EIR Addendum to the Miravale III Specific Plan EIR, CEQA Findings and Statement of Overriding Considerations

B

EXHIBIT

Planning for Success.

ADDENDUM TO THE MIRAVALE III SPECIFIC PLAN EIR (SCH #2006081129)

Prepared for the 2018 Miramonte Specific Plan

PREPARED FOR

City of Soledad

August 21, 2018

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1.0
Introduction

1.1 BACKGROUND

In early 2000, the City of Soledad ("city") received an application initiated by Nader Agha (applicant) for a proposed specific plan (Miravale III Specific Plan) and related preliminary vesting tentative map. The application proposed a phased development for a 920-acre area north and west of the current boundaries of the City of Soledad, including residential, commercial, recreational, and public facility uses and supporting infrastructure, hereinafter referred to as Miravale III Specific Plan project.

The City of Soledad, as lead agency, determined that the Miravale III Specific Plan project could result in significant adverse environmental impacts and required that an environmental impact report (EIR) be prepared to evaluate these potentially significant adverse environmental impacts. A Notice of Preparation (NOP) was sent out in August 2006. The *Draft Environmental Impact Report for the Miravale Phase III Specific Plan* (hereinafter "Miravale III EIR" or "Draft EIR") was circulated for public review and comment for 45 days between November 4, 2008, and December 18, 2008. The *Final Environmental Impact Report for the Miravale Specific Plan* (hereinafter Final EIR), consisting of the Draft EIR, public comments and responses to comments was prepared in accordance with the California Environmental Quality Act (CEQA, California Public Resources Code, Sections 21000, et seq.) and the State CEQA Guidelines (California Code of Regulations, Title 14, Sections 15000, et seq.).

The Final EIR for the Miravale III Specific Plan analyzed the potential environmental effects of the then-proposed specific plan and vesting tentative map for environmental effects. The proposed specific plan would have provided policy guidance for the phased annexation and development of a portion of the Mirrasou Specific Plan area, the San Vicente West Specific Plan area, and Northwest Expansion Area identified in the city's 2005 General Plan. The preliminary vesting tentative map provided the basis for the conceptual lotting plan and infrastructure improvements for the uses proposed by the Miravale III Specific Plan.

The Miravale III Specific Plan, which was never adopted by the City Council, identified the following implementation measures for development of the project (Draft EIR page 3.0-7):

- Amendment of the General Plan – both policy provisions and diagrams— concurrently with the adoption of the specific plan to incorporate the land use designations illustrated in the Land Use Plan, and policies included in the text of the specific plan.

- Amendment of the Zoning Ordinance to rezone the property "MIIISP" within the specific plan area.
- Preparation of a final tentative map for subdivision of the specific plan area consistent with the design and zoning standards described in the specific plan. Requests for modifications to the land uses or zoning standards identified in the specific plan may be approved by the city provided they are in substantial conformance with city goals and criteria of the specific plan.
- Development of individual phases of the project consistent with the land use designations and with the policies and implementation measures contained in the specific plan.
- Application for a Sphere of Influence Amendment and subsequent annexation approval(s) from Monterey County Local Agency Formation Commission (LAFCO).

Approval of the then-proposed Miravale III Specific Plan and vesting tentative map would have resulted in the construction of 1,470 single-family residential units, 116 duplex/small lot single-family residential units, 2,614 multi-family residential units (includes affordable housing, workforce housing, and senior housing units), 120 hotel rooms, 275,000 square feet of retail commercial space, and an 18-hole golf course. The previously proposed project would have also included three school sites (two elementary schools and one middle school), a fire and police substation, a recycled water plant, and approximately 75 acres of open space and recreation areas, including parks, playgrounds, and a trail system. Table 1-1 Miravale III Specific Plan Land Use (Formerly Proposed Specific Plan) presents the uses and acreage of the formerly-proposed Miravale III specific plan project that were analyzed in the Miravale III EIR.

In the Final EIR, the city concluded that many of the significant impacts resulting from the former project could be mitigated by adding or modifying specific plan provisions and by making changes to the preliminary vesting tentative map. Project revisions would be necessary to comply with the mitigation measures listed in the Final EIR.

The Final EIR was certified by the City Council in September 2010. The Final EIR is included in Appendix A. The applicant was directed to revise the specific plan and vesting tentative map for the Miravale Specific Plan project. Issues identified by the City Council included inconsistency of the Miravale Specific Plan project with a number of General Plan policies and provisions, in particular, those outlined in the Miravale III Specific Plan EIR analysis of impacts related to aesthetics, biological resources, public services and facilities, and population and housing. The project has since been revised and a new specific plan and vesting tentative map have been prepared to address the issues identified by the City Council during its review of the Miravale III Specific Plan EIR in 2010. The applicant has since submitted revisions to the specific plan and vesting tentative map and new applications, which are the subject of this addendum.

Table 1-1 Miravale III Specific Plan Land Use (Formerly Proposed Specific Plan)[1]

Land Use	Acreage	Amount	Gross Density[2]
Single-family Residential	240.88	1,470	6.1 du/acre
Multi-family Residential (Townhomes/Apartments)	146.97	1,183	18.99 du/acre
Senior Housing Units[3]	-	500	18.99 du/acre
Workforce/Senior Housing Units[3]	-	1,047	18.99 du/acre
Total Residential	387.85	4,200 DU	10.83[2]
Hotel	6.5	120 Rooms	-
Retail/Commercial	33.22	275,000 SF	-
Fire/Police Substation	1.31	1	-
Elementary School	20.00	2	-
Middle School	19.00	1	-
Churches	1.67	1	-
Park/Open Space	75.77	-	-
Golf Course/maintenance	149.76	18 Holes	-
Recycled Water Plant	1.82	-	-
Detention/Retention Ponds	15.75	-	-
Water Tanks	3.02	-	-
Roads/ROW	121.78	-	-
Agricultural buffer	1.61	-	-
Urban Reserve/Agriculture	85.80	-	-
Total Acres	921.77	-	-

SOURCE: Denise Duffy and Associates 2008

NOTES:

1. Amounts may vary due to rounding.
2. Includes land occupied by roadway and utility infrastructure and neighborhood public parks.
3. The acreage of Senior and Workforce housing is included in Multi-family acreage.

1.2 DECISION TO PREPARE AN ADDENDUM TO THE MIRAVALE III SPECIFIC PLAN EIR

The city has determined that the proposed project (specific plan amendment and tentative map application) is not an exempt project as defined in CEQA and therefore, must be evaluated for its potential impacts on the environment pursuant to CEQA.

CEQA Guidelines Section 15164 states that the lead agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR have

occurred. CEQA Guidelines sections 15162 and 15163 define the conditions under which a subsequent or supplemental EIR may be prepared for a project. Section 15162 states:

> (a) When an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:
>
> (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
>
> (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
>
> (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:
>
> (A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
>
> (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
>
> (C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
>
> (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.
>
> (b) If changes to a project or its circumstances occur or new information becomes available after adoption of a negative declaration, the lead agency shall prepare a subsequent EIR if required under subdivision (a).

> Otherwise the lead agency shall determine whether to prepare a subsequent negative declaration, an addendum, or no further documentation.

The city's decision to prepare an addendum to the Miravale III Specific Plan EIR is based on its determination that none of the conditions in CEQA Guidelines section 15162 or 15163, which would require preparation of a subsequent or supplemental EIR, are met. This conclusion is in turn based on the analysis provided in Section 3.0, Project Analysis.

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2.0
Project Description

2.1 Project Site and Vicinity Setting

Project Location

The project site is located in unincorporated Monterey County on the northern edge of the Soledad city limits. The project site is located east of U.S. Highway 101, approximately nine miles southeast of Gonzales, 22 miles southeast of Salinas, and nine miles north of Greenfield. The project location is illustrated in Figure 2-1, Location Map. Surrounding land uses include a farmworker housing area to the west, agricultural land to the north and west, an existing residential subdivision to the south, and undeveloped foothills of the Gabilan Mountain Range to the north and east.

Project Site Setting

The approximate 647-acre project site consists of six parcels: Assessors Parcels Numbers (APN) 417-151-082, 417-151-084, 417-151-089, 417-151-090, 417-151-091, and 417-151-092. The 647 acres includes portions of the following parcels that will be dedicated for expansion of the San Vicente Road right-of-way and the park/drainage facility: APN 257-081-005, 257-091-009, and 257-091-012. Refer to Figure 2-2, Project Parcels.

The project site consists primarily of undeveloped land. The site's topography slopes naturally from the southwest corner of the site to the northeast with steeper slopes located at the eastern boundary. The majority of the site ranges in elevation between approximately 180 and 600 feet above mean sea level. The site generally drains to the southwest. Existing trees are located near a cluster of farm buildings at the southwestern corner of the site. A portion of the eucalyptus tree row historically located along San Vicente Road has been recently cut down.

The project site has a rural/agricultural appearance with a majority of the site reserved for agricultural uses. Much of the site is in active agricultural production for row crops and vineyards. The western and central portions of the site are generally vacant of structures and other physical features except for a farming buildings and support structures, farming equipment, detention and percolation ponds, pumping houses and equipment, and access roads. The eastern edge of the site contains predominantly undeveloped foothills currently

utilized for grazing activities. Existing development within these foothills include ranch roads, City of Soledad water tanks (located on APN 417-151-091 and 417-151-092), electrical power lines, and small-scale communication equipment.

The project site is bounded on the south by the Soledad city limits, which consist predominately of residential uses that are suburban in nature and include single-family residences comparable in density to the single family residential units proposed along the southern boundary of the project site. The project site's southwestern and eastern edges are visible by cars traveling on U.S. Highway 101. Other views of the project site are available from surrounding urban areas, primarily those areas adjacent to San Vicente Road.

Figure 2-3, Aerial Photograph, presents the project site characteristics. Figure 2-4, Site Photographs, present photographs of the existing setting at the project site.

Vicinity Setting

The project site is bordered by agricultural and grazing lands on three sides (east, north, and west). Residential development borders the site to the south.

There are several parks and open space areas within the vicinity of the project site including the Mission Nuestra Senora de la Soledad, located approximately two miles southwest of the city; Pinnacles National Park, located approximately five miles east of the city; and Arroyo Seco in the Los Padres National Forest, located approximately 25 miles southwest of Soledad.

Permitted aggregate resources located within the project vicinity include Stonewall Canyon Quarry, which is operated by Syar Industries and located off of Metz Road and Stonewall Canyon Road, approximately 1.5 miles east of the project site. There are no public airports within the vicinity of the project site. However, a private airstrip is located four miles south of the project site.

2.2 REGIONAL SETTING

The City of Soledad is located in the center of the Salinas Valley between the Santa Lucia Mountains to the west and the Gabilan Mountains to the east. The city encompasses 4.6 square miles and is surrounded by unincorporated Monterey County on all sides. The closest cities include Gonzales to the north and Greenfield to the south. Regional access to the city is provided solely via U.S. Highway 101. The Salinas Valley is one of the most economically productive and technologically advanced agricultural regions in the world and the area around Soledad is primarily productive agricultural land and range land. Natural resources of concern within the Soledad area include important farmland and limited habitat for rare and endangered species.

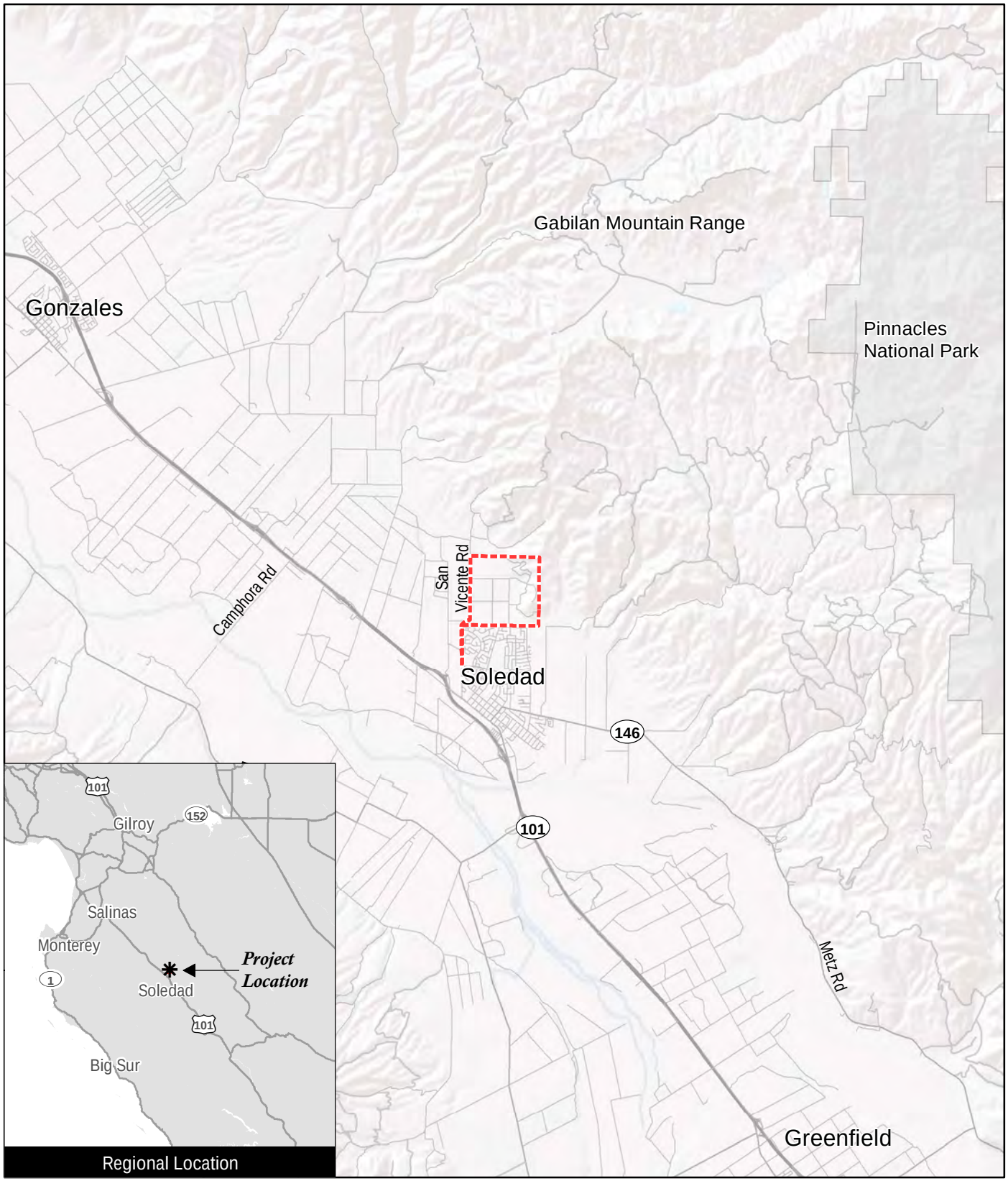
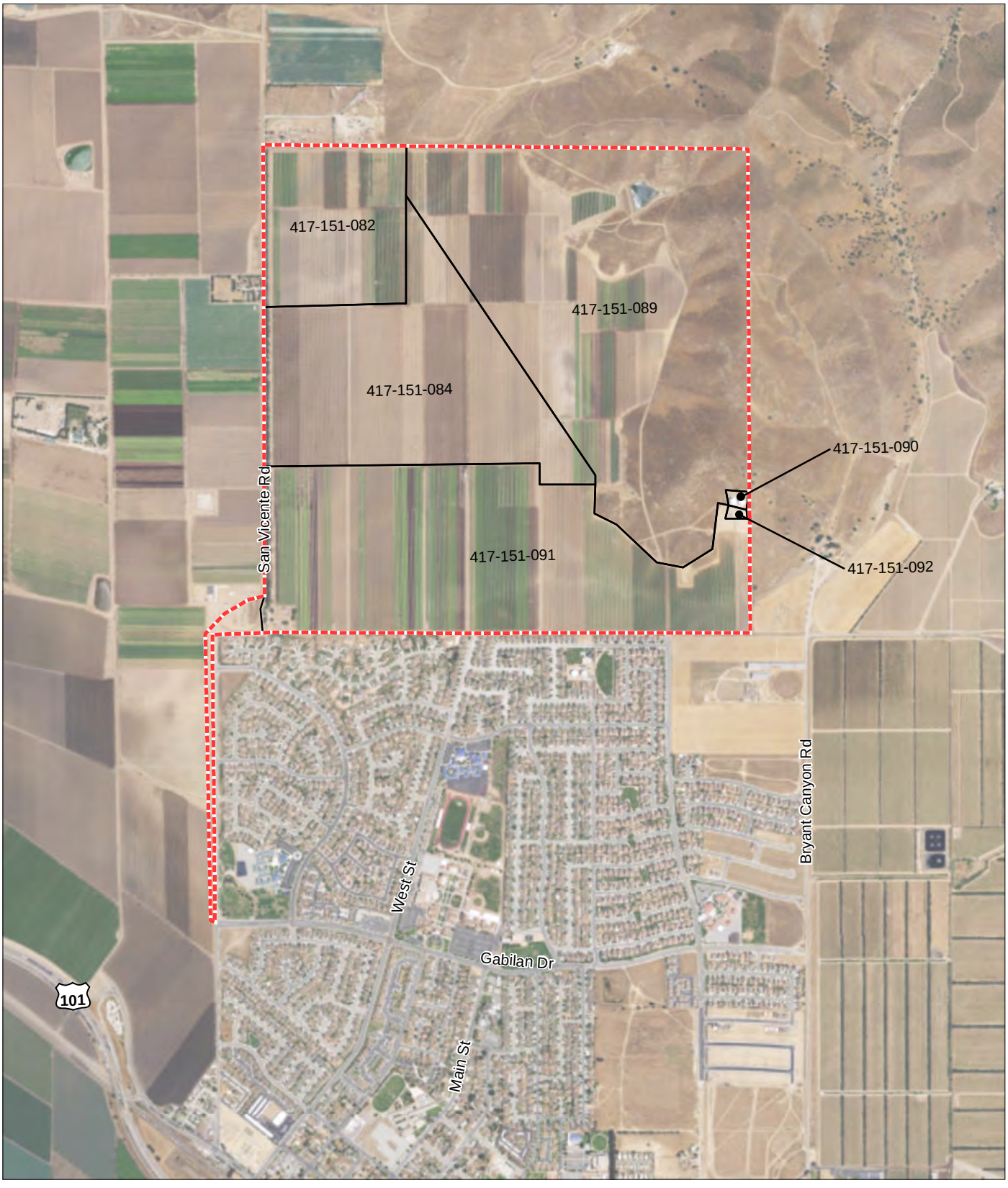


Figure 2-1

Location Map

Miravalle III Specific Plan EIR Addendum

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Source: Esri 2017

Figure 2-2

Project Parcels

Miravalle III Specific Plan EIR Addendum

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Project Site

Source: Esri 2017

Figure 2-3

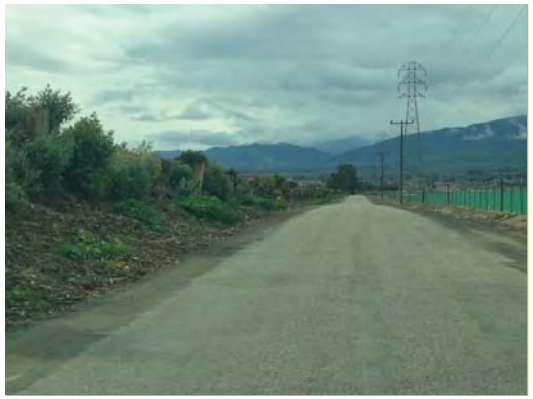
Aerial Photograph

Miravalle III Specific Plan EIR Addendum

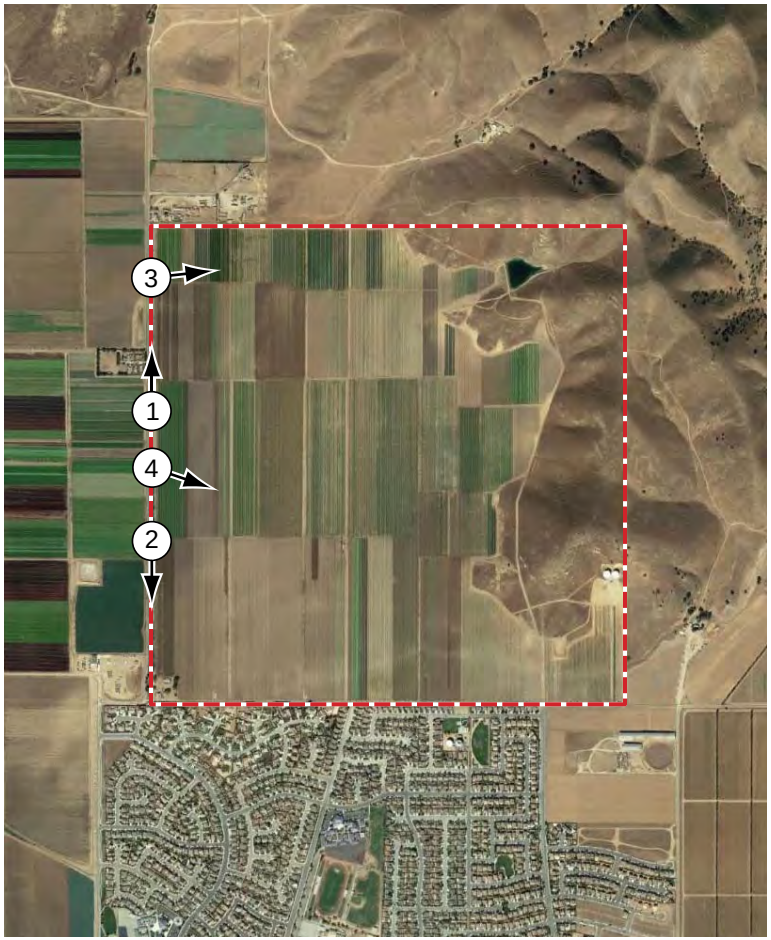
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1 View north along San Vicente Road adjacent to site



2 View south along San Vicente Road north of site



Project Site

Source: Google Earth 2016
Photographs: EMC Planning Group 2017



3 View East from San Vicente Road



4 View southeast from San Vicente Road

Figure 2-4
Site Photographs

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2.3 PROPOSED PROJECT

The City of Soledad Planning Department has received a planning permit application for a specific plan, general plan amendment, sphere of influence amendment, prezone and annexation, zoning map and text amendment, vesting tentative map, and a development agreement (hereinafter referred to as the "proposed project"). The proposed specific plan and vesting tentative map revise the previously-proposed Miravale III Specific Plan, summarized above in Section 1.1, Background.

The name of the proposed project has changed to Miramonte Specific Plan (also referred to herein as "specific plan"). The specific plan would guide the development of the uses identified in the accompanying proposed vesting tentative map. The specific plan includes text, tables and graphics that identify the total acreage in residential land use, total dwelling units within the specific plan area ("plan area"), population changes, etc. The proposed specific plan (*Draft City of Soledad Miramonte Specific Plan*) is included as Appendix B of this document. The proposed specific plan land use diagram is shown in Figure 2-5, Miramonte Specific Plan Land Use Diagram and would be the controlling land use diagram for development within the plan area. The proposed Miramonte Residential Subdivision vesting tentative map is shown as Figure 2-6, Miramonte Residential Subdivision Vesting Tentative Map. The proposed specific plan was prepared after the revised map was submitted city. The map will be required to be revised prior to City of Soledad approval of the final map, to match the development patterns, intensities, and densities described in the approved specific plan for the project site. The proposed specific plan and vesting tentative map are discussed in greater detail below.

Specific Plan

A specific plan is required by the city in advance of a sphere of influence amendment, annexation, entitlement approvals, and development of the project site. The proposed Miramonte Specific Plan would provide policy guidance and would be the controlling document for development of the site, once it is adopted by the city. Requests for modifications to the land uses or zoning standards identified in the specific plan may be approved by the city provided they are in substantial conformance with city goals and criteria of the Miramonte Specific Plan, once it is adopted by the city.

Proposed Land Uses

The specific plan proposes a mixed-use development consisting of approximately 1,318 low-density residential units, 626 medium-density residential units, 134 senior housing units, 100,000 square feet of retail commercial space in a central core area, over 140 acres of open space, and 56 acres of parklands. The specific plan also includes a 35.9-acre Residential Study Area (Sub-area 13 on the land use map) that would provide an opportunity for additional parklands and/or an additional 314 low density residential or medium density residential

lots, or a mix of both to provide flexibility as growth within the plan area proceeds. Land uses would be arranged around a core area of neighborhood commercial and higher density residential uses. Some parcels within the core area provide a mixed-use opportunity. The specific plan would allow a variety of residential types, including apartments, townhouses, and detached homes on small and large lots. The specific plan also would create opportunities for two elementary school sites a fire/police substation, storm water facilities, paved pathways, a community park, and an unimproved trail system within the hillside open space. The proposed land uses are summarized below in Table 2-1, Miramonte Specific Plan Proposed Land Use.

Table 2-1 Miramonte Specific Plan Proposed Land Use[1]

Land Use	Acreage[2]	Number of Units	Commercial Square Feet
Low-Density Residential	296.1	1,318	
Medium-Density Residential	31.3	626	
Senior Housing	6.7	134	0
Residential Study Area	35.9	314	
Total Residential	370.0	2,392	
Neighborhood Commercial	8.6	-	100,000
Schools and Public Facilities	22.0	-	-
Parks	56.18		
Open Space	140.4	-	-
Collector Streets	32.2	-	-
San Vicente Road	14.1		
Totals	647.0	2,392	100,000

SOURCE: EMC Planning Group 2017

NOTES:

1. Amounts may vary due to rounding
2. Residential acreage includes local street rights-of-Way and agricultural buffers.

The specific plan area will be served by a series of collector streets that tie into the city's existing collector and arterial street system. Local streets and bicycle paths will provide access to residential areas, the neighborhood commercial area, parks, and schools. Based on the anticipated mix of land uses, population was projected using U.S. Census Bureau data for Soledad for the low-density and medium-density housing, and custom estimates for the specialty housing for senior housing. Table 2-2, Miramonte Specific Plan Population Estimate, provides the population estimate for the specific plan area.



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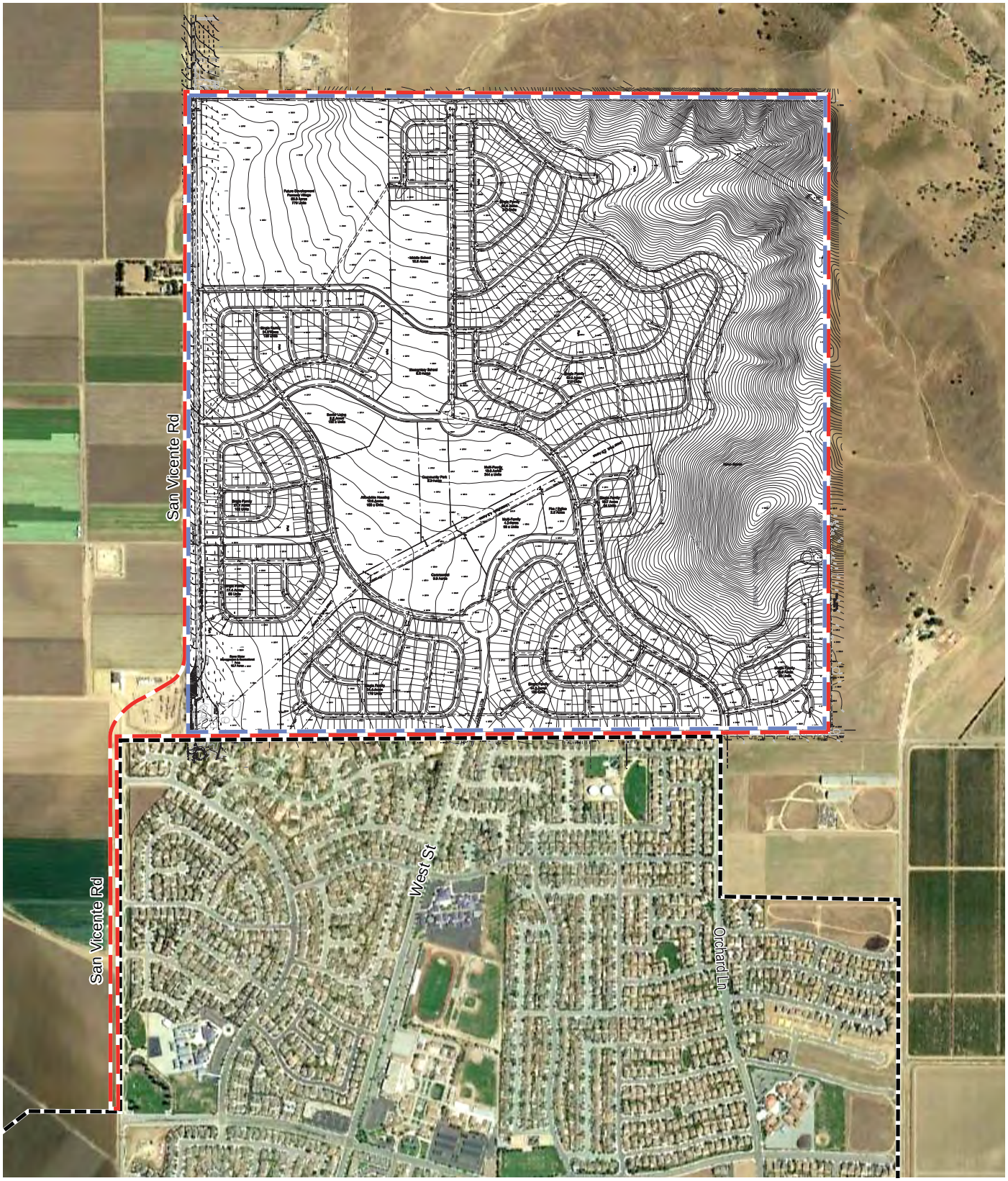
Source: Google Earth 2017

Figure 2-5

Miramonte Specific Plan Land Use Diagram

Miravalle III Specific Plan EIR Addendum

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Source: Google Earth 2017, Bestor Engineers, Inc. 2017

Figure 2-6

Miramonte Subdivision Vesting Tentative Map

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Table 2-2 Miramonte Specific Plan Population Estimate

Land Use	Units	Persons per Unit	Population
Low-Density Residential	1,318	4.2	5,536
Medium-Density Residential	626	4.2	2,629
Senior Housing	134	1.7	228
Residential Study Area	314	4.2	1,319
Totals	2,392		9,712

SOURCE: EMC Planning Group 2017; United States Census Bureau 2015.

NOTE: Low density and medium density based on U.S. Census Bureau data; Medium-density residential includes land designated as Affordable Housing. Senior housing based on 70 percent couples and 30 percent singles.

As shown in Figure 2-7, City of Soledad General Plan Expansion Areas, the project site occupies a 633.8-acre portion of the general plan's 1,165-acre Mirrasou Specific Plan Area, currently located in unincorporated Monterey County. The city's desired improvements to San Vicente Road would require right-of-way acquisition consisting of approximately 1.28 acres within the Northwest Expansion Area and right-of-way acquisition and additional parkland consisting of approximately 9.71 acres within the San Vicente West Specific Plan Area. An additional 2.05 acres are located in the North Entry Commercial Specific Plan Area and Entry Commercial Expansion Area. The affected areas associated with the San Vicente roadway improvements are also located in unincorporated Monterey County. Table 2-3, Comparison of Development Potential, presents a comparison of the proposed project's potential development intensities with the Mirrasou Specific Plan Area development potential identified in the general plan.

Table 2-3 Comparison of Development Potential

Land Use	Mirrasou Specific Plan Area Development Potential	Miramonte Specific Plan	Difference
Residential	1,867 dwelling units	2,392 dwelling units	525 additional dwelling units
Commercial	100,000 square feet	100,000 square feet	none
Parks and Open Space	50 acres park and 515 acres open space	56.18 acres park and 140.4 acres open space	14.1 less park and 364.6 less open space

Source: City of Soledad General Plan 2005, page 11-19 and Table 11-1

* May vary from original 2005 source table due to rounding, or addition errors in source table

The proposed specific plan exceeds the residential unit allowance as provided in the Mirrasou Specific Plan Area by 525 units. In contrast, the general plan identifies a total development potential of 10,317 dwelling units within its four expansion areas; 6,500 of these units are identified within the Northwest Expansion Area, adjacent to the western boundary

of the Mirrasou Specific Plan Area (Table II-1 of the general plan). The proposed project represents the full residential buildout potential for the Mirrasou Specific Plan Area, as well as 525 units of the identified residential potential of the Northwest Expansion Area.

Circulation Improvements

The specific plan's circulation system is designed to provide a functional and efficient transportation network for automobiles, transit, bicyclists, and pedestrians. The street system is comprised of a network of arterial, collector, and local residential streets designed to accommodate traffic generated by plan area residents. All streets are public with the exception of the private driveways that serve hillside lots and some roads within areas that may be developed within the commercial and multi-family residential areas. All streets will be designed to meet the *City of Soledad Design Standards and Standard Specifications* (City of Soledad 2007). Every street will include one traffic lane in each direction, gutter, storm drains, curb, planting strip, and sidewalks.

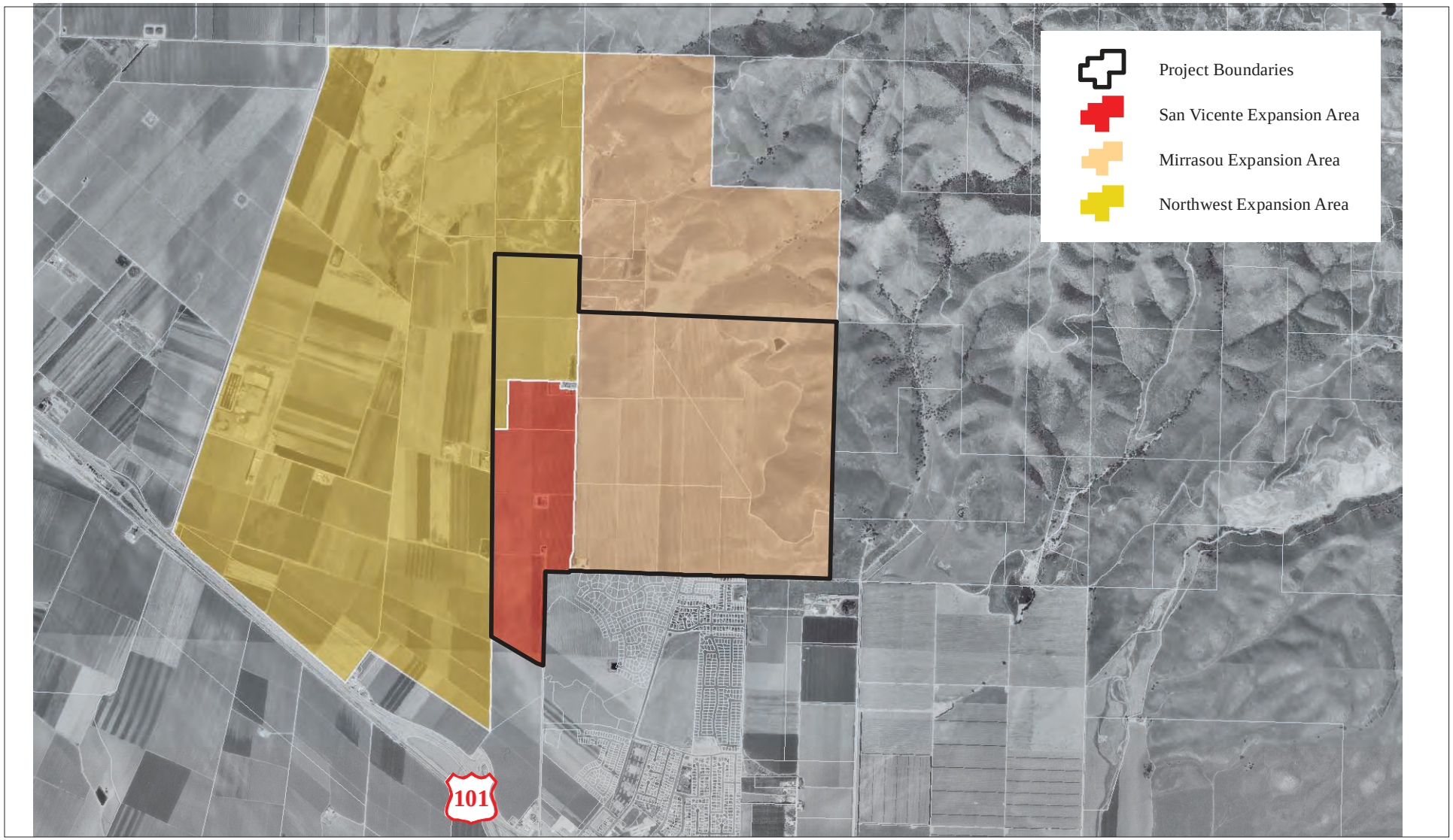
The City of Soledad desires that San Vicente Road provide the primary access route to the San Vicente West Specific Plan Area, the Northwest Expansion Area, and the Mirrasou Specific Plan Area. The city's desired roadway improvements and related right-of-way acquisition are not proposed by the applicant but are included in the specific plan and are considered part of the project description for analysis in this EIR addendum. City-desired improvements to San Vicente Road would require acquisition of approximately 13 acres land currently located in unincorporated Monterey County for city public right-of-way.

Open Space and Parks

The specific plan incorporates a network of parks and pathways that form a comprehensive and thoroughly interconnected system through the plan area. Several open space and recreational opportunities are provided including soccer or other sports fields, picnic areas, playgrounds, paved trails, and unimproved open space trails. The park and open space areas are arranged within the specific plan area to connect Sub-areas and to protect the hillside area from development.

Storm Water and Drainage

Existing drainage on the site flows generally from northeast to southwest. The specific plan includes requirements for the provision of storm water collection and conveyance and includes policy standards for design and performance of the storm drain and storm water facilities system, and for implementation of pre- and post-construction best management practices and low impact design to capture and retain flows on the site. The proposed system consists of storm drains, collection pipes, a drainage bio-swale within the linear park, a retention basin to capture post-development runoff, and other improvements to capture, retain, and percolate storm water within the project site consistent with the requirements of the Central Coast Regional Water Quality Control Board. Storm water flows would be



0 0.5 Miles

Source: Denise and Duffy Associates, Inc.

Figure 2-7

City of Soledad General Plan Expansion Areas

Miravalle III Specific Plan EIR Addendum

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collected in the linear park and through an underground storm drain system and directed to a retention pond (basin) located within the southwest corner of the project site. The linear park would serve as a bio-swale, following the existing topography and leading from upper elevations to the storm water retention basin. Storm water within developed areas would be collected and conveyed in a curb, gutter and underground storm drain system to the storm water retention basin. The basin, which may serve as a dual-use facility for recreational purposes, would be sized to accept the increase in flow resulting from full buildout of the uses identified in the specific plan. The preliminary design of the new storm water system within the project site is shown conceptually on Figure 2-8, Conceptual Storm Water Plan.

Flows in storms of greater intensity than an approximately 50-year return period may be discharged to the downstream city storm drainage facilities consistent with the city's *2007 Storm Water Management Plan* (2004). Any runoff that would be discharged from the storm water retention basin would be treated prior to release to existing downstream storm water facilities located on San Vicente Road, and would be released at a rate equal to or less than the historic flows of the site prior to development.

Sanitary Sewer

The City's water reclamation facility was issued an approval to construct permit with a treatment capacity rating of 5.7 mgd (Donald Wilcox, email message, June 8, 2017) and disposal capacity of 5.5 mgd. However the permitting is not complete as the water reclamation facility was never fully completed. The city is in this process now and it is anticipated that the facility can be completed and rated as designed. Average daily flow to the water reclamation facility is approximately 2.4 million gallons per day (mgd). In addition, the California Department of Corrections has a "reserved" capacity of approximately 1 mgd (Donald Wilcox, email message, March 7, 2017).

Once the facility is completed, the city's water reclamation facility will have sufficient capacity to accommodate the addition of wastewater generated by development consistent with the specific plan, because the water reclamation facility upgrade was originally designed to accommodate developments outside of the current city limits. Additionally, since the upgrade, little or no development has occurred outside of the current city limits creating an abundance of capacity available for the plan area (Akel Engineering Group 2016).

Based on the calculations completed by Bestor Engineers, wastewater generated by the plan area will be approximately 1.5 mgd. When adding the city's current wastewater flow of 2.4 mgd to the projected 1.5 mgd flow from the Plan Area, the total wastewater flow to the plant would be 3.9 mgd, which can be accommodated by the total facility treatment capacity of 5.7 mgd, including the California Department of Corrections "reserved" capacity. The proposed specific plan includes policies that minimize wastewater generation through the implementation of water conservation efforts and include design and performance standards for the construction of wastewater infrastructure consistent with the *2015 Urban Water*

*Management Plan (*Akel Engineering Group 2016*)* (urban water management plan) and *Long-term Wastewater Management Plan (*City of Soledad 2006*)*. An on-site recycled water facility is not proposed.

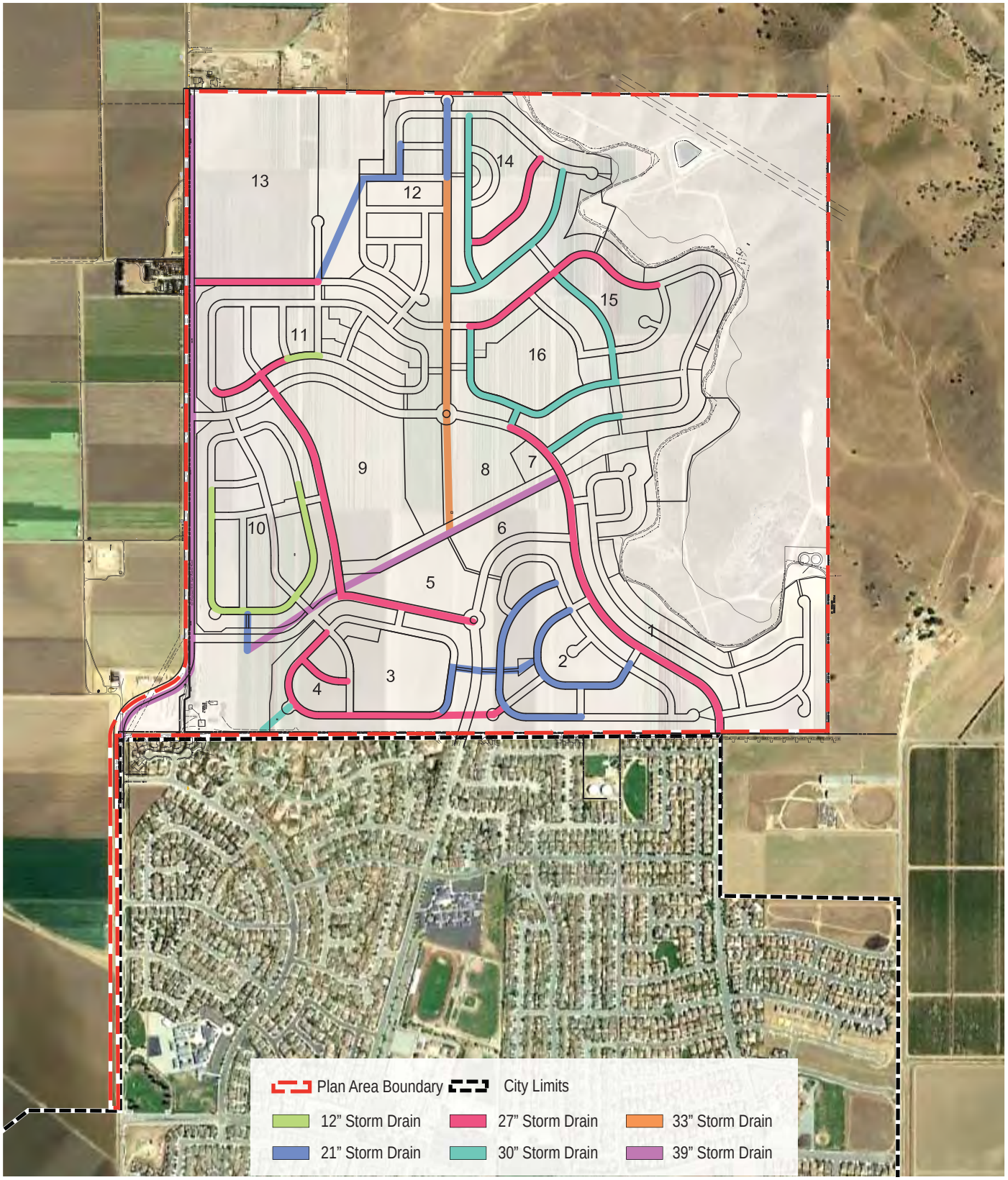
Similar to the Miravale III project, future development of the project site would connect to the existing municipal sanitary sewer main located on San Vicente Road. Construction of an offsite 18-inch sewer main from the southwest corner of the plan area south along San Vicente Road to Gabilan Drive is necessary to transport wastewater from the project site to the city's municipal reclamation facility. The proposed on-site wastewater conveyance system would be gravity-fed. Wastewater would be collected and conveyed by a network of 8-inch or larger pipes throughout the site before discharging from the site through the new 18-inch sewer main extension. The preliminary design of the new wastewater system within the project site is shown conceptually on Figure2-9, Conceptual Wastewater Plan.

Water Supply

The plan area also contains two existing agricultural wells owned by the property owner, two one million (each) domestic storage tanks owned by the city, a number of easements and unpaved farm access roads. The existing easements in the plan area will need to be removed or relocated as a part of the final subdivision map(s) and map(s) recordation. The two existing wells will be required to be contained in separate well parcels or in a public easement for ownership, use as an irrigation supply, and for on-going maintenance when the final map is prepared, adopted, and recorded.

The city's 2005 Water System Master Plan assumed the project site would develop as a combination of multi-family residential, public facility, and open space land use types. The *Soledad Water Master Plan* (City of Soledad 2005c) (water master plan) assumes the project site will develop as a combination of medium density residential, public facility, and open space land use types. An updated water supply assessment has been prepared: *City of Soledad Water Supply Assessment for Miramonte Specific Plan* (AKEL Engineering Group 2017) (water supply assessment) to determine whether sufficient water supply is available for the Miramonte Specific Plan Project.

According to the water supply assessment, the water demand for the plan area will be 980 acre feet per year (afy). This amount is 99 afy greater than the water demand of 881 afy identified in the city's 2005 water master plan for a similarly-sized use using 2005 water demand coefficients (page 3). However, the water supply assessment also notes that the existing agricultural water demand on the site is approximately 1,568 afy. When compared with the existing water demand on the site, the water demand from the proposed project would be 587 afy less than water demand for the existing agricultural use of the site (AKEL Engineering Group 2017, page 4). WSA update concludes that the proposed project would demand less water than the 1,566.7 acre feet per year than the original project and current agricultural water consumption on the site, but more water than the existing water system infrastructure can currently provide to adequately meet the peak hour demand.



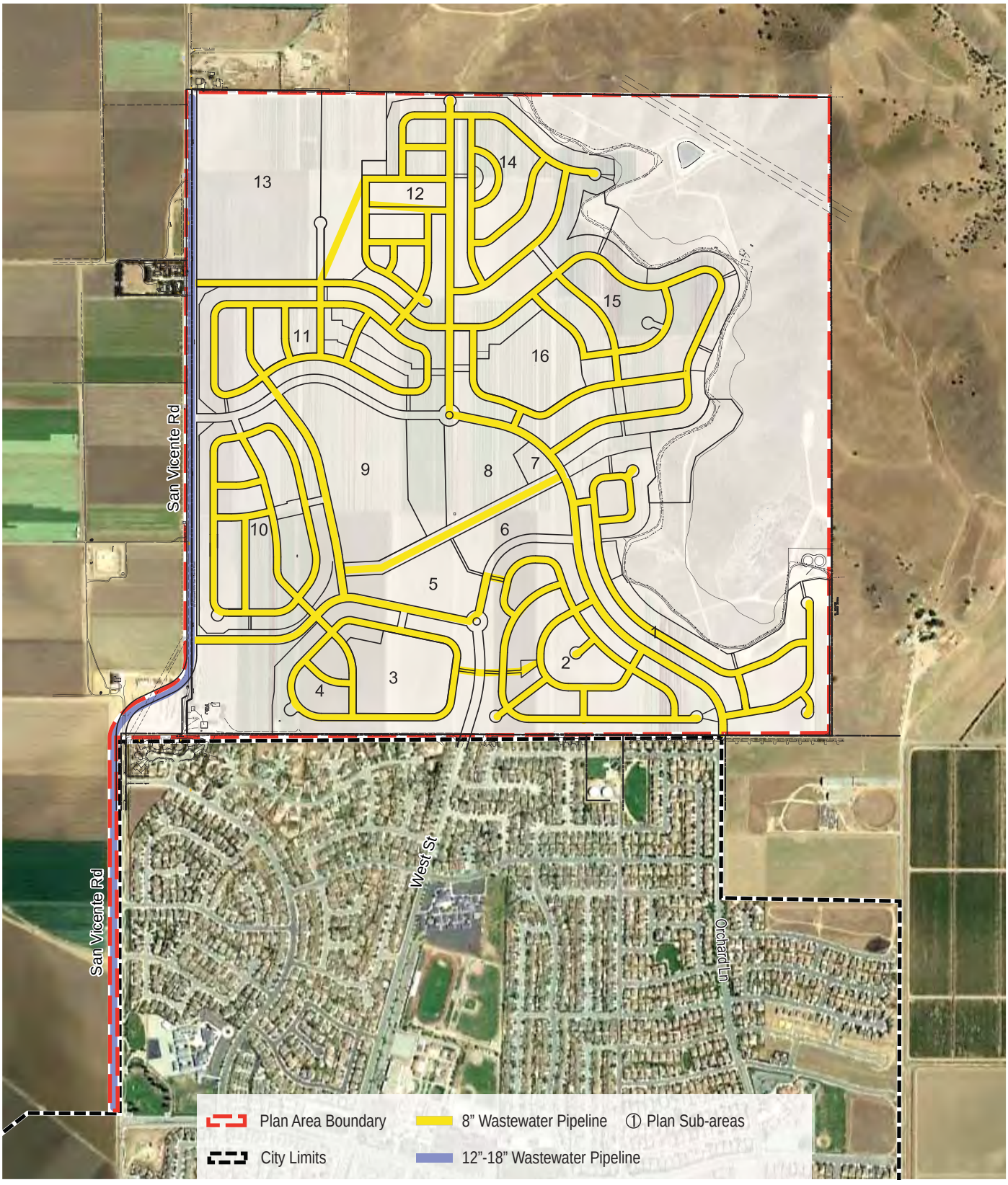
Source: Google Earth 2017

Figure 2-8

Conceptual Stormwater Plan

Miravalle III Specific Plan EIR Addendum

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0 1,200 feet

Source: Google Earth 2017

Figure 2-9

Conceptual Wastewater Plan

Miravalle III Specific Plan EIR Addendum

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As noted in the urban water management plan (page 6-15) the City's groundwater supply has been adequate to meet the City's historical demands. In order to meet growing demand for new development not annexed into the City's sphere of influence, the urban water management plan concludes that new groundwater wells will have to be constructed and paid for by future development applicants. The City intends to continue to use groundwater as the sole source of supply. However, domestic water supplies would be augmented by the city's recycled water distribution system, which is expected to come online in 2020 (AKEl Engineering. The proposed project would connect to the municipal water distribution system, which, based on the city's urban water management plan, has a total reliable supply of 148,000 acre feet per year for the year 2035 and is equal to the sustainable yield of the Forebay Subarea (City of Soledad 2015, page 6-16). According to the urban water management plan, the reliable supply will serve a projected 2035 demand of 148,000 acre feet per year. The proposed project would contribute to this demand. However, the proposed project will be required to provide new water supply infrastructure to increase the city's available water system storage and distribution capacity.

The specific plan includes policy design and performance standards for the water supply and distribution system and its connection to existing municipal infrastructure consistent with the urban water management plan and the water master plan. The water distribution system would be sized in anticipation of future development phases. The specific plan also includes policies that reduce potable water consumption through the use of recycled water or non-potable ground water for irrigation, emphasis on drought-tolerant plant materials for landscaping, and the incorporation of state-of- the art low water/high efficiency use fixtures and appliances in all new private development and public facility construction, including schools. The conceptual design of the new water delivery system is presented in Figure 2-10, Conceptual Water Plan.

Other Utilities

Natural gas and electricity is provided by the Pacific Gas and Electric Company. Cable television and telephone land lines are provided by Charter Communication and AT&T, respectively. All new public energy and communications lines and equipment (excepting solar panels and cell towers) within the plan area shall be placed underground pursuant to the standards and requirements of the city and/or appropriate State or Federal regulatory agencies. Planning and design of the new underground infrastructure, including phasing of the improvements will be coordinated with the local agency for each utility. The requirements for undergrounding of existing utilities and/or relocation of existing utilities will also be coordinated with the local utility agencies.

Off-Site Improvements

Construction of an offsite 18-inch sewer main from the southwest corner of the plan area south along San Vicente Road to Gabilan Drive will be required to transport wastewater from the plan area (at buildout) to the city's municipal reclamation facility. The on-site wastewater conveyance system is gravity-fed and will be collected and conveyed by a network of 8-inch or larger pipes throughout the site before discharging from the site through the new 18-inch sewer main extension. The developer shall be responsible for the payment of required development impact fees for new facility construction and may participate in a reimbursement program per Municipal Code Chapter 14.06 for the new sewer main and upgrades to the existing sewer main on San Vicente Road.

Public Services

Schools

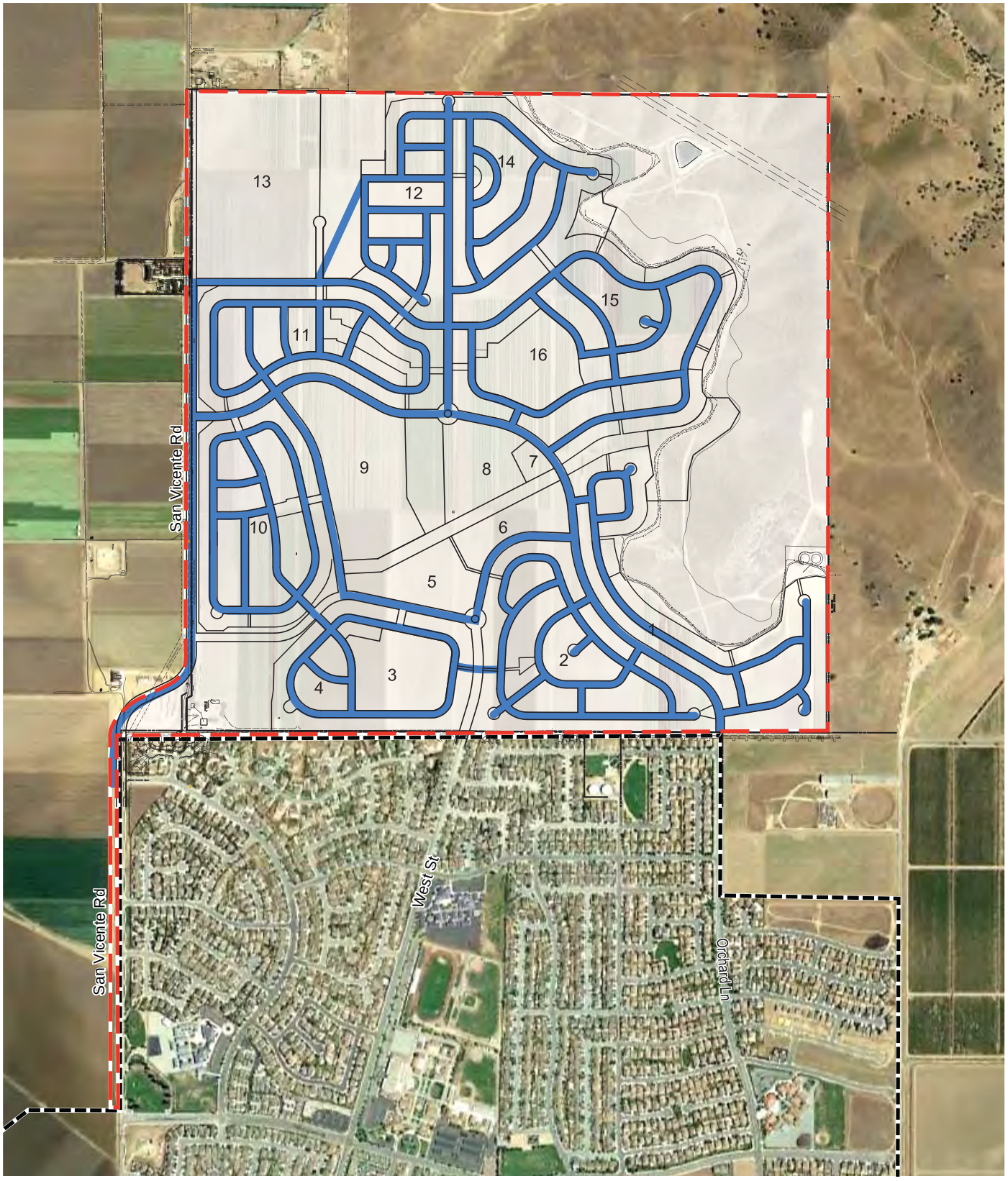
The plan area is served by Soledad Unified School District for grades K-12. Buildout of the proposed specific plan is expected to generate 1,062 students for grades K-6, 317 students for grades 7-8, and 468 students for grades 9-12 (a total of 1,847 students). The proposed specific plan includes two 11-acre elementary school sites. The locations of the proposed school sites are shown in Figure 2-5, Miramonte Specific Plan Land Use Diagram, presented earlier. The applicant and/or developer(s) will provide an offer to dedicate the school sites (i.e. turn over fee simple title to the land to the school district). In addition to the dedication of land, the developer(s) will pay school impact fees as prescribed by the law in effect at the time of payment, unless otherwise dictated by a development agreement or permit conditions. The proposed specific plan includes a policy that requires that an agreement be established between the developer and/or successors in interest and the school district that establishes the timing of the school construction or improvements and financing obligations.

Law Enforcement

The Monterey County Sheriff's Office currently provides service to the project site, which is located in unincorporated Monterey County. Upon annexation, the Soledad Police Department would serve the project site. The proposed specific plan includes a new site for a police substation centrally located within the project site to help serve and reduce response time to existing and future residents. The proposed site for a potential substation is located approximately 1.6 miles north of the current city police station in downtown Soledad.

Fire Prevention/Protection

Fire protection service within the City of Soledad and the surrounding rural areas is provided by the City of Soledad Fire Department and the California Department of Forestry and Fire Protection (CAL FIRE). The current service area for CAL FIRE overlaps the northeast half of the plan area (California Department of Forestry and Fire Protection 2017)



0 1,200 feet

Plan Area Boundary
City Limits
8" - 12" Water Pipeline
① Plan Sub-areas

Source: Google Earth 2017

Figure 2-10

Conceptual Water Plan

Miravalle III Specific Plan EIR Addendum

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while the southwest half of the plan area is currently the responsibility of the Mission Soledad Fire Protection District (LAFCO 2012). Once annexed, the City of Soledad Fire Department area of responsibility will be expanded to include the plan area and potentially adjacent streets. The proposed specific plan includes a site for the provision of a new fire substation to provide shorter response times than would the existing station located at 525 Monterey Street. A new substation in this location would reduce response times within the project site and adjacent areas within the current city limit.

Solid Waste Collection

Solid waste collection services will be provided by the Salinas Valley Solid Waste Authority which uses the Johnson Canyon Landfill, Monterey Peninsula Landfill, and the Foothill Sanitary Landfill (in San Joaquin County) for disposal purposes. Waste collection and disposal for the City of Soledad is provided by Tri-Cities Disposal, a private hauler that primarily uses the Johnson Canyon which is located approximately 12 miles northeast of the City of Soledad.

Libraries

The Monterey County Free Libraries network supports Soledad residents with a branch at 401 Gabilan Drive, approximately ¼ mile south of the plan area. The Monterey County Free Libraries funds are largely from a portion of the property tax that is collected within its service area.

As identified in the specific plan, upon annexation of the plan area to the city, development and growth in population would result in an increase in service demand on the county library services. Funding for library facilities will continue to come primarily from a share of the property tax collected. As a result of the current depletion of staffing levels, the city will be required to provide support for the county library facilities and services in the form of funding mechanisms (e.g. Community Facilities District, Assessment District, etc.) to provide staffing as well as additional capital facilities, on-going operations, and maintenance.

It may be appropriate to provide county library services at or near the two designated school sites and/or the commercial site within the plan area. These options should be considered by the city as a part of the development approval process, along with funding mechanisms to provide additional capital facilities, on-going operations, and maintenance.

General Plan Amendment-Miramonte Specific Plan

1. A specific plan has been prepared to guide the development of the proposed Miramonte Project (formerly Miravale III Specific Plan). An amendment to the General Plan is needed to allow residential uses at greater densities within the General Plan Mirrasou Specific Plan Area than currently allowed by the City of

Soledad 2005 General Plan; related changes to the land use map and text to reflect the Miramonte Specific Plan land use designation, 647-acre boundary, and policy guidance contained in the proposed specific plan as follows: Change the City of Soledad General Plan land use designation for 633.8 acres of the Mirrasou Specific Plan Area to Miramonte Specific Plan;

2. Change the City of Soledad General Plan land use designation for 1.28 acres of the project site from Northwest Expansion Area to Miramonte Specific Plan;
3. Change the City of Soledad General Plan land use designation for 9.71 acres of the project site from San Vicente West Specific Plan Area to Miramonte Specific Plan;
4. Change the City of Soledad General Plan land use designation for 2.05 acres of the project site from the North Entry Commercial Specific Plan Area and Entry Commercial Expansion Area to Miramonte Specific Plan;
5. Identify a development potential of 5,975 units in the Northwest Expansion Area (6,500 identified in the current General Plan less 525 reallocated to the Mirrasou Specific Plan Area); and
6. Change the existing jurisdictional boundaries to include the 647-acre specific plan area (which includes the approximately 14.1 acres of land needed for the City's desired San Vicente Road improvements in the City of Soledad).Figure 2-11, City of Soledad Planning Boundaries, shows the new land use designations and change to the jurisdictional boundary.

Sphere-of-Influence Amendment

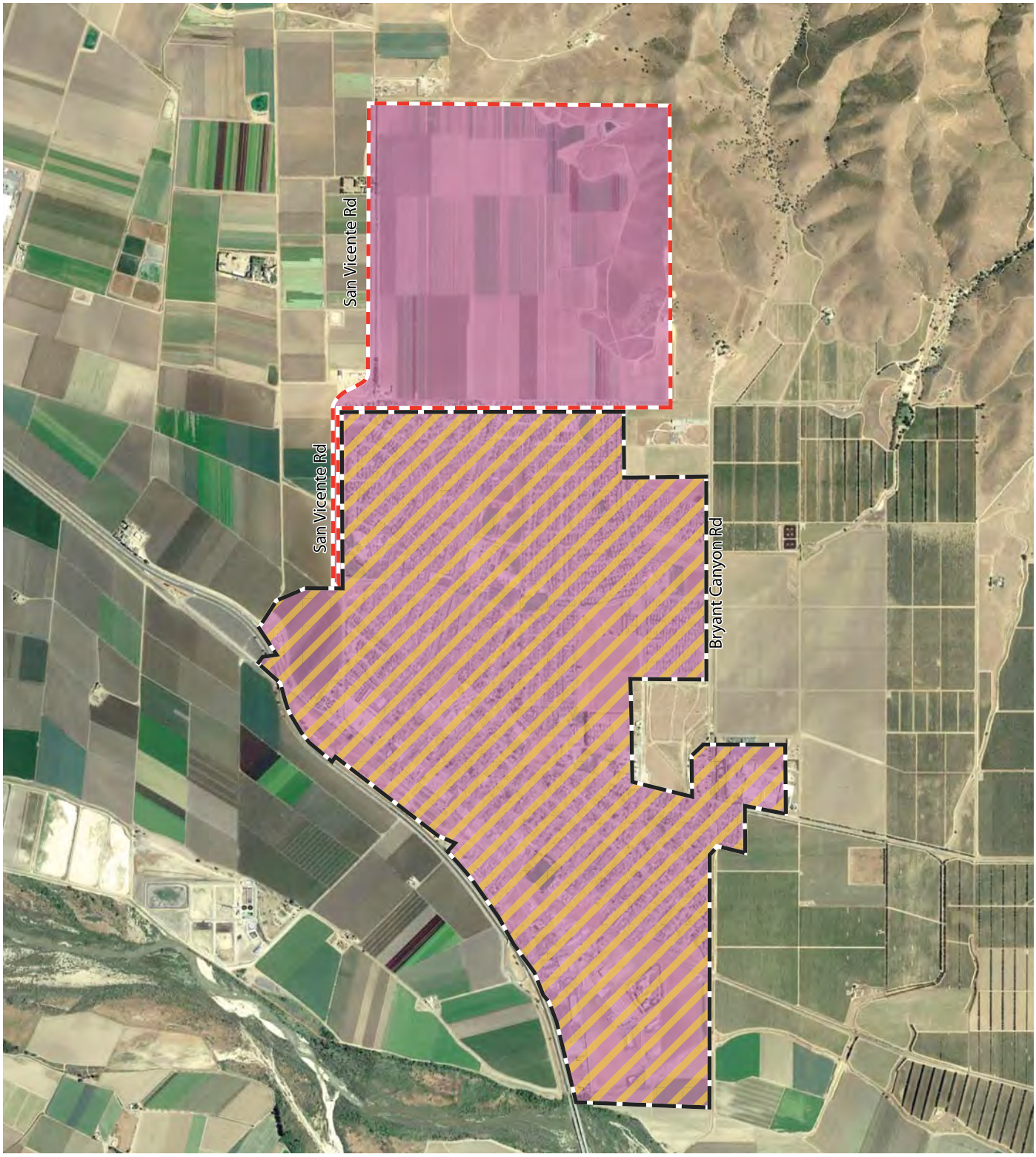
The proposed project includes amending the City of Soledad sphere of influence to include the 647-acre project site, which requires LAFCO approval, as illustrated by Figure 2-12, City of Soledad Existing and Proposed Sphere of Influence.

Prezoning

The proposed project includes prezoning the 647-acre project site as Miramonte Specific Plan, in accordance with the Planning Areas and overlay zones outlined in Table 2-2, Miramonte Specific Plan Proposed Land Use, and shown in Figure 2-5, Miramonte Specific Plan Land Use Diagram.

Annexation

The proposed project includes annexing the 647-acre project site into the city limits of Soledad, which requires LAFCO approval.



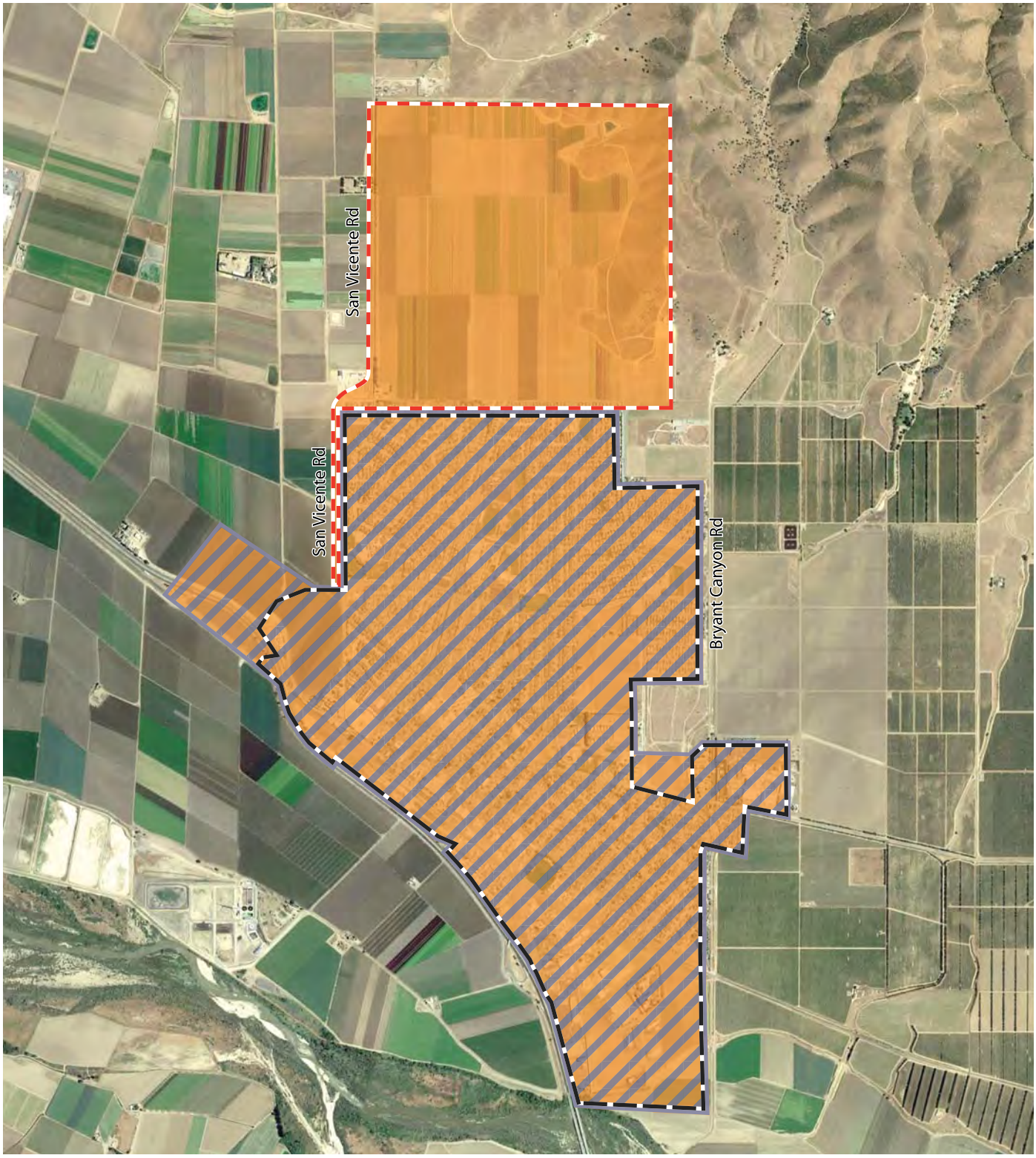
Source: Esri 2017

Figure 2-11

City of Soledad Existing and Proposed City Limits

Miravalle III Specific Plan EIR Addendum

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Source: Esri 2017

Figure 2-12

City of Soledad Existing and Proposed Sphere of Influence

Miravalle III Specific Plan EIR Addendum

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Zoning Amendment

Amending Title 17 of the Soledad Municipal Code is required to add the Miramonte Specific Plan zoning categories as shown on Figure 2-13, Miramonte Specific Plan Zoning Map, as follows: LDR Low Density Residential (M3-R-1); VR Village Residential (M3-R-V), C Village Commercial (M3-C-V), MU Mixed Use Opportunity (M3–MU), PF Public Facility (P-F), and OSP Open Space & Parks (O-S). This action includes mapping and text amendments.

Vesting Tentative Map

The application includes a vesting tentative map, which was prepared and submitted prior to preparation of the specific plan. The vesting tentative map would subdivide the site for the development of mixed uses including single- and multi-family residential uses, senior housing, sites for commercial development, police and fire facility improvements if needed, two elementary school sites, a community park, linear park, pocket parks and open space above the 400-foot contour line in hillside areas. The tentative map includes diagrams for water, wastewater, storm water, and roadway infrastructure. Figure 2-6, Miramonte Residential Subdivision Vesting Tentative Map, presented earlier, provides an overview of the vesting tentative.

The vesting tentative map includes 16 sub-areas that may be developed over the next over 10-30 years. The anticipated order of development may occur in one or more phase encompassing one or more sub-areas as identified in the specific plan.

Approval of the vesting tentative map would allow development of the site in accordance with the specific plan when approved, once the site is annexed to the city. Approval of the final map will be contingent upon the developer, or developers of the project site to prepare final map(s) and improvement plans that reflect the development of the plan area pursuant to and consistent with the specific plan. For the purposes of this EIR, the development pattern, intensities and densities are those identified in the specific plan land use diagram.

Development Agreement

The plan area developer(s) are expected to sign one or more development agreements as an implementation tool for facilitating buildout development of the plan area. The development agreement(s) include, but are not limited to, clarifying responsibilities of the developer, city, and others (as applicable) for implementing the Miramonte Specific Plan.

2.4 Comparison to the Project Evaluated in the Miramonte Specific Plan EIR

The proposed project is similar to the larger 2010 Miravale III Specific Plan; however, the current proposal eliminates approximately 273 acres from the originally proposed project and does not include subdivision of the San Vicente West Specific Plan Area and the Northwest Expansion Area.

A comparison of proposed land uses between the formerly proposed Miravale III project analyzed in the Miravale III EIR, with the proposed Miramonte Specific Plan, evaluated in this EIR addendum, is presented in Table 2-4, Land Use Comparison.

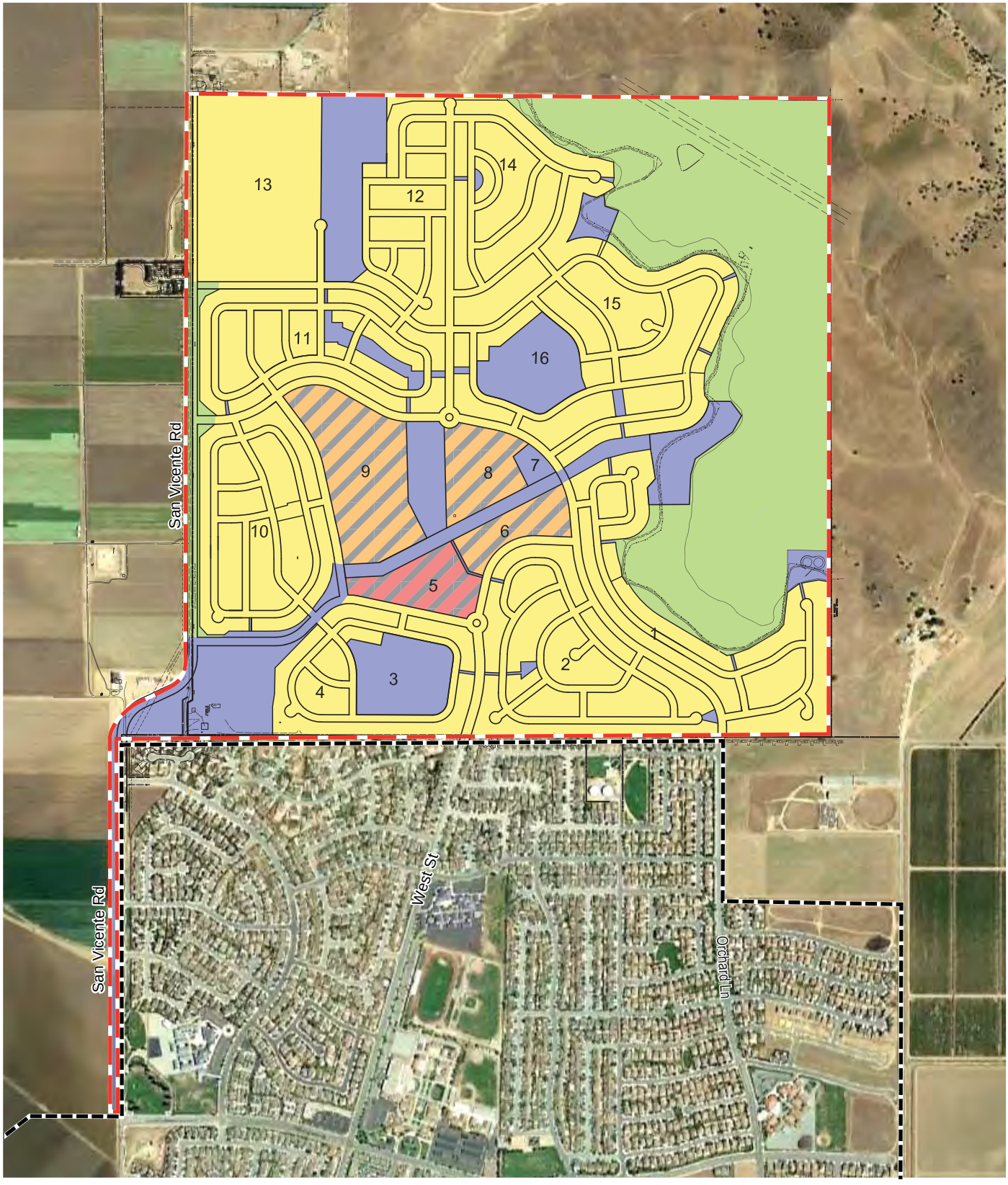
Table 2-4 Land Use Comparison[1]

Land Use	Miravale III Project		Miramonte Specific Plan		Change	
	Acres	Units	Acres	Units	Acres	Units
Low-Density Residential	240.88	1,470	296.1	1,318	+54.5	-152
Medium-Density Residential and Affordable Housing	146.97[3]	2,230	31.3	626	-115.67	-1,604
Senior Housing Units[3]	--[3]	500	6.7	134	--[3]	-366
Residential Study Area	0	0	35.9	314	+35.9	+314
Total Residential	387.85	4,200	370.0	2,392	-17.85	-1,808
Non-Residential Uses	Acres		Acres		Change	
Hotel	6.5		0.0		Eliminated	
Retail/Commercial	33.22		8.6		-24.16 acres	
Fire/Police	1.31		2.0		+0.69 acres	
Elementary School	20.00		22.0		+2 acres	
Middle School	19.00		None per SUSD		Eliminated	
Churches	1.67		0		Eliminated	
Park/ Recreation/Open Space	75.77		196.4		+ 120.23	
Golf Course/maintenance	146.76		0.0		Eliminated	
Recycled Water Plant	1.82		0.0		Eliminated	
Detention/Retention Ponds	15.75		--[4]		-15.75	
Water Tanks	3.02 (Assumed)		2.0		-1.02	
Collector Streets/ROW	121.78 (Assumed)		32.2/14.1		-77.88	
Agricultural buffer	1.61		Yes		Eliminated	
Urban Reserve/Agriculture	85.80		0		Eliminated	
Utility Easements	Unknown		Unknown		Unknown	
Total Acres	921.77		647.0		-274.77	

SOURCE: Denise Duffy and Associates 2008; Bestor Engineers 2017; EMC Planning Group 2017

NOTES:

1. Amounts may vary due to rounding
2. Acreage and land use types and sizes may change pending submittal and review of the proposed specific plan
3. The acreage of Senior Housing is included in Medium Density acreage
4. Acreage of the retention pond is included in the Parks and Recreation category



Note: Neighborhood Park locations are conceptual within Sub-areas

Figure 2-13

Miramonte Specific Plan Zoning Map

Miravalle III Specific Plan EIR Addendum

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2.5 INTENDED USED OF THE EIR ADDENDUM

The purpose of this EIR addendum is to document why a subsequent or supplemental EIR is not required. The City of Soledad is the lead agency responsible for certification of the EIR addendum and approval the project. Project actions will include, but not be limited to, a general plan amendment, specific plan adoption, sphere of influence amendment, pre-zone, annexation request, vesting tentative subdivision map, architectural review and a development agreement(s) to allow for the proposed development. The following is a listing of permits and approvals under the city and other jurisdictions.

City of Soledad

- Amend the General Plan concurrently with the adoption of the specific plan and certification of the addendum to the previously certified EIR to incorporate the land use designations and provisions of the specific plan.
- Approve sphere of influence and annexation requests and pre-zone the territory requested for annexation. Related detachments (i.e., Mission Soledad Rural Fire Protection District, Soledad-Mission Recreation District, and the Resources Conservation District of Monterey County) will be requested concurrently.
- Adopt the water supply assessment, the plan for services and the fiscal analysis, and forward them to LAFCO of Monterey County along with the sphere of influence and annexation request.
- Adopt the vesting tentative map, subject to:
    - Changes proposed in and consistent with the specific plan;
    - Mitigations in the certified EIR and EIR addendum;
    - Conditions of approval; and
    - Subject to LAFCO action on the requested sphere of influence change and reorganization.
- File and obtain approval for a sphere of influence amendment and subsequent annexations from LAFCO of Monterey County.
- Upon completion of annexation, the city must amend the Zoning Ordinance to rezone the property within the plan area consistent with Figure 2-12, Miramonte Specific Plan Zoning Map contained herein.
- Adoption of the development agreement(s).
- Review and approve all required permits, including, but not limited to, building, grading, encroachment, and occupancy permits.

Agencies

- Monterey County LAFCO for the approval of sphere of influence amendment and annexation required for development within the incorporated limits of the city, and for the approval of special district detachments (i.e., Mission Soledad Rural Fire Protection District, Soledad-Mission Recreation District, Resources Conservation District of Monterey County).
- Other agencies with permit or review authority over some aspect of the project.

3.0
Project Analysis

3.1 METHODOLOGY

The primary purpose of this EIR addendum is to validate that the proposed project would not trigger the need for a subsequent or supplemental EIR as described in CEQA Guidelines sections 15162 and 15163. The primary methodological approach is to identify whether the proposed specific plan amendment would result in new significant environmental effects or cause previously identified effects found to be less than significant to rise to a level of significance.

As with the Miravale III EIR, the following analysis assumes that the entire specific plan would build out consistent with the Miramonte Specific Plan and does not evaluate any interim scenarios.

Miravale III specific plan policy mitigations and mitigations contained in the Miravale III EIR that address all development within the specific plan boundary and the proposed project in particular would continue to apply to all development pursuant to the specific plan. The proposed tentative map would be conditioned to be consistent with the policy mitigations and to implement Miravale III EIR mitigation measures. Consequently, all significant impacts of the revised project would be reduced to a less than significant level unless otherwise noted in this addendum or noted in the Miravale III EIR as significant and unavoidable.

3.2 AESTHETICS

Miravale III Specific Plan EIR Analysis

Scenic Vista

The general plan identifies the highly visible foothills of the Gabilan Mountain Range located on the eastern edge of the project site as an important scenic vista which serves as a dramatic backdrop to the flat valley land below.

The Miravale III EIR determined that the project would permanently alter views to the Gabilan Mountain Range foothills by developing above the 400 foot contour of the foothills. Although the Miravale III Specific Plan contained specific policies governing development

within the hillside portion of the project site, the Miravale III EIR found that development within and above the 400 foot contour foothill portions of the project site constituted ridgeline development and would result in a significant and unavoidable impact to a scenic vista. Implementation of the following mitigation measures would reduce impacts, but not to a less than significant level. The Miravale III EIR additionally determined that implementation of the project would introduce substantial new development, including structures of various heights and densities, which would result in decreased views of open space. This increased visibility and intensity of development would have a substantial adverse effect on a scenic vista. However, the EIR determined that these impacts could be reduced to a less-than-significant level with implementation of the following mitigation measures:

Mitigation Measures

4.1-1 Building heights of all new structures shall adhere to the limits set forth in the Miravale III Specific Plan dated June 2007. Additionally, all new structures shall adhere to the applicable Development Standards as established in Section 2.0 of the Specific Plan. Prior to the issuance of any building permit for development within the Specific Plan area, the project applicant shall submit detailed plans, including elevations, site plans, and/or other documentation detailing compliance with applicable development standards, subject to the review and approval of the City of Soledad.

4.1-2 In order to minimize potential adverse visual impacts associated with development within the hillside portions of the project site, the project applicant shall submit and have approved, prior to the recordation of the final map for Phases three and four, building envelopes for each new residential lot proposed above the 400 foot elevation contour. The proposed building envelopes shall be located in the least visually sensitive area of each lot. No new structures shall be constructed outside of the approved building envelopes, unless otherwise approved by the City of Soledad.

4.1-3 In order to minimize aesthetic-related impacts due to development within the hillside portion of the site, the project applicant, prior to project approval, shall submit a revised Specific Plan that includes the following policy in Section 2.6 Low Density Residential (LDR & LDR-H/M3-R-1): All new residential units proposed within areas of the project site above the 400 foot elevation contour shall be subject to a Design Review approval process or similar. As part of the design review process, vertical building envelopes shall be identified and staking and flagging shall be required to demonstrate the extent of proposed development. All new structures shall be designed to minimize visual impacts to the greatest extent feasible.

4.1-4 Final design plans for proposed development shall utilize natural landforms and vegetation for screening structures, access roads, building foundations, cut and fill slopes, and exterior lighting. Roads, parking, and utilities shall be designed to minimize visual impacts. Prior to the issuance of any grading and/or building permit, the project applicant shall submit design-level drawings demonstrating compliance with this measure, subject to the review and approval of the City of Soledad. If an alternative design would minimize impacts, the applicant shall submit evidence demonstrating that the alternative design is infeasible.

4.1-5 The applicant shall provide landscape screening appropriate to the surrounding area in order to integrate the development with the existing natural landscape. Landscaping plans shall be submitted to the City of Soledad for review and approval prior to the issuance of any building or grading permit.

4.1-6 All buildings shall be designed with colors and materials that effectively blend the structures with the surrounding landscape. Building applications for new structures shall include color and material sample photo sheets and shall be approved by the City of Soledad, prior to the issuance of any building permit.

4.1-7 A site-specific geotechnical report shall be prepared for new development on hillsides in order to ensure that the development will not cause or worsen natural hazards, such as erosion and sedimentation, and will minimize risk to life and property from slope failure, landslides, and flooding. The report shall include erosion and sediment control measures, such as temporary vegetation sufficient to stabilize disturbed areas. Prior to the issuance of any grading and/or building permit for new development within the hillside portions of the project site, the project applicant shall submit a geotechnical report prepared by a qualified professional to the City of Soledad Department of Public Works for review and approval. The site-specific geotechnical report shall identify feasible recommendations and avoidance measures to minimize potential impacts.

4.1-8 Land alterations within areas above the 400 foot elevation shall be minimized by keeping cuts and fills to a minimum, limiting grading to the smallest practical area of land, limiting land exposure to the shortest practical amount of time, replanting graded areas to insure establishment of plant cover before the next rainy season, and creating grading contours that blend with the natural contours on site or look like contours that would naturally occur. Prior to the issuance of any grading permit, the project applicant shall submitted detailed grading plans consistent with the intent of this mitigation, subject to the review and approval of the City of Soledad.

Visual Degradation

Development of the Miravale III Specific Plan project would permanently alter the visual character of the site, transforming what is currently 920 acres of relatively undeveloped agricultural and grazing land into an urban landscape. Substantial grading would be required in order to accommodate project development. As a result, project development would alter the existing visual character of the site by causing changes to topography, removing vegetation, including mature eucalyptus along San Vicente Road, and adding roads, residences and commercial uses. Although the Miravale III Specific Plan has incorporated design measures, including height restrictions, landscape screening, appropriate color and architectural schemes, light and glare reduction and screening measures, and the use of non-reflective building materials, to minimize visual impacts, the introduction of urban features would permanently alter the existing visual character of the project site as perceived from adjacent public vantage points, including Highway 101 and adjacent residential uses. Currently, the project site, as perceived from adjacent and distant land uses, consists predominantly of existing mature eucalyptus trees, agricultural uses, and associated infrastructure. Removal of existing vegetation, particularly the mature eucalyptus trees, would substantially alter the existing visual character of the project site. This would constitute a significant impact to the existing visual character of the site. Below is a description of the project's primary development components, uses, and their resulting visual effects. The Miravale III EIR concluded that the loss of agricultural land and natural open space and introduction of urban development would result in significant and unavoidable impacts to the visual character of the site. In order to minimize the extent of project-induced impacts, the following mitigation measures were required. However, these mitigations were determined not reduce the impact to a less-than-significant level.

Mitigation Measures

4.1-9 In order to minimize tree removal and associated visual impacts, final design-level improvements plans shall retain existing mature eucalyptus and other tree species to the greatest extent possible. Final design-level plans shall be prepared in consultation with a registered arborist/forester to minimize tree removal and ensure the health of remaining trees. Prior to the issuance of any grading and/or building permits, final plans shall be subject to the review and approval of the City of Soledad Director of Public Works. If the removal of existing mature eucalyptus is required the applicant shall submit evidence demonstrating that there are no feasible design alternatives to avoid tree removal. In the event that tree removal is required, the project proponent shall prepare a tree removal and replacement plan for each phase of construction, subject to the review and

approval of the City of Soledad Community Development Director. The tree removal and replacement plan shall identify specific grading limits that minimize tree removal, as well as appropriate tree replacement ratios and replanting locations.

4.1-10 Final design plans for the proposed gateways shall include elements, such as signage, landscaping and landscaped center medians, and appropriate architectural detailing consistent with the Miravale III Specific Plan. Prior to issuance of any permit for the construction of any of the four gateways, the project applicant shall submit detailed plans that include the above referenced elements, subject to the review and approval of the City of Soledad.

4.1-11 Final design plans for proposed residential development shall include form, scale, and character elements which emulate the best characteristics of the existing residential neighborhoods, such as single and two-story dwellings with adequate off-street parking, landscaped front yards with trees, and sidewalks. Prior to the issuance of any building permit for residential development within the Specific Plan area, the project applicant shall submit design-level drawings consistent with the intent of this measure, subject to the review and approval of the City of Soledad. All residential development within the Specific Plan area shall be subject to a conditional use or design-review process as administered by the City of Soledad.

4.1-12 Final design plans for proposed multi-family development shall include useable open space for each dwelling and shall be designed to be integrated with the surrounding neighborhood. Prior to the issuance of any building permit for multi-family development within the Specific Plan area, the project applicant shall submit design-level drawings consistent with the intent of this measure, subject to the review and approval of the City of Soledad.

4.1-13 Final design plans for proposed development shall include a tree planting plan in order to increase the number and density of tree cover within new development areas. Prior to the issuance of any grading and/or building permit, the project applicant shall submit a detailed tree planting plan, subject to the review and approval of the City of Soledad.

Light and Glare

The Miravale III EIR determined that the proposed project would increase the intensity of development within an existing undeveloped area, and therefore the amount of artificial light produced by the site. The Highway 101 corridor and surrounding urban uses would be most affected by this increase in light and glare. Artificial lighting within the project site would impact nighttime views by altering the natural landscape and, in sufficient quantity,

lighting up the nighttime sky and reducing the visibility of astronomical features. The additional lighting within the project site, especially unshielded light, could result in spillover light that could impact surrounding land uses. Further, daytime glare could occur as light reflects off pavement, vehicles, rooftops, and structures. However, the EIR concluded that this impact could be reduced to a less-than-significant level with implementation of the following mitigation measures.

Mitigation Measures

4.1-14 All buildings shall be designed so that exterior lighting is down-lit and illuminates the intended area only. Building applications for new structures shall include an exterior lighting plan subject to approval of the Soledad Planning Department that includes the following requirements: 1) exterior lighting shall be directional; 2) glare from exterior lighting shall be adequately minimized; 3) the source of directional lighting shall not be directly visible; and 4) vegetative screening shall be considered, where appropriate, as a means of reducing development-related light and glare. The project applicant shall submit an exterior lighting plan to the City of Soledad Planning Department prior to the issuance of any building permit.

4.1-15 Ornamental lighting use for streets, parks, public open spaces, trails, bike paths, parking lots, and walkways shall utilize fixtures consisting of metal halide with full cut-off luminaries or other form of similar fixtures in order to control light and glare. Prior to the issuance of any building permit, the project applicant shall provide documentation as part of the exterior lighting plan described in Mitigation Measure 4.1- 14 demonstrating that these measures are incorporated into site lighting, subject to the review and approval of the Soledad Planning Department.

4.1-16 Light reduction and screening measures shall be required in order to reduce nighttime ambient light increases in the area. Lighting levels in commercial areas shall be kept as low as feasible and controlled to minimize operating time. Light sources shall be installed, so there is no light radiation above the horizontal plane (i.e., dark sky). Lighting shall be focused downward to prevent the splay of ambient light to other areas. Prior to the issuance of any building permit, the project applicant shall provide documentation as part of the exterior lighting plan described in Mitigation Measure 4.1-12 demonstrating that these measures are incorporated into site lighting, subject to the review and approval of the Soledad Planning Department.

Proposed Project Analysis

The proposed project is similar to the larger project analyzed in the Miravale III EIR; however, the current proposal eliminates approximately 275 acres from the originally proposed project. While project design may necessitate the placement of infrastructure improvements above the portion of the project site above the 400-foot elevation contour line of the Gabilan foothills, the Miramonte project otherwise eliminates development above the 400 foot contour. As discussed in the Miravale III EIR, the Gabilan foothills are identified by the general plan as a scenic vista and the Miravale III EIR concluded that development of the hillside portion of the project site would be a significant and unavoidable impact despite mitigation. Because the currently proposed project no longer includes residential development on the portion of the project in the Gabilan foothills there is no longer a significant and unavoidable impact to the scenic vista resulting from hillside residential development. Therefore, the following mitigation measures identified in the Miravale III EIR are not applicable to the currently proposed specific plan: 4.1-2 and 4.1-3. Mitigation measure 4.1-7 is still required to mitigate impacts related to erosion effects and is discussed in Section 3.7. Mitigation Measure 4.1-8, as edited for clarification remain applicable to address any impacts related to the placement of infrastructure above the 400 foot contour line. Impacts to scenic vistas are less than significant.

Although smaller, the proposed project would still permanently alter the visual character of the site, transforming what is currently approximately 647 acres of relatively undeveloped agricultural and grazing land into an urban landscape and would introduce new light and glare to the project area similar to those analyzed in Miravale III EIR. Therefore, the remainder of the mitigation measures (measures 4.1-1, 4.1-4 through 4.1-6, and 4.1-8 through 4.1-16) remain applicable to the currently proposed project with the following edits:

Mitigation Measure

4.1-1 Building heights of all new structures shall adhere to the limits set forth in the ~~Miravale III~~ adopted Miramonte Specific Plan ~~dated 2007~~. Additionally, all new structures shall adhere to the applicable Development Standards as established in Section ~~2.0~~ 2.4 of the Specific Plan. Prior to the issuance of any building permit for development within the Specific Plan area, the project applicant shall submit detailed plans, including elevations, site plans, and/or other documentation detailing compliance with applicable development standards, subject to the review and approval of the City of Soledad. The following mitigation measure is edited for clarification.

4.1-10 Final design plans for the proposed gateways shall include elements, such as signage, landscaping and landscaped center medians, and appropriate architectural detailing consistent with the adopted Miramonte ~~Miravale III~~

Specific Plan. Prior to issuance of any permit for the construction of any of the four gateways, the project applicant shall submit detailed plans that include the above referenced elements, subject to the review and approval of the City of Soledad.

Aesthetics Conclusion

The proposed project would not result in new significant aesthetic impacts or substantially increase the severity of previously identified significant effects. The proposed project would have lesser impacts to scenic vistas, reducing the previously proposed project's significant and unavoidable impact to less than significant with mitigation. No new information has been identified that indicates the proposed project would have new or more significant impacts on aesthetics than were identified for the original project.

3.3 AGRICULTURAL RESOURCES

Miravale III Specific Plan EIR Analysis

Conversion of Important Farmland

The Miravale III EIR determined that the project would convert 760 acres of Prime Farmland to a non-agricultural use which is a significant and unavoidable impact and that no feasible mitigation exists that could reduce impacts to a less-than-significant level.

Williamson Act

According to the Miravale III EIR, two parcels totaling approximately 107 acres (APN 257-001-026 and APN 257-001-027) located on the northwestern portion of the plan area were under Williamson Act contract. The EIR concluded that the project would require cancellation of these contracts which would be a significant and unavoidable impact.

Land Use Conflicts

Land Use Compatibility

Implementation of the proposed Miravale III Specific Plan would result in sensitive receptors being sited adjacent to existing agricultural uses located on the boundary of the project footprint. The EIR found that this has the potential to cause an increase in land use compatibility problems and nuisance complaints due to urban uses being sited adjacent to agricultural uses. The EIR found that in order to minimize these potential land use conflicts, the project design included a minimum 60-foot buffer zone between the residential and agricultural uses along the western boundary of the project site but additional buffers were warranted along the northern and eastern project boundaries. Further, the EIR found that the proposed 60-foot buffer did not meet the minimum buffer distance recommended by the

Monterey County Agricultural Commissioner to ensure that residential uses are adequately buffered from agricultural uses. The EIR concluded that these impacts could be reduced to less-than-significant with the following mitigation.

Mitigation Measures

4.2-1 Adequate buffer areas between urban and agricultural uses, including a minimum 50-foot buffer along the northern and eastern boundary of the project site and a 200-foot buffer along the western boundary, shall be incorporated into the proposed project. These buffers shall also be supplemented with physical barriers in areas where residential and commercial structures are to be located, as recommended by the Agricultural Resources Report contained Appendix T-1. The 200-foot buffer along the project's western boundary may be reduced upon demonstration to the satisfaction of the city that other measures, including those recommended in Mitigation Measure 4.2-2, will adequately protect human health and safety and minimize potential conflicts, and provided that any such reduction shall not result in a buffer width of less than 100 feet. The County of Monterey Agricultural Commissioner shall be consulted regarding the adequacy of the proposed buffers and physical barriers and evidence of said consultation and recommendation shall be submitted to the city prior to approval of the tentative map. Prior to the recordation of any final map, the project applicant shall submit evidence in the form of agricultural setbacks delineating buffer locations consistent with the recommendations contained in the Agricultural Resources Report, subject to the review and approval of the City of Soledad. All agricultural buffers, excluding public right-of-ways, shall be maintained by the Project Proponent and/or his/her successor(s) in interest through easements dedicated to the city or other entity until such time that the adjoining agricultural operation and use no longer exists.

4.2-2 In order to ensure the adequacy of the agricultural buffer located along the western boundary of the project site, as required by Mitigation Measure 4.2-1, the project applicant shall submit a detailed landscape plan that includes vegetative screening in addition to physical barriers, such as fences, walls, or similar structures to protect human health and safety. One or more of the following options may also be used in combination with landscaping requirements to create an adequate buffer between the agricultural parcel property line and habitable structures within the Plan area:

a. Public or private road right-of-ways;

b. Landscaped islands and planting areas;

c. Recreational trail corridors; and/or

d. Placing dwellings in the rear portion of lots.

Prior to the recordation of any final map along the western project boundary, the agricultural buffer and any related easement shall be delineated on the final map, subject to the review and approval of the City of Soledad.

4.2-3 Prior to the issuance of any certificate of occupancy for residences adjacent to or in close proximity to the agricultural buffer along the western project boundary, the project applicant shall provide documentation demonstrating that adequate screening, landscaping and structural improvements have been installed and/or constructed within the buffer, subject to the review and approval of the City of Soledad.

Land Use Conflicts

Disruption of Adjacent Agricultural Activities

Additionally, the Miravale III Specific Plan EIR found that the specific plan has the potential to impact routine and on-going agricultural activities on the areas adjacent to the northern, eastern, and western boundaries of the project site. The EIR recommended implementation of the following mitigation measures to reduce these impacts to the extent possible. However, the EIR determined that project related impacts were significant and unavoidable.

4.2-4 Access for agricultural equipment and vehicles to the adjoining row crop land on the western boundary shall continue to be provided from the ramp to Highway 101 North (see Figure 2 in Technical Appendix T-1, Agricultural Report). The current access road to the Braga property should remain at the current width to allow for passing and ensure adequate turnaround space for field equipment. Implementation of this measure would reduce impacts to routine and on-going agricultural operations on lands west of the proposed project site.

4.2-5 Prior to the issuance of any permit, the project applicant shall have recorded a right-to-farm notice on parcels adjacent to existing and on-going agricultural uses consistent with the requirements of the City of Soledad General Plan, subject to the review and approval of the City of Soledad.

Proposed Project Analysis

Conversion of Important Farmland

The Miravale III EIR determined that the project would convert 760 acres of Prime Farmland to a non-agricultural use. This impact to conversion of agricultural lands due to proposed

development was considered to be significant and unavoidable. The currently proposed project is smaller than the previously proposed project and thus would convert fewer acres of important farmland to non-agricultural uses.

The city entered into a memorandum of understanding with Monterey County on March 15, 2016. Compensation for conversion of Prime Farmland or Farmland of Statewide Importance to urban uses is required by the memorandum of understanding, using one of four methods, at the discretion of city to coincide with the time of the recordation of a final subdivision map. The specific plan includes policies that are consistent with the memorandum of understanding requirements. The proposed project would not result in new or greater impacts than those identified in the Miravale III EIR.

To ensure compensation for the conversion of Prime Farmland or Statewide Importance to urban uses is provided as required by the 2016 memorandum of understanding; the following mitigation measure shall be required:

Mitigation Measure

4.2-6 Concurrent with recordation of a final subdivision map, developers shall provide compensation for conversion of Prime Farmland or Farmland of Statewide Importance to urban uses using one of four methods, at the discretion of the city:

a) provide the in-kind direct purchase/acquisition of an agricultural mitigation easement at a 1:1 ratio and dedicate the easement to an agricultural land trust or other qualifying entity; and/or

b) if available, purchase agricultural banked mitigation credits at a 1:1 ratio from a qualifying entity; and/or

c) pay an in-lieu mitigation fee, which amount shall be determined by the city prior to project approval. The amount of the fee should reasonably be expected to lead to the preservation of agricultural land. Said fee shall be kept by the city in a fund established specifically for agricultural land mitigation purposes; and/or

d) implement other innovative approaches as approved by the city that results in the preservation of agricultural land within areas targeted by the city.

The memorandum of understanding requirements for compensation for conversion of Prime Farmland or Farmland of Statewide Importance to urban uses lessens the impact; however, the project would still result in the conversion of important farmland which remains a significant and unavoidable impact.

Williamson Act

The two parcels (APN 257-001-026 and APN 257-001-027) that were identified by the Miravale III Specific Plan EIR as Williamson contract properties are not proposed for development in the currently proposed specific plan. Thus, under the specific plan would not result in impacts related to the conversion of Williamson contract land.

Land Use Conflicts

Land Use Compatibility

As with the Miravale Specific Plan, the proposed specific plan includes areas of single-family residential development that would be sited adjacent to agricultural lands located on the northern, eastern, and western boundary of the project site, which has the potential to cause an increase in land use compatibility problems. Mitigation measures identified in the Miravale III EIR requiring adequate agricultural buffers (mitigation measures 4.2. 1 through 4.2.3) are applicable to these areas and would reduce impacts related to land use conflicts to less than significant. The following edits are made to 4.2-1 to update the project reference.

4.2-1 Adequate buffer areas between urban and agricultural uses, including a minimum 50-foot buffer along the northern and eastern boundary of the project site and a 200-foot buffer along the western boundary, shall be incorporated into the proposed project. These buffers shall also be supplemented with physical barriers in areas where residential and commercial structures are to be located, as recommended by the Agricultural Resources Report contained in the Miravale III EIR Appendix T-1. The 200-foot buffer along the project's western boundary may be reduced upon demonstration to the satisfaction of the city that other measures, including those recommended in Mitigation Measure 4.2-2, will adequately protect human health and safety and minimize potential conflicts, and provided that any such reduction shall not result in a buffer width of less than 100 feet. The County of Monterey Agricultural Commissioner shall be consulted regarding the adequacy of the proposed buffers and physical barriers and evidence of said consultation and recommendation shall be submitted to the city prior to approval of the tentative map. Prior to the recordation of any final map, the project applicant shall submit evidence in the form of agricultural setbacks delineating buffer locations consistent with the recommendations contained in the Agricultural Resources Report, subject to the review and approval of the City of Soledad. All agricultural buffers, excluding public right-of-ways, shall be maintained by the Project Proponent and/or his/her successor(s) in interest through easements dedicated to the city or other entity until such time that the adjoining agricultural operation and use no longer exists.Land Use Conflicts

Disruption of Adjacent Agricultural Activities

The Miravale III EIR found that the specific plan has the potential to impact routine and on-going agricultural activities on the areas adjacent to the northern, eastern, and western boundaries of the project site. The proposed specific plan is no longer adjacent to the Braga property; therefore, mitigation measure 4.2-4 is no longer applicable to the project.

However, mitigation measure 4.2-5 is applicable to the project and would reduce impacts, but not to a less-than-significant level and disruption of adjacent agricultural activities would remain a significant and unavoidable impact

Agricultural Resources Conclusion

The proposed project would not result in new significant agricultural impacts or substantially increase the severity of previously identified significant effects. The currently proposed project would not result in the conversion of Williamson contract lands and therefore would avoid the significant and unavoidable impact identified in the Miravale III EIR.

A mitigation measure has been provided to ensure that compensation for the conversion of Prime Farmland or Statewide Importance to urban uses is provided as required by the 2016 memorandum of understanding. This mitigation will lessen the impact; however the project would still result in the conversion of important farmland which remains a significant and unavoidable impact. Impacts due to disruption of adjacent agricultural activities remain a significant unavoidable impact. All mitigation measures identified in the Miravale III EIR are applicable to the currently proposed specific plan with the exception of mitigation measure 4.2-4. No new information has been identified that indicates the proposed project would have new or more significant impacts on agricultural resources than were identified for the original project.

3.4 AIR QUALITY

Miravale III Specific Plan EIR Analysis

Construction Impacts

The Miravale III EIR concluded that construction activities associated with implementation of the specific plan such as clearing, excavation and grading operations, construction vehicles traffic on unpaved ground, and wind blowing over exposed earth would generate dust and particulate matter that result in significant and unavoidable impacts. Implementation of Best Management Practices as required by the following mitigation measure and limiting the size of the grading area would reduce project impacts to a less-than-significant level only if emissions can be limited to 82 pounds per day or subsequent

dispersion modeling of construction activities demonstrates that PM_{10} concentrations from construction activity would not cause an exceedance of the State ambient air quality standard, as averaged over 24 hours. The Miravale III EIR concluded that limiting construction activities was likely not feasible for this project and dispersion modeling could not be conducted at that time (due to lack of detailed construction plans). Therefore, the impact was considered to remain significant and unavoidable, even with mitigation.

Mitigation Measure

4.3-1 Prior to start of construction, the project applicant or contractor shall submit to the City of Soledad Public Works Department a construction dust mitigation plan. This plan shall specify the methods of dust control that would be utilized, demonstrate the availability of needed equipment and personnel, use reclaimed water for dust control, and identify a responsible individual who, if needed, can authorize implementation of additional measures. The construction dust mitigation plan shall, at a minimum, include the following measures:

- Limit grading activity to a maximum of 2.5 acres daily. As more detailed construction information becomes available, emissions from grading activities could be reassessed to determine if the area of grading could be increased. Such an assessment would have to be conducted using appropriate assumptions and mitigation measures.
- Water all active construction areas at least twice daily and more often during windy periods.
- Active areas adjacent to existing businesses should be kept damp at all times. If necessary, during windy periods, watering is to occur on all days of the week regardless of onsite activities.
- Cover all trucks hauling dirt, sand, or loose materials.
- Haul trucks shall maintain at least 2'0" of freeboard.
- Plant tree windbreaks on the windward perimeter of construction project if adjacent to open land.
- Install wheel washers at the entrance to construction sites for all exiting trucks.
- Pave all roads at construction sites.
- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.

- Sweep daily all paved access roads, parking areas and staging areas at construction sites.
- Sweep streets daily if visible soil material is deposited onto the adjacent roads.
- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).
- Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles.
- Limit traffic speeds on unpaved roads to 15 mph.
- Replant vegetation in disturbed areas as quickly as possible.
- Suspend excavation and grading activity when hourly-average winds exceed 15 mph and visible dust clouds cannot be contained within the site.

According the Miravale III EIR, grading of the site is expected to result in the highest emissions of diesel particulate matter during the construction period. Diesel particulate matter includes air contaminants that could impact sensitive receptors including residences that border the project site as well as new on-site residences constructed during earlier phases of the project. However, the Miravale III EIR concluded that this potentially significant impact can be reduced to a less-than-significant level with the implementation of the following mitigation measure.

Mitigation Measure

4.3- 2 Projects developed under the specific plan shall be evaluated for individual construction period air quality impacts. Project-specific mitigation measures shall be identified at that time to reduce impacts to a less-than-significant level, if feasible.

However, the following shall be implemented for all projects to reduce diesel particulate emissions from on-site construction equipment:

- The following equipment may be used without control devices or additional mitigation
  - No engineers greater than 750HP are used;
  - Engines between 501 HP and 750 HP are model years 2002 and newer;
  - Engines between 251 HP and 500 HP are model years 1996 or newer; and
  - Engines between 175 HP and 250 HP are model years 1985 or newer.

- The following equipment may be used without causing acute adverse health effects, if retrofitted with a catalyzed diesel particulate filter (CDPF):
  - Engines greater than 750 HP; if model year 2006 and newer; and
  - All engines less than 749 HP, regardless of model year.
- If construction equipment uses B99 biodiesel, no acute adverse health effect would be expected in the following:
  - Engines between 501 HP and 750 HP, if model years 2002 or newer;
  - Engines between 250 HP and 500 HP, if model years 1996 and newer; and
  - Any engine less than 250 HP.

Operational Impacts

The EIR additionally found that implementation of the proposed specific plan would result in increases in long-term operational emissions of ozone precursor pollutants that would exceed significance thresholds established by the Monterey Bay Air Resources District (formerly Monterey Bay Unified Air Pollution Control District, hereinafter "air district") , which is a significant and unavoidable impact. The Miravale III EIR provides calculations produced by the URBEMIS model, which forecasts daily emissions linked to the designated land uses. The pollutants measured by the model include volatile organic compounds (VOC), nitrogen oxides (NO_x), carbon monoxide (CO), and respirable particulates (PM_{10}). Both NO_x and PM_{10} are largely discussed in terms of their effect on air quality because according to the URBEMIS model, the emissions of NO_x and PM_{10} generated in the build out of the Miravale III Specific Plan would surpass the air district thresholds.

Mitigation Measure

4.3-3. In order to reduce greenhouse gas (GHG) and regional air pollutants and precursors (criteria air pollutants or CAPs) emissions to the extent feasible, the applicant/project proponent shall prepare and submit a GHG and CAP Reduction Plan (GCRP) concurrent with submittal of any revised Tentative Map under the Specific Plan or any Site Plan that differs from the Specific Plan as described in this EIR. The GCRP shall include a description of the measures that are proposed to be implemented by that phase of the project, including one or more of the measures contained in Appendix (F-1) of this Final EIR. The plan shall be approved by the city prior to construction of structures and site improvements, including but not limited to, determination of substantial conformance, building permits, and grading permits. For each of the measures not included, the applicant shall describe why the measure was not included. The GCRP shall present estimated reductions in GHGs and CAPs based on available information source.

No certificate of occupancy for any phase, or portion thereof, of the project shall be granted until all of the feasible, applicable measures have been implemented by the applicant/project proponent. The proponent shall demonstrate that measures that must be implemented throughout the life of the project are included in all applicable CC&Rs, property deeds, commercial center rules and regulations, and draft tenant lease agreements.

4.3-4 Fireplaces and stoves shall be gas-fired and meet U.S. Environmental Protection Agency certification requirements. The installation or operation of a wood-burning fireplace or a wood-burning stove shall be prohibited in perpetuity on all residential properties in the Miravale III Specific Plan Development. This restrictive covenant shall be recorded on the title of all parcels in the Miravale III Specific Plan area and shall run with the land.

Nuisances and Odors

The Miravale III EIR determined that the project would not create significant odors and that while agricultural activities adjacent to the project site could result in short-term nuisances, these nuisances would be reduced to a less-than-significant level with adequate agricultural buffers.

Proposed Project Analysis

Since the certification of the Miravale III EIR, the air district adopted the *2012-2015 Air Quality Management Plan* (Monterey Bay Air Resources District 2017) (AQMP). This AQMP does not call for significant changes in past air district's programs and plans, and the policies and programs of this AQMP would not significantly alter the air quality findings of the Miravale III EIR.

The proposed project is smaller than the previously proposed project and would result in less development in than what was evaluated in the Miravale III EIR. Specifically, the currently proposed project includes a mixed-use development consisting of approximately 1,318 single-family residential units, 626 multi-family residential units, 134 senior housing units, a 35.9-acre low- to medium-density Residential Study Area (up to 314 residential units), and 100,000 square feet of retail commercial space. The previously proposed project included 1,470 single-family units and 2,730 multi-family, units including affordable housing, workforce, and senior housing, 275,000 square feet of retail commercial space, and an 18-hole golf-course.

Construction Impacts

The proposed project is smaller than the project analyzed in the Miravale III EIR. However, construction activities associated with implementation of the specific plan would still include clearing, excavation and grading operations, construction vehicles traffic on unpaved

ground, and wind blowing over exposed earth that would generate dust and particulate matter. The Miravale III EIR concluded that limiting construction activities was likely not feasible for this project and dispersion modeling could not be conducted at that time (due to lack of detailed construction plans); therefore, the impact was significant and unavoidable. While limiting construction activities may remain infeasible for this project and dispersion modeling similarly cannot be completed at this time due to lack of sufficient detail; implementation of mitigation measure 4.3-1, as edited below, is feasible and would reduce construction dust impacts to a less-than-significant level.

Mitigation Measure

4.3-1 Grading activity shall be limited to a maximum of 2.5 acres daily, or, if grading cannot be limited to 2.5 acres daily, prior to start of construction, the project applicant or contractor shall submit to the City of Soledad Public Works Department a construction dust mitigation plan. This plan shall specify the methods of dust control that would be utilized, demonstrate the availability of needed equipment and personnel, use reclaimed water for dust control, and identify a responsible individual who, if needed, can authorize implementation of additional measures. The construction dust mitigation plan shall, ~~at a minimum,~~ include the following measures as necessary to control visible dust:

~~Limit grading activity to a maximum of 2.5 acres daily. As more detailed construction information becomes available, emissions from grading activities could be reassessed to determine if the area of grading could be increased. Such an assessment would have to be conducted using appropriate assumptions and mitigation measures.~~

- Water all active construction areas at least twice daily and more often during windy periods.
- Active areas adjacent to existing businesses should be kept damp at all times. If necessary, during windy periods, watering is to occur on all days of the week regardless of onsite activities.
- Cover all trucks hauling dirt, sand, or loose materials.
- Haul trucks shall maintain at least 2'0" of freeboard.
- Plant tree windbreaks on the windward perimeter of construction project if adjacent to open land.
- Install wheel washers at the entrance to construction sites for all exiting trucks.
- ~~Pave all roads at construction sites.~~

- Upon completion of mass grading, ~~P~~pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.
- Sweep daily all paved access roads, parking areas and staging areas at construction sites.
- Sweep streets daily if visible soil material is deposited onto the adjacent roads.
- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).
- Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles.
- Limit traffic speeds on unpaved roads to 15 mph.
- Replant vegetation in disturbed areas as quickly as possible.
- Suspend excavation and grading activity when hourly-average winds exceed 15 mph and visible dust clouds cannot be contained within the site.

Grading of the site would result in the highest emissions of diesel particulate matter during the construction period. Diesel particulate matter includes air contaminants that could impact sensitive receptors including residences that border the project site as well as new on-site residences constructed during earlier phases of the project. However, like Miravale III, this potentially significant impact can be reduced to a less-than-significant level with the implementation of mitigation measure 4.3-2 identified in the Miravale III EIR. Because construction details of future development projects cannot be know at this time, and feasible mitigation will need to be incorporated into future projects to ensure air quality impacts are reduced to a less-than-significant-level, mitigation measure 4.3-2, as clarified below, is required:

Mitigation Measure

4.3-2a ~~Projects developed under the specific plan shall be evaluated for individual construction period air quality impacts. Project specific mitigation measures shall be identified at that time to reduce impacts to a less-than-significant level, if feasible.~~ Prior to each final map and use permits, the developer shall have a construction air quality report prepared by a qualified air quality consultant. The report shall be subject to review and approval by the City Planning Department and all recommendations shall be implemented during construction.

4.3-2b In addition to the construction air quality analysis required in mitigation measure 4.3-2a, during construction ~~At a minimum~~, the following shall be implemented for all projects to reduce diesel particulate emissions from on-site construction equipment:

- The following equipment may be used without control devices or additional mitigation
  - No engineers greater than 750HP are used;
  - Engines between 501 HP and 750 HP are model years 2002 and newer;
  - Engines between 251 HP and 500 HP are model years 1996 or newer; and
  - Engines between 175 HP and 250 HP are model years 1985 or newer.
- The following equipment may be used without causing acute adverse health effects, if retrofitted with a catalyzed diesel particulate filter (CDPF):
  - Engines greater than 750 HP; if model year 2006 and newer; and
  - All engines less than 749 HP, regardless of model year.
- If construction equipment uses B99 biodiesel, no acute adverse health effect would be expected in the following:
  - Engines between 501 HP and 750 HP, if model years 2002 or newer;
  - Engines between 250 HP and 500 HP, if model years 1996 and newer; and
  - Any engine less than 250 HP.

Operational Impacts

Miravale III EIR determined that the previously proposed project would result in 34,856 daily vehicle trips. The currently proposed project, including the residential uses in Sub-area 13 would result in 20,888 daily trips (Higgins 2018), which is approximately 40 percent fewer trips than analyzed in the Miravale III EIR. However, even with a 40 percent reduction in trips, implementation of the proposed specific plan would result in increases in long-term operational emissions of ozone precursor pollutants that would likely exceed significance thresholds established by the air district, which is a significant and unavoidable impact.

Daily project emissions for the specific plan were estimated using a 47 percent reduction in vehicle trips identified in the 2017 traffic report (Higgins 2017a) and based on URBEMIS modeling conducted by for the Miravale III project with a 47 percent reduction in daily trips. With a 47 percent reduction it was determined that the proposed project would produce 193 lbs per day VOC (exceeding the 137 lb threshold), and 226 lbs per day PM_{10} (exceeding the 82

lb threshold). Thus, VOC and PM impacts for this project remain significant and unavoidable. A 40 percent reduction in trips would generate emissions that exceed these standards.

The Miravale III EIR was prepared in advance of the California Air Resources Board development of acceptable and appropriate methodologies for identifying thresholds of significance, modeling greenhouse gas (GHG) emissions, and determining the significance of emissions associated with specific development. In the absence of thresholds and quantification methods, the Miravale III EIR presumed that the GHG emissions volumes generated by the land uses consistent with the then-proposed specific plan would be significant and unavoidable. Mitigation Measure 4.3-3 required the preparation of an emissions reduction plan prior to any changes made to the then-proposed tentative map and/or specific plan. Implementation of the measures required by this mitigation measure (refer to the Miravale III Final EIR Appendix F-1), would reduce project-related emissions, but not to a less-than-significant level.

The currently proposed project is smaller and would generate fewer GHG emissions than the original project although emissions volumes would still be large enough to warrant preparation of an emissions reduction plan as identified in Mitigation Measure 4.3-3. The currently proposed project does not yet contain enough project-specific data to enable a meaningful assessment and quantification of project-related emissions. Therefore, the timing of preparation of the plan required by Mitigation Measure 4.3-3 has been determined to be more appropriate prior to recordation of the first final map. Mitigation will need to be incorporated into site-specific plan area development projects. To ensure GHG emissions volumes impacts are reduced to the extent feasible, mitigation measure 4.3-3, as clarified below, is required:

Mitigation Measure

4.3-3. In order to reduce greenhouse gas (GHG) and regional air pollutants and precursors (criteria air pollutants or CAPs) emissions to the extent feasible, the applicant/project proponent shall prepare and submit a GHG and CAP Reduction Plan (GCRP) prior to recordation of the first final map.~~concurrent with submittal of any revised Tentative Map under the Specific Plan or any Site Plan that differs from the Specific Plan as described in this EIR.~~ The GCRP shall include a description of the measures that are proposed to be implemented ~~by that phase of the project~~, including one or more of the measures contained in Appendix (F-1) of the ~~is~~ Miravale III Specific Plan Final EIR. The plan shall be approved by the city prior to construction of structures and site improvements, including but not limited to, determination of substantial conformance, building permits, and

grading permits. For each of the measures not included, the applicant shall describe why the measure was not included. The GCRP shall present estimated reductions in GHGs and CAPs based on available information source.

No certificate of occupancy for any phase, or portion thereof, of the project shall be granted until all of the feasible, applicable measures have been implemented by the applicant/project proponent. The proponent shall demonstrate that measures that must be implemented throughout the life of the project are included in all applicable CC&Rs, property deeds, commercial center rules and regulations, and draft tenant lease agreements.

The following minor revision to mitigation measure 4.2-4 is made for clarification purposes:

Mitigation Measure

4.3-4. Fireplaces and stoves shall be gas-fired and meet U.S. Environmental Protection Agency certification requirements. The installation or operation of a wood-burning fireplace or a wood-burning stove shall be prohibited in perpetuity on all residential properties in the ~~Miravale III~~ Miramonte I Specific Plan Development. This restrictive covenant shall be recorded on the title of all parcels in the ~~Miravale III~~ Miramonte I Specific Plan area and shall run with the land.

Air Quality Conclusion

The proposed project would not result in new significant air quality effects or substantially increase the severity of previously identified significant effects, and would result in lesser construction and operational impacts than identified in the Miravale III EIR. No new information has been identified that indicates the proposed project would have new or more significant impacts on air quality or the generation of GHG emissions volumes that were identified and addressed for the original project.

3.5 BIOLOGICAL RESOURCES

Miravale III Specific Plan EIR Analysis

The Miravale III EIR addressed the existing biological conditions within the proposed project, identified the potential occurrence of special-status plant species, wildlife species, and sensitive habitats at the project site, and discussed potential project-related impacts to those resources. Mitigation measures were proposed to avoid or reduce any potential impacts that were identified. The section was based on the results of the *Preliminary Biological Assessment Report for the Proposed Miravale Phase III Specific Plan, City of Soledad, CA*, prepared by Denise Duffy & Associates, Inc. (August 2007), an initial site visit, a site review, a preliminary wetland assessment, assessment of nesting bank swallow *(Riparia riparia)*

presence, a California tiger salamander (*Ambystoma californiense*, CTS) Habitat Assessment Report followed by one spring of protocol-level aquatic sampling (4 sampling events) and a tissue sample collection, a San Joaquin kit fox habitat evaluation, a presence/absence study of the Salinas pocket mouse *(Perognathus inornatus psammolphilus*) via a small mammal trapping study, and protocol-level western burrowing owl surveys. These reports are on file with the City of Soledad.

Wetlands/Waters of the U.S.

Wetlands and waters of the U.S. were identified and assessed in the Miravale III EIR, including the reservoir within the grassland area and three agricultural basins occurring west of San Vicente Road. Fringe wetlands adjacent to the reservoir and basins were identified that could potentially be considered jurisdictional by the CDFW. No mitigation measures were proposed, however verification from the USACE that the fringe wetlands are not considered jurisdictional and coordination with CDFW to determine if a permit is required was recommended.

Vegetation

The Miravale III EIR determined that the project would result in temporary and permanent impacts to all habitats and the vast majority of vegetation within project boundaries, and would result in the removal of three or more oak trees and all Eucalyptus and/or Tamarisk trees lining San Vicente Road. Temporary impacts to vegetation included grubbing and grading associated with development of the site; permanent impacts include the conversion of open vegetated areas to urban housing through placement of structures, homes, roads, driveways, etc. However, these impacts were determined to be less than significant with implementation of the following measures.

Mitigation Measures

4.4-1 A Forest Management Plan shall be prepared for the project due to proposed tree removals. The Forest Management Plan shall include a map that indicates all of the trees within the project site and denotes which trees are to be removed. The map shall also include notes which clearly state protection procedures for trees that are to be preserved. In addition, the Forest Management Plan shall include, but is not limited to, a description of each tree by species and its condition .The City approved Forest Management Plan (and associated replanting plan) shall be incorporated as a condition of project approval to satisfy General Plan Conditions C/OS 17-19. Prior to the issuance of any grading and/or building permit, the project applicant shall submit a Forest Management Plan, subject to the review and approval of the City of Soledad.

4.4-2 Prior to the onset of construction, trees and vegetation not planned for removal shall be protected during construction to the maximum extent feasible. This shall include the use of exclusionary fencing of herbaceous and shrubby vegetation, such as hay bales and protective wood barriers for trees. Only certified weed-free straw shall be used to avoid the introduction of non-native, invasive species. A qualified biological monitor shall verify that adequate protective measures are in place prior to construction and remain intact throughout the construction phase.

4.4-3 Following construction, the disturbed areas that are proposed as parks and native landscaping areas shall be restored to pre-project contours and revegetated using locally-occurring native species and native erosion control seed mix to the maximum extent feasible. Landscape plans for all such areas adjoining natural open space, including landscaped strips within right-of-ways, shall be reviewed by a qualified biologist to ensure that only native and non-invasive species are included in the planting palette and shall include a supplemental note and/or report by said biologist documenting compliance with this requirement. Landscape plans for other disturbed areas or for designated parks shall utilize native species to the extent feasible and avoid the use of all invasive species; such plans shall include a note from the licensed professional who prepared the plan(s) or from a qualified biologist documenting compliance with this requirement. Prior to the issuance of any grading and/or building permit, the project applicant shall submit landscape plans prepared by a licensed landscape architect for review and approval by the City of Soledad.

4.4-4 Prior to the onset of construction, protective fencing shall be placed so as to keep construction vehicles and personnel from impacting vegetation adjacent to the project site outside of work limits. A qualified biological monitor shall verify protection is in place prior to construction and remains intact throughout the construction phase.

4.4-5 Grading, excavating, and other activities that involve substantial soil disturbance shall be planned and carried out in consultation with a qualified hydrologist, engineer, or erosion control specialist, and shall utilize standard erosion control techniques to minimize erosion and sedimentation to native vegetation. Only natural-fiber, biodegradable meshes shall be used in erosion control mats, blankets, and straw or fiber wattles. “Photodegradable” and other plastic mesh products will not be used as these materials are known to persist in the environment, ensnaring and killing a variety of terrestrial wildlife species. A qualified biological monitor shall verify that erosion control measures are implemented and materials used are consistent with this measure and remain intact throughout the construction phase.

4.4-6 No construction equipment shall be serviced or fueled outside of designated staging areas. A qualified biological monitor shall verify that this measure is being implemented throughout the construction phase.

Special Status Plant Species

According to the Miravale III Specific Plan EIR, the presence/absence of jewelflower could not be determined, but appropriate habitat was present within project boundaries. This species could be permanently impacted by proposed grading, excavation, and other activities that may result in the permanent loss or disturbance of individual jewelflowers and/or jewelflower habitat. However, the EIR concluded that with the following mitigation measure this impact would be less than significant.

Mitigation Measure

4.4-7 A qualified botanist shall be retained to conduct preconstruction surveys for Lemmon's jewelflower during the typical flowering season of this species (March-May), to determine the presence/absence of this species. If no Lemmon's jewelflower is present, no additional mitigation is required. If Lemmon's jewelflower is present, a qualified biologist shall prepare a mitigation plan to be approved by CDFG prior to initiation of construction. The mitigation plan shall include a description of the special-status plant population(s), map depicting the location(s), and size of the population(s). If feasible, disturbance of the population(s) of Lemmon's jewelflower shall be avoided and its habitat protected utilizing methods developed in coordination with the CNPS and CDFG. Avoidance shall be confirmed by the City prior to the time of tentative map approval for this phase of the project. If impacts to the Lemmon's jewelflower population(s) cannot be avoided, mitigation shall include preservation on- or off-site at a minimum 1:1 ratio (one plant preserved for each plant impacted), or restoration on- or off-site at a minimum 3:1 ratio (three plants planted for each plant impacted). The CNPS and CDFG shall be consulted to evaluate the suitability for transplanting the impacted species to suitable habitat within the identified and established preserve/restoration area. These details shall be described and included in the mitigation plan. Restoration and preservation strategies shall be developed in coordination with the CNPS and CDFG. The City of Soledad Planning Department shall be provided verification of CDFG concurrence and satisfaction prior to issuance of grading permits.

Wildlife Corridors

The Miravale III EIR found that project development would fragment the vast majority of the existing wildlife habitat on the site, and would encroach into the foothills of the Gabilan Range which is an important wildlife corridor. The ongoing presence of homes, roads, cars,

people, firearms, pets, etc. would adversely impact any wildlife currently utilizing the site, particularly in the grassland portions of the site. This fragmentation of habitat was found to be a significant impact that can be partially reduced by implementation of the following mitigation. However, it was determined that the impact could not be fully mitigated without project redesign. Therefore, the fragmentation of habitat was considered a significant, unavoidable impact of the project as designed.

Mitigation Measure

4.4-8 Prior to approval of each final map, the applicant shall prepare and submit draft Covenant, Conditions, and Restrictions (CC&Rs) applicable to that phase that shall include the following:

a) restrict installation fencing to the immediate vicinity of residences, and where fencing is placed adjacent to open space areas and areas of natural, undisturbed habitat, fences shall be installed such that a six inch space is left between the bottom of the fence and the surface of the ground;

b) prohibit off-road vehicle use;

c) prohibit illegal discharge of firearms;

d) prohibit the installation of road medians throughout the development.

These CC&Rs shall be reviewed and approved by the City of Soledad prior to approval of each final map.

Special Status Wildlife Species

San Joaquin Kit Fox

The Miravale III EIR determined that the project would result the loss of potential San Joaquin kit fox denning, foraging, and migratory habitat resulting from development within the grassland area. The EIR concluded that while this impact could be reduced by the following mitigation measure, the impact remained significant and unavoidable.

Mitigation Measures

4.4-9 The applicants shall enter into consultation with USFWS and CDFG and shall provide evidence of their compliance with applicable requirements of the federal Endangered Species Act and California Endangered Species Act to the City prior to the issuance of building permits.

4.4-10 Pre-construction surveys for kit fox dens shall be required for all development phases of the future project. The preconstruction surveys shall be conducted per Standardized Recommendations for the Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance (USFWS 1999b), as updated. Potential

dens (including man-made structures) and known dens shall be protected by minimum buffers of 50 feet and 100 feet, respectively. If an occupied or unoccupied natal den is detected, no construction shall occur for the Phase until the USFWS and CDFG have been contacted and authorization to proceed has been obtained by the applicant. Pre-construction surveys shall be conducted by a qualified biologist no less than 14 days and no more than 30 days prior to the start of any ground disturbing activities to locate kit fox den sites.

In addition to pre-construction surveys, a qualified biologist, meeting the required qualifications described in the U.S. Fish and Wildlife Service Standardized Recommendations for the Protection of the San Joaquin Kit Fox Prior to Ground Disturbance, June 1999 (USFWS Recommendations for SJKF), shall be on-site to monitor construction activities for the San Joaquin kit fox. In the event that an active kit fox den is found, then the standard mitigation actions outlined in the USFWS Recommendations for SJKF, are recommended to avoid possible take of kit fox during future construction activities. These actions are general in nature; therefore, site specific strategies for the project site shall be based upon consultation with USFWS and CDFG, as stated above in Mitigation Measure 4.4-9. To reduce the risk of impacts during construction, the applicant shall, at a minimum, implement the following measures, unless directed otherwise through consultation with the USFWS and CDFG:

a) Restrict project-related vehicle speed to 20 mph on project roads.

b) Cover all excavated, steep-walled holes or construction trenches more than 2 feet deep at the close of each working day by plywood or similar materials or provide such holes or trenches with one or more escape ramps constructed of earth fill or wooden planks, inspect such holes or trenches for trapped San Joaquin kit fox prior to filling.

c) Inspect all construction pipes, culverts, or similar structures with a diameter of 4 inches or greater that are stored at a construction site for one or more overnight periods for kit foxes before the pipe is subsequently buried, capped, or otherwise used or moved in any way.

d) Contain all food-related trash items in closed containers and remove food related trash at least once a week from the project site.

e) No firearms shall be allowed on the project site.

f) No pets shall be permitted on the project site.

g) Use of rodenticides and herbicides on the project site shall be restricted to the use of zinc phosphide, in cases where it is necessary to protect public health and safety.

h) A representative shall be appointed by the project proponent who will be the contact source for any employee or contractor who might inadvertently kill or injure a kit fox or who finds a dead, injured or entrapped individual. The representative will be identified during the employee education program. The representative's name and telephone number shall be provided to the Service.

i) An employee education program shall be conducted and shall consist of a brief presentation by persons knowledgeable in kit fox biology and legislative protection to explain endangered species concerns to contractors, their employees, and agency personnel involved in the project. The program shall include the following: a description of the San Joaquin kit fox and its habitat needs; a report of the occurrence of kit fox in the project area; an explanation of the status of the species and its protection under the Endangered Species Act; and a list of measures being taken to reduce impacts to the species during project construction and implementation. A fact sheet conveying this information shall be prepared for distribution to the above-mentioned people and anyone else who may enter the project site.

j) In the case of trapped animals, escape ramps or structures shall be installed immediately to allow the animal(s) to escape, or the Service shall be contacted for advice.

k) To the extent feasible, nighttime construction shall be avoided.

l) Include kit fox mitigation measures on project plans.

If active kit fox den sites are found and/or kit fox individuals are observed during the survey, the applicant will be required to comply with all mitigation actions required by USFWS and CDFG and the City shall monitor implementation of those actions. Examples of mitigation actions that may be required by the regulatory agencies may include, but are not limited to:

- To the extent feasible, lot placement shall be situated to create wildlife corridors in protected open space to allow for kit fox and other wildlife movement through the site.

- Fencing shall surround the site to restrict kit fox movement into the development area; types of fencing (e.g. exclusionary or kit fox friendly) shall depend on the density of the development area.

- Speed bumps, rolls, or reduced speed limits shall be employed along project roads in or near open space areas to reduced likelihood of kit fox mortality by vehicle strikes.

- Street lighting shall be situated as to not spill into adjacent open space areas. The height and intensity of street lighting shall be designed to minimize indirect impacts to open space. Outdoor lighting for residential uses adjacent to open space and large lots shall also be restricted to CC&Rs to be low wattage (150 watts or less) and directed toward the residences to reduce effects on kit fox nocturnal activities.

American Badger

The Miravale III EIR determined that the project would result the loss of potential American badger denning and foraging habitat resulting from development within the grassland area and the loss of foraging habitat within agricultural areas. The EIR concluded that while this impact could be reduced by the following mitigation measure, the impact remained significant and unavoidable.

Mitigation Measure

4.4-11 The applicant shall retain a qualified biologist to conduct focused preconstruction surveys for potential American badger dens. These surveys shall be conducted no sooner than 2 weeks prior to the start of construction. Surveys for badger dens may be conducted at the same time as burrowing owl surveys. The results of the survey shall be submitted to the City prior to issuance of grading permit or initiation of grading for that phase of development on the site. Based on the results of these surveys, one or more of the following additional measures shall be implemented:

- If the qualified biologist determines that potential dens are inactive, the biologist shall excavate these dens by hand with a shovel to prevent badgers from re-using them during construction. If hand excavation is not practical, careful excavation with an excavator may occur provided that the biologist is onsite to monitor these activities.

- If the qualified biologist determines the presence of active dens, the location of these dens shall be documented and reported to CDFG. Avoidance of active dens, particularly natal dens, is the preferred approach; Impacts to

active badger dens shall be avoided by establishing a 100-meter exclusion zones around all active badger dens, within which construction related activities shall be prohibited until denning is complete and/or the den is abandoned. A qualified biologist shall monitor each den once per week in order to track the status and inform the project sponsor of when a den area has been abandoned.

- If avoidance of an active badger den is not feasible, the biologist shall coordinate with CDFG on the appropriate way to evict/exclude badgers from their dens. Please note that special consideration of natal dens is required given the low likelihood that excluded young would survive; a CDFG depredation permit would be required to disrupt a natal den. For non-natal dens, CDFG has permitted badgers to be gradually excluded from their dens by placement of soil, sticks, and debris at den entrances, incrementally increasing the degree of blockage over a period of three to five days (please note that blockage cannot trap/entomb badgers). After the monitoring biologist determines that badgers have stopped using active dens within the project boundary, the dens shall be hand-excavated with a shovel to prevent re-use during construction. If hand excavation is not practical, careful excavation with an excavator may occur provided that the biologist is onsite to monitor these activities. Please note that eviction of onsite badgers will reduce construction phase impacts to this species, but given the large home ranges and territoriality of this species, emigration to alternative habitats may not be feasible without inter/intra specific competition (energetic stress possibly resulting in mortality). CDFG may require that appropriate onsite or adjacent habitat be conserved to allow relocation of excluded animals within their home range.

Special Status Bats

The Miravale III EIR determined that the project had the potential to impact two bat species (pallid bat and Townsend's big-eared bat) due to the potential for direct impacts to bats and/or bat roosts (day, night, foraging, and maternity) and the loss of the vast majority of onsite foraging habitat for these species. The Miravale III EIR concluded that this impact could be reduced to a less-than-significant level with the following mitigation measure.

Mitigation Measure

4.4-12 A qualified bat specialist shall conduct site surveys to characterize bat utilization of the site and species composition present (techniques utilized to be determined by the biologist). The results of the survey shall be submitted to the City prior to

issuance of grading permit or initiation of grading for that phase of development on the site. Based on the results of these surveys, one or more of the following additional measures shall be implemented:

- If it is determined that bats are not present at the site, no additional mitigation is required.
- If it is determined that bats are utilizing the site and would likely be impacted by the proposed project, preconstruction surveys shall be conducted no more than 30 days prior to modification, demolition, or removal of onsite buildings and/or any other occupied habitat.
- If no bat or bat sign are observed in the course of preconstruction surveys, then demolition/removal of buildings and/or construction initiation may proceed. If bat and/or bat sign are observed during the preconstruction surveys, the biologists shall determine if disturbance will jeopardize a maternity roost, or another type of roost (foraging, day, night).
- If a single bat and/or only adult bats are roosting, demolition or removal of the structure can proceed after the bats have been safely excluded from the roost. Exclusion techniques shall be determined by the biologist and depend on the type utilization; the biologist shall prepare a mitigation plan for provision of alternative habitat to be approved by CDFG and the City.
- If an active maternity roost is detected, work in the vicinity of the roost (and/or demolition of the structure) shall be postponed until the qualified biologist monitoring the roost(s) determines that the young have fledged and are no longer dependent on the roost. The monitor shall ensure that all bats have left the building and or area of disturbance prior to initiation of construction and/or demolition activities. If disruption of a maternity roost cannot be avoided, a depredation permit would be required.

Salinas Pocket Mouse

According to the Miravale III EIR the Salinas pocket mouse and Salinas pocket mouse habitat are known to occur on the site. The vast majority of the onsite grassland habitat would have been converted to residential usage and the remaining portions would have been fragmented from surrounding habitat and subject to ongoing disturbance (cars, lights, noise, sound, vibration, etc.) that could result in direct and indirect mortality. The following mitigation measure was determined to lessen the impact but not to a less-than-significant level. The EIR concluded that this would be a significant and unavoidable impact.

Mitigation Measure

4.4-13 The applicant shall contract a qualified biologist to coordinate with CDFG and prepare a mitigation and monitoring plan for the Salinas pocket mouse. The mitigation and monitoring plan shall include a description of the population and locations of known and potential habitat within the project site, mitigation to avoid and reduce impacts to the species, monitoring actions success criteria, and adaptive management measures if success criteria are not met. Verification of CDFG concurrence/approval shall be submitted to the City of Soledad prior to issuance of a grading permit for that phase of development of the site.

Special Status Avian Species

According to the Mirvale III EIR, suitable breeding habitat is present for burrowing owl, northern harrier, white-tailed kite, and loggerhead shrike. The project would result in the loss of foraging and/or nesting habitat for these species. Raptors and their nests are protected by both federal and state regulations (MBTA and CDFG Code Sections 30503 and 3503.5), which protect birds of prey and their eggs and nests. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "take" by CDFG. The EIR concluded that construction activities such as tree removal or site grading that result in any loss of fertile raptor eggs or nesting raptors, or any activities resulting in raptor nest abandonment onsite or immediately adjacent to the site would constitute a significant impact. However, the EIR determined that the impact could be reduced to a less-than-significant level with implementation of the following mitigation measure.

Mitigation Measures

4.4-14 Burrowing owls are known to occupy burrows in mixed grassland, active agricultural, and fallow agricultural portions of the Miravale site during the non-breeding season (breeding season utilization not observed in the course of protocol-level surveys). A qualified biologist shall conduct preconstruction surveys to locate active breeding and/or wintering burrowing owls (depending on season) no more than 30 days prior to the start of construction. If ground disturbing activities are delayed or suspended for more than 30 days after the preconstruction survey, the site shall be resurveyed. The survey shall conform to the CDFG 1995 Staff Report protocol. Wherever burrows are identified, impact avoidance and mitigation measures shall be implemented (previously mapped burrow locations may not be occupied and/or new burrows may be occupied). Please refer to the mitigation measures regarding burrowing owl in the Preliminary BA (June, 2008) for avoidance and mitigation measures that may be implemented based on the results of these surveys.

4.4-15 If project activities will initiate during the typical avian nesting season (February 15– August 1), a qualified biologist shall conduct focused preconstruction surveys no more than 14 days prior to initiation of construction activities for nesting birds, including (but not limited to) white-tailed kite, northern harrier, loggerhead shrike, and horned lark, in all areas that may provide suitable nesting habitat within 300 feet of the construction area. If active nests are found, a suitable construction buffer shall be established by a qualified biologist, and no work shall occur within that buffer until August 1 when young are assumed fledged. Alternatively, a qualified biologist can conduct weekly nest checks to gauge nestling/fledgling status, and construction may proceed once fledglings have dispersed from the nest provided written concurrence from CDFG. No active nest shall be impacted or removed without a depredation permit from CDFG, and a depredation permit will not be issued for impacts to Fully Protected Species such as the white-tailed kite. For activities that occur outside of the nesting season (generally September 1 through February 14), preconstruction surveys are not required. If construction is initiated outside of the nesting season and continues into the nesting season, preconstruction surveys are required if construction will occur in areas not previously accessed and/or disturbed (>300 feet from previous construction activities).

4.4-16 A preconstruction survey shall be conducted no more than 14 days prior to modification, demolition, or removal of onsite buildings. If no owls or other nesting birds are observed, then demolition or removal may proceed. If barn owls (or any other nesting birds) are observed during the preconstruction survey, a determination shall be made on whether birds are roosting or nesting. If a single owl is roosting, demolition or removal of the structure can proceed after the owl has been persuaded to move from the roost area. Non-invasive techniques include light shining into the roost space for one or two nights and days. If barn owls (or other nesting avian species) are found to be actively nesting in the barn, work on or demolition of the structure shall be postponed until one of the following conditions have been met: 1) a qualified biologist monitoring the nest determines that the owls have abandoned the nest without any outside interference or 2) a qualified biologist monitoring the nest has determined that the young have fledged and are capable of relocating and using another roost site. Once the young have fledged, non-invasive techniques may be used to encourage the owls to leave the barn. Under either scenario, the monitor shall ensure that all owls have left the building prior to construction or demolition activities. The barn owl nesting period is typically between February 15 and July 15.

Special Status Reptiles and Amphibians

The Mirvale III EIR found that given the presence of marginally appropriate habitat, both California red-legged frog (CRLF) and Western spadefoot may be present within project boundaries. If CRLF or spadefoot are present, proposed impacts to onsite agricultural basins (particularly the reservoir) would result in direct impacts to these species including "take." (i.e. loss of individuals and habitat, loss of a breeding resource, direct mortality, etc.). In addition, grading and other earthmoving activities proposed would represent an adverse effect on upland estivation habitat for these species, if present. The EIR presented mitigation measure 4.4-17 (below) to reduce impacts but determined that impacts could not be reduced to a less-than-significant level. Therefore, the EIR concluded that the project would result in a significant and unavoidable impact to a federally Threatened Species and State Species of Special Concern.

The Miravale III EIR additionally determined that the development of the majority of the onsite grassland habitat and fragmentation of remaining grassland habitat represents a significant impact to coast horned lizards, black-legless lizards, and San Joaquin coachwhip. Given the lack of unaffected portions of the grassland habitat for conservation of these species, the EIR concluded that this was a significant impact. While mitigation measures 4.4-18 through 4.4-21 would reduce impacts, it would not be to a less-than-significant level and impacts to these species were determined to be significant and unavoidable impact despite mitigation.

Mitigation Measures

4.4-17 Protocol-level CRLF surveys (USFWS, August 2005) shall be completed at each aquatic resource present within project boundaries. Protocol-level CRLF surveys would likely detect Western spadefoot, if present (Western spadefoot toad surveys are also conducted at night during winter months, preferably January through March, and therefore, overlap CRLF survey protocol requirements). The results of the survey shall be submitted for the review and approval of the City, USFWS, and CDFG. If it is determined that CRLF are present, the applicant shall coordinate with the USFWS to determine the appropriate course of action per the requirements of the federal ESA (e.g., applying for an Incidental Take Permit [Section 10]) and implementing the permit requirements prior to issuance of a grading permit. Any mitigation and avoidance measures required by USFWS for potential impacts to CRLF (if applicable) would likewise reduce impacts to Western spadefoot given their overlapping habitat characteristics. If CRLF is not found on-site and USFWS concurs with a negative finding, no further mitigation is required.

If it is determined that spadefoot are present, but CRLF are not, coordination with CDFG regarding appropriate mitigation to reduce impacts to this species shall be required prior to issuance of a grading permit. If the Western spadefoot toad is not found on-site, no further mitigation is required.

4.4-18 The applicant shall retain a qualified biologist to conduct a construction monitoring program for black legless lizards, coast horned lizards, and San Joaquin coachwhip which shall include procedures for capture and release. The biologist shall remain on-site during initial grading activities to salvage and relocate these species that may be uncovered during earthmoving activities. Recovered individuals shall be placed in appropriate habitat outside of the project site in accordance with the memorandum of understanding with CDFG. The biologist shall walk alongside the grading equipment in each new area of disturbance and shall have the authority to halt construction temporarily if necessary to capture and relocate an individual. Any individual captured in the grading zone shall be relocated as soon as possible to adjacent suitable habitat outside of the area of impact, pursuant to the memorandum of understanding.

4.4-19 The applicant shall conduct an employee education program for construction crew and City staff prior to construction activities. A biological monitor shall meet with the construction crew at the onset of construction to educate the construction crew on the following: 1) the appropriate access route in and out of the construction area; 2) how biological monitor will examine the area and agree upon a method which will ensure the safety of the monitor during such activities, 3) the special-status species that may be present; 4) the specific mitigation measures that will be incorporated into the construction effort; and 5) the proper procedures if a special-status animal or any other animal is encountered within the project site.

4.4-20 A representative shall be appointed by the City who will be the contact source for any employee or contractor who may inadvertently kill or injure a special-status species or find one dead, injured, or trapped. The representative shall be legally responsible to notify USFWS and CDFG immediately in the event that "take" of any special-status wildlife species occurs. The representative shall be identified during the Employee Education Program and his/her contact information shall be provided to USFWS and CDFG. It is imperative that this individual will be present onsite every day and will be accessible to regulatory agency personnel.

4.4-21 All food-related and other trash shall be disposed of in closed containers and removed from the project area at least once a week during the construction period or more often if trash is attracting avian or mammalian predators. Construction

personnel shall not feed or otherwise attract wildlife to the area. These instructions to the construction crew shall be reiterated during the employee education program and during update meetings with construction crews. The instructions shall also be posted conspicuously on the site.

Wildlife Movement and Nursery Sites

The General Plan EIR identifies "adverse but not significant" impacts to wildlife movement based on the availability of the Salinas River and Arroyo Seco corridors in the project area. However, the General Plan EIR requires that portions of the Gabilan Range above 400-feet elevation be conserved as open space. Development above 400-feet elevation was proposed as a portion of the Miravale III project, significantly encroaching into an area proposed for conservation and impacting an upland wildlife movement corridor. As stated in the Preliminary BA, Miravale III "proposed 'open space' portions of the site (including the 62 acres of grasslands) are not designed or suitable as plant and wildlife conservation areas." An increase in the total number of roadways in the project site could be expected to result in an increase in the number of animals killed by vehicular traffic. The permanent onsite presence of homes, roads, and infrastructure would further fragment habitats surrounding the project site and represents an urban encroachment into the foothills of the Gabilan Range. As such, the Miravale III EIR determined that development of the proposed project, particularly above the 400 foot elevation contour, would result in a significant impact to wildlife movement. The EIR found that while mitigation measures identified in the Biological Resources section would minimize project induced impacts, they could not be reduced to a less-than-significant level.

Proposed Project Analysis

EMC Planning Group biologist Andrea Edwards performed a reconnaissance field survey at the site on April 26, 2017 to verify that conditions described in the Miravale III EIR remain accurate, to document existing plant communities and wildlife habitats, and to evaluate the potential for special-status biological resources to occur within the revised site boundary. Qualitative estimations of plant cover, structure, and spatial changes in species composition were used to determine plant communities and wildlife habitats, and habitat quality and disturbance level were noted.

Wetlands/Waters of the U.S.

A reservoir and three agricultural basins were identified and assessed in the Miravale III EIR. The revised project does not propose to disturb the reservoir, and the three agricultural basins occur west of San Vicente Road are no longer included in the project boundary. As a result, permits from the U.S. Army Corps of Engineers, California Department of Fish and Wildlife, and the Regional Water Quality Control Board will not be required.

Vegetation

The revised specific plan does not include disturbance to the grassland habitat along the eastern project boundary. The proposed project would cause temporary and permanent impacts to all agricultural fields and the vast majority of vegetation west of the grassland habitat. Temporary impacts to vegetation included grubbing and grading associated with development of the site; permanent impacts include the conversion of open vegetated areas to urban housing through placement of structures, homes, roads, driveways, etc. The Miravale III Preliminary Biological Assessment (2008) determined that a Forest Management Plan should be required because three or more native live oak trees located in the foothills and grassland areas would be impacted by the then-proposed project. However, only one oak tree is located below the 400 foot elevation contour that could be impacted with implementation of the currently proposed project. Therefore, since fewer than three oak trees would potentially be impacted by the proposed project, a forest management plan would not be required. Mitigation measure 4.4-1, which requires preparation of a forest management plan, is not applicable to the proposed project and is not required. Mitigation measures 4.4-2 through 4.4-6, which propose protection of adjacent grassland areas from disturbance, erosion, and contamination, remain applicable to the proposed project.

Special-Status Plant Species

One special-status plant species, Lemmon's jewelflower (*Caulanthus lemmonii*), was identified as having the potential to occur within grazing land in the eastern portion of the project site. Lemmon's jewelflower is a CNPS List 1B species associated with open, grassy areas; on hillside slopes and in fields, canyons, and arroyos. While the revised project no longer proposed residential development in the grassland areas, it may require the placement of infrastructure in this area which may result in limited disturbance to the grassland. Therefore, mitigation measure 4.4-7, which requires additional surveys, remains applicable.

Wildlife Movement and Nursery Sites/Wildlife Corridors

A significant and unavoidable impact to wildlife corridors was identified in the Miravale III EIR due to proposed development within the grassland area. While infrastructure improvements may be required in the grassland area, the revised project no longer includes intensive residential development within the grassland area identified in the Miravale III EIR Therefore, impacts to species and habitats occurring within grassland areas of the site are significantly reduced. The proposed project's impacts to wildlife corridors and movement would be less than significant. The specific plan requires recordation of a conservation easement for all hillside areas, within which the grassland habitat and related corridors occur. Mitigation Measure 4.4-8 is clarified to reflect the conservation easement required by the specific plan. Additionally, because development is no longer occurring above the 400 foot elevation contour, subsections a and d are removed from the mitigation measure as these address development above the 400 foot elevation contour and are not applicable to the proposed project.

In addition to the species-specific measures identified in the Miravale III EIR, Mitigation Measures 4.4-19, 4.4-20, and 4.4-21 remain applicable to address general impacts, including preparation of an employee education program, identification of a qualified biologist in the event an animal is discovered or injured during construction, and measures to prevent inadvertently attracting wildlife species.

Mitigation Measure

4.4-8 Areas above the 400 foot elevation contour shall be protected from development, excluding infrastructure and utility improvements, in perpetuity. Prior to approval of ~~each~~ the first final map, the applicant shall prepare and submit to the city for review and approval ~~draft Covenant, Conditions, and Restrictions (CC&Rs) applicable to that phase that shall~~ a draft conservation easement for all areas above the 400 foot elevation contour. The easement shall include the following:

~~a) restrict installation fencing to the immediate vicinity of residences, and where fencing is placed adjacent to open space areas and areas of natural, undisturbed habitat, fences shall be installed such that a six inch space is left between the bottom of the fence and the surface of the ground;~~

a~~b~~) prohibit recreational off-road vehicle use;

b~~c~~) prohibit illegal discharge of firearms;

~~d) prohibit the installation of road medians throughout the development.~~

~~These CC&Rs~~ The conservation easement shall be reviewed and approved by the City of Soledad prior to approval of ~~each~~ the first final map. The developer shall record the conservation easement prior to issuance of a grading permit or the onset of any other site disturbance.

Special-Status Wildlife Species

The potential for the wildlife species identified within the Miravale III EIR have the same potential to occur within the project boundary despite modifications to the project.

San Joaquin Kit Fox

A significant and unavoidable impact to San Joaquin kit fox was identified in the Miravale III EIR due to the loss of potential denning, foraging, and migratory habitat resulting from development within the grassland area. The revised project may include infrastructure improvements in the grassland area but otherwise no longer includes development within this area; therefore, impacts to species and habitats occurring there have been significantly reduced. The potential for San Joaquin kit fox to occur within the project remains, however

impacts are no longer considered significant and unavoidable with the protection of the grassland area and implementation of Mitigation Measures 4.4-9 and 4.4-10, which require obtaining Incidental Take Permits from USFWS and CDFW and preconstruction surveys and monitoring.

American Badger

A significant and unavoidable impact to American badger was identified in the Miravale III EIR due to the loss of potential denning and foraging habitat resulting from development within the grassland area and the loss of foraging habitat within agricultural areas. The revised project may include infrastructure improvements in the grassland area but otherwise no longer includes development within this area; therefore, impacts to species and habitats occurring there have been significantly reduced. The potential for American badger to occur within the project remains, however impacts are no longer considered significant and unavoidable with the protection of the grassland area and implementation of Mitigation Measure 4.4-11, which require preconstruction surveys.

Special-Status Bat Species

A less-than-significant impact with implementation of mitigation for two bat species (pallid bat and Townsend's big-eared bat) was identified in the Miravale III EIR due to the potential for direct impacts to bats and/or bat roosts (day, night, foraging, and maternity) and the loss of the vast majority of onsite foraging habitat for these species. The revised project may include infrastructure improvements in the grassland area but otherwise no longer includes development within the grassland area; therefore, impacts to species and habitats occurring there have been significantly reduced. The potential for bats to occur within the project remains, and impacts remain less-than-significant with protection of the grassland area and implementation of Mitigation Measure 4.4-12, which require preconstruction surveys.

Salinas Pocket Mouse

A significant and unavoidable impact to Salinas pocket mouse was identified in the Miravale III EIR due to the potential loss of individuals and the loss of denning, foraging, and migratory habitat resulting from development within the grassland area. The revised project may include infrastructure improvements in the grassland area but otherwise no longer includes development within this area; therefore, impacts to species and habitats occurring there have been significantly reduced. The potential for Salinas pocket mouse to occur within the project area remains, however impacts are no longer considered significant and unavoidable with the protection of the grassland area and implementation of Mitigation Measure 4.4-13, which requires preparing a mitigation and monitoring plan in coordination with CDFW.

Special-Status Bird Species

During surveys conducted for the Miravale III EIR, the following special-status bird species were observed foraging within the project site: Western burrowing owl, Northern harrier, white-tailed kite, loggerhead shrike, and Northern harrier. In addition, golden eagle, merlin, prairie-falcon, and horned lark were identified as having the potential to utilize the site for foraging. A less-than-significant impact with implementation of mitigation to bird species was identified in the Miravale III EIR due to the potential for direct impacts to birds and/or nests and the loss of the vast majority of onsite nesting foraging habitat for these species The revised project may include infrastructure improvements in the grassland area but otherwise no longer includes development within this area; therefore, impacts to species and habitats occurring there have been significantly reduced. However, the potential for bird species to occur within the project remains, and impacts remain less-than-significant with greater protection of the grassland area and implementation of Mitigation Measures 4.4-14, 4.4-15, and 4.4-16, which require protocol-level preconstruction surveys for burrowing owl and preconstruction surveys for nesting birds. Mitigation Measure 4.4-14 is edited as follows to correctly reference the current project.

Mitigation Measure

4.4-14 Burrowing owls are known to occupy burrows in mixed grassland, active agricultural, and fallow agricultural portions of the ~~Miravale~~ Miramonte site during the non-breeding season (breeding season utilization not observed in the course of protocol-level surveys). A qualified biologist shall conduct preconstruction surveys to locate active breeding and/or wintering burrowing owls (depending on season) no more than 30 days prior to the start of construction. If ground disturbing activities are delayed or suspended for more than 30 days after the preconstruction survey, the site shall be resurveyed. The survey shall conform to the CDFG 1995 Staff Report protocol. Wherever burrows are identified, impact avoidance and mitigation measures shall be implemented (previously mapped burrow locations may not be occupied and/or new burrows may be occupied). Please refer to the mitigation measures regarding burrowing owl in the Preliminary BA (June, 2008) for avoidance and mitigation measures that may be implemented based on the results of these surveys.

California Tiger Salamander

No impacts to California tiger salamander were identified in the Miravale III EIR after coordination with USFWS regarding ESA jurisdiction over onsite hybrid/non-native tiger salamanders determined that tiger salamanders present at Miravale Pond 1 (onsite reservoir) are not subject to regulation under ESA and are therefore not within the regulatory jurisdiction of USFWS regulation (USFWS concurrence letter issued February 26, 2008 and presented in Appendix I of the June 2008 Preliminary BA). However, a CDFW report,

A Status Review of the California Tiger Salamander (CDFW 2010), includes a recommendation that even hybrid populations with small amounts of native genetic material should not lose their protected status. As noted in the Miravale III EIR, coordination with the CDFW will occur to determine whether the CDFW will take jurisdiction over the on-site tiger salamander population (FEIR pp. 140-141). The following mitigation measure is added for clarification of the process required to coordinate with CDFW.

Mitigation Measure

4.4-22 The applicant shall enter into consultation with CDFW to determine the appropriate course of action per the requirements of the state ESA regarding the protection of hybridized California tiger salamander populations and to determine if requirements include applying for an Incidental Take Permit (Section 2081). If an ITP is required, implement all corresponding permit requirements. No approval or issuance of a grading permit shall occur until such time as the consultation process is complete.

California Red-Legged Frog and Western Spadefoot

A significant and unavoidable impact to California red-legged frog and western spadefoot was identified in the Miravale III EIR if found within the project area. The revised project does not propose to disturb the reservoir, and the three agricultural basins occur west of San Vicente Road are no longer included in the project boundary. The revised project may include infrastructure improvements in the grassland area but otherwise no longer includes development within this area; therefore impacts to species and habitats occurring there have been significantly reduced. The potential for California red-legged frog and western spadefoot to occur within the project remains, however impacts are no longer considered significant and unavoidable with the protection of the grassland area and implementation of Mitigation Measure 4.4-17, which requires protocol-level surveys for California red-legged frog (which would also identify western spadefoot, if present, given their overlapping habitat characteristics).

Coast Horned Lizard, Black Legless Lizard, and San Joaquin Coachwhip

A significant and unavoidable impact to coast horned lizard, black legless lizard, and San Joaquin coachwhip was identified in the Miravale III EIR due to the loss of habitat resulting from development within the grassland area. The revised project may include infrastructure improvements in the grassland area but otherwise no longer includes development within this area; therefore, impacts to species and habitats occurring there have been significantly reduced. The potential for coast horned lizard, black legless lizard, and San Joaquin coachwhip to occur within the project area remains, however impacts are no longer considered significant and unavoidable with the protection of the grassland area and implementation of Mitigation Measure 4.4-18, which requires construction monitoring and a salvage and relocation plan in coordination with CDFW.

Biological Resources Conclusion

As discussed above, the proposed revision to the Miramonte I development area has significantly reduced the level of potential impact to many biological resources. Excluding development west of San Vicente Road and limiting development within the grassland area lessened impacts to biological resources. Due to the known or potential presence of many wildlife species, however, a majority of the mitigation measures proposed in the Miravale III EIR remain applicable.

3.6 CULTURAL RESOURCES

Miravale III Specific Plan EIR Analysis

Historic Resources

A Preliminary Archaeological Reconnaissance (archaeological report) was prepared for the project site by Archaeological Consulting (September 2006) to assess potential effects of the previously proposed specific plan on cultural resources. The archeological report identified the farmhouse and barn located along the southern property border at the intersection of San Vicente Road and the proposed H Street as potential historic resources. A Phase One Historic Review was prepared by Kent Seavey (October 2006) to evaluate the historical significance of these buildings. The review determined that the farmhouse, referred to as the Morris Lorentzen House, was significant under Public Resources Code Section 5024.1(a). The proposed project would require the removal of the Lorentzen House in order to accommodate project development which is a potentially significant impact due to the historical significance of structure. A CEQA Impacts Analysis and Mitigation Report was prepared by JRP Historical Consulting (July 2007) to identify impacts to the historic resource and identify appropriate mitigation for the protection of this resource. The Miravale III Specific Plan EIR concluded that implementation of the following mitigation measures identified in the JRP report and Miravale III Specific Plan EIR would ensure that project-related impacts could be minimized to a less-than-significant level.

Mitigation Measures

4.5-1 Relocation of House. The project proponent shall ensure that the design and implementation of the relocation project is consistent with the Secretary of the Interior's Standards for Rehabilitation and Illustrated Guidelines for Rehabilitating Historic Buildings (U.S. Department of the Interior, National Park Service, 1992), the California Historical Building Code, and the Mitigation Monitoring and Reporting Plan (MMRP) for the project. Prior to recordation of the final map, the project applicant shall submit a relocation plan prepared by a qualified professional in accordance with the general recommendations of

Moving Historic Buildings, a publication of the National Park Service, to the City of Soledad for review and approval. The relocation plan shall discusses planning, research, and recording prior to the move. In addition, the relocation plan shall identify siting, foundation construction, building reassembly, and restoration work after a successful move. See John Obed Curtis, Moving Historic Buildings, Heritage Conservation and Recreation Service, Publication No. 9, US Department of Interior (1979) for further details. Prior to the relocation, the applicant shall provide verification of compliance with related mitigations to the City of Soledad Community Development Department Director for review and approval. In addition, the structure shall be relocated prior to the issuance of any building and/or grading permit for development within the Specific Plan area.

4.5-2 Protective Measures. The project proponent shall develop and implement measures to protect the character-defining features of the Lorentzen House building from damage by the relocation project. The features include, but are not limited to scale, massing, and layout of the house, as well as siding and wood frame fenestration. Protective measures shall be prepared by a qualified professional in accordance with the Secretary of the Interior's Standards for Rehabilitation and Illustrated Guidelines for Rehabilitating Historic Buildings (U.S. Department of the Interior, National Park Service, 1992), the California Historical Building Code, Moving Historic Buildings, and the MMRP for the project. Prior to the recordation of the final map, the project applicant shall submit a relocation plan, consistent with Mitigation Measure 4.5-1, which incorporates protective measures consistent with the intent of this measure. Prior to the relocation of the structure, the applicant shall submit evidence from a qualified professional demonstrating that protective measures have been implemented, subject to the review and approval of the City of Soledad.

4.5-3 Repair of Inadvertent Damage. The project proponent shall ensure that any inadvertent damage to the character-defining features of the Morris Lorentzen House resulting from the rehabilitation project is repaired in accordance with the Secretary of the Interior's Standards for Rehabilitation and Illustrated Guidelines for Rehabilitating Historic Buildings (U.S. Department of the Interior, National Park Service, 1992) and California Historical Building Code. A qualified professional shall be consulted prior to any repairs. The condition of the building shall be photographed as part of the proposed recordation document and/or video documentation, prior to the start of the relocation, and this will help to establish the baseline condition for assessing inadvertent damage. The project applicant shall submit detailed documentation prepared by a qualified professional demonstrating that all repairs have been completed in accordance with applicable standards prior to the issuance of any building and/or grading permit.

4.5-4 Professional Standards. All activities regarding historical architectural resources and historic preservation carried out as part of this project shall be carried out by or under the direct supervision of persons meeting, at a minimum, the Secretary of the Interior's professional qualifications standards (48 FR 44738-9) in these disciplines. Prior to the relocation of the Lorentzen House, the applicant shall submit evidence to the City of Soledad demonstrating compliance with this measure.

4.5-5 Monitoring. The mitigation measures applying to the relocation of the Lorentzen House shall be set forth in a Mitigation Monitoring and Reporting Program (MMRP) for the project. The MMRP will guide project-specific mitigation, monitoring, and/or reporting programs for various aspects of mitigation monitoring, reporting, and enforcement in order to ensure full compliance with the conditions of project approval.

4.5-6 Coordination. The project proponent shall coordinate with and inform interested parties, including, but not limited to the Soledad Historical Society and the Monterey County Historical Society, regarding the status of its compliance with the mitigation measures set forth in the MMRP, as necessary.

4.5-7 Recordation to Historic American Building Survey standards. Prior to the start of any project work, the project proponent shall ensure that the Lorentzen House property is recorded and documented in accordance with the Level II recordation standards of the Historic American Building Survey/Historic American Engineering Record (HABS/HAER) program. This level of recordation would include:

- Archival reproduction of any existing historic images of the property and grounds;
- Archival reproduction of any existing maps, sketches, or drawings of the house;
- Production of measured architectural plans and drawings;
- Production of large-format photographs of exterior and interior views of the house, and exterior views of the house and current setting, including relationship to non-eligible outbuildings; and
- Narrative history and description of the property (based on the narrative provided in the Seavey (2006) evaluation of the property, and the Monterey County survey(s) of similar properties.

The original archival set of recordation documents and photograph prints will be submitted to the Soledad Historical Society (or its designee), and archival quality photocopies of the documentation set will be provided to the following interested parties and local repositories: the Monterey County Historical Society; the Monterey County Libraries (Soledad and Salinas branches), and the UC Santa Cruz Library Special Collections Department. The project proponent would ensure that this recordation documentation was prepared prior to carrying out any other treatment and would make the content of the document available for other mitigation measures, such as the preparation of interpretive material.

Archaeological Resources and Human Remains

A records search and field reconnaissance conducted for the Miravale III EIR did not produce evidence of archaeological resources or human remains on the project site. However, it was determined that construction of the project could potentially uncover unknown buried archaeological resources or human remains during excavation and clearing activities which is a potentially significant impact. However, the EIR concluded that implementation of the following mitigation measures would ensure this potential impact was less than significant.

Mitigation Measures

4.5-8 In order to ensure that project-impacts to potentially unknown resources are avoided, the project proponent shall be responsible for on-going monitoring of project construction. Prior to the issuance of any grading permit, the project proponent shall provide the City of Soledad with documentation identifying construction personnel that will be responsible for on-site monitoring.

If archaeological resources or human remains are accidentally discovered during construction, work shall be halted within 150 feet (50 meters) of the find until a qualified professional archaeologist can evaluate it. Work shall not recommence until the project archaeologist has submitted documentation to the City indicating that discovered resources have been adequately salvaged and no further resources have been identified within the area of disturbance

4.5-9 In order to ensure that the proposed project does not impact buried human remains during project construction, the project proponent shall be responsible for on-going monitoring of project construction. Prior to the issuance of any grading permit, the project proponent shall provide the City of Soledad with documentation identifying construction personnel that will be responsible for on-site monitoring. If buried human remains are encountered during construction, work in that area must halt and the archaeologist and the coroner immediately notified. If the remains are determined to be Native American, then the NAHC

must be notified within 24 hours as required by Public Resources Code 5097. The NAHC will notify designated Most Likely Descendants who will provide recommendations for the treatment of the remains within 24 hours. The NAHC will mediate any disputes regarding treatment of remains. Work shall not recommence until the project archaeologist, coroner, and NAHC, submit documentation to the City indicating that buried human remains have been adequately salvaged and no further remains have been identified within the area of disturbance.

Proposed Project Analysis

The currently proposed specific plan, while smaller than the previously proposed plan, would still require removal of the Lorentzen House and require site preparation and construction activities that have the potential to disturb or damage unknown archaeological resources and human remains if such are discovered. All development within the specific plan area would be subject to the mitigation measures identified in the Miravale III EIR, and noted above, with the following clarification to mitigation measure 4.5-9 regarding the timing of recommendations by designated Most Likely Descendants.

Compliance with these measures would ensure that the known historic resource and unanticipated archaeological resources and human remains are adequately protected should these resources be uncovered during construction activities.

Mitigation Measure

4.5-9 In order to ensure that the proposed project does not impact buried human remains during project construction, the project proponent shall be responsible for on-going monitoring of project construction. Prior to the issuance of any grading permit, the project proponent shall provide the City of Soledad with documentation identifying construction personnel that will be responsible for on-site monitoring. If buried human remains are encountered during construction, work in that area must halt and the archaeologist and the coroner immediately notified. If the remains are determined to be Native American, then the NAHC must be notified within 24 hours as required by Public Resources Code 5097. The NAHC will notify designated Most Likely Descendants who will provide recommendations for the treatment of the remains within ~~24~~ 48 hours. The NAHC will mediate any disputes regarding treatment of remains. Work shall not recommence until the project archaeologist, coroner, and NAHC, submit documentation to the City indicating that buried human remains have been adequately salvaged and no further remains have been identified within the area of disturbance.

Compliance with these measures would ensure that the known historic resource and unanticipated archaeological resources and human remains are adequately protected should these resources be uncovered during construction activities.

Cultural Resources Conclusion

The proposed project would not result in new significant cultural resource effects or substantially increase the severity of previously identified significant effects, no changes in cultural resources related circumstances have occurred, and no new information has been identified that indicates the proposed project would have new or more significant impacts on cultural resources than were identified for the original project.

3.7 GEOLOGY, SOILS, AND MINERALS RESOURCES

Miravale III Specific Plan EIR Analysis

Several reports were completed for the Miravale III Specific Plan project including two Preliminary Geologic Hazards Investigations prepared by Nolan Associates (August 9, 1995 and an update September 27, 2006); a Geotechnical Investigation for the Preliminary Design Phase, prepared by Tharp & Associates, Inc. (August 29, 2005); and a Preliminary Soils & Foundation Investigation, prepared by Tharp & Associates, Inc. (October 19, 1995). The following analysis included in the Miravale III EIR was based, in part, on these reports.

Seismic Hazards

The Reliz-Rinconada fault zone, passes within six miles of the project site and the San Andreas Fault Zone passes within 12 miles of the site. The project could be exposed to potential adverse effects from strong seismic ground shaking that may result in damage to proposed structures which would represent a potentially significant impact. However, the EIR concluded that this impact could be reduced to a less-than-significant level with implementation of the following mitigation measures.

Mitigation Measures

4.6-1 To minimize the potential effects from strong seismic ground shaking on project components, a project-specific geotechnical analysis shall be performed by a registered professional engineer with geotechnical expertise, and all recommendations shall be incorporated into final design plans. Prior to the issuance of any building and/or grading permit, the project applicant shall submit a project-specific geotechnical analysis to the City of Soledad Public Works Director for review and approval. The project engineer shall develop project-level plans based upon and in response to the observations and recommendations made in the project specific geotechnical analysis.

4.6-2 In order to minimize potential seismic-related hazards, the project engineer shall incorporate the seismic shaking analysis contained within the Geologic Hazards Investigation Update prepared by Nolan Associates (September 2006) into project design. Prior to the issuance of any building and/or grading permits, the project applicant shall submit design level plans demonstrating that the recommendations of the Geologic Hazards Investigation Update are incorporated into project design, subject to the review and approval of the City of Soledad Public Works Director. In addition, all structures shall be designed to the most current standards of the California Building Code, at a minimum.

4.6-3 In order to minimize seismic-related hazards to new public facilities, a site-specific probabilistic seismic hazards assessment shall be incorporated into the design of any schools, hospitals, fire or police stations, or any other critical facilities planned for the project site. An individual assessment shall be performed for each site by an engineering geologist. Prior to the issuance of any grading and/or building permit for new public facilities, including but not limited to new schools, hospitals, and fire or police stations, a probabilistic seismic hazards assessments shall be prepared and submitted to the City of Soledad Director of Public Works for review and approval.

Erosion

The Miravale III EIR found that site preparation and construction activities would disturb soil and increase its susceptibility to erosion. Removal of soils by wind or water can undermine buildings, roads, and other developments, as well as contribute siltation of local streams or water bodies. Moreover, removal of existing mature eucalyptus and other tree species along San Vicente Road could result in additional erosion-related impacts. Although the Hillside Development Standards & Guidelines contained in Appendix C of the Miravale III EIR included specific erosion control regulations, the Miravale III EIR found that additional mitigation would be warranted in order to ensure that project-related impacts are reduced to a less-than-significant level. The Miravale III EIR concluded that implementation of the project could result in substantial soil erosion or loss of topsoil which is a potentially significant impact. However, it was found that this impact could be reduced to a less-than-significant level with implementation of the following mitigation measures, including Mitigation Measure 4.1-7 (refer to discussion of Aesthetic Resources, Section 3.2).

Mitigation Measures

4.1-7 A site-specific geotechnical report shall be prepared for new development on hillsides in order to ensure that the development will not cause or worsen natural hazards, such as erosion and sedimentation, and will minimize risk to life and property from slope failure, landslides, and flooding. The report shall include

erosion and sediment control measures, such as temporary vegetation sufficient to stabilize disturbed areas. Prior to the issuance of any grading and/or building permit for new development within the hillside portions of the project site, the project applicant shall submit a geotechnical report prepared by a qualified professional to the City of Soledad Department of Public Works for review and approval. The site-specific geotechnical report shall identify feasible recommendations and avoidance measures to minimize potential impacts.

4.6-4 In order to reduce wind and water erosion on the project site, an erosion control plan and Storm Water Pollution Prevention Plan (SWPPP) shall be prepared for the site preparation, construction, and post-construction periods. The erosion control plan shall incorporate best management practices consistent with the requirements of the National Pollution Discharge Elimination System (NPDES). The erosion component of the plan must at least meet the requirements of SWPPP required by the California State Water Resources Control Board. If earth disturbing activities are proposed between October 15 and April 15, these activities shall be restricted per the requirements of Soledad Municipal Code Chapter 15.08. Prior to the issuance of any permit, the project proponent shall submit detailed plans to the satisfaction of the City of Soledad Public Works Director. The components of the erosion control plan and SWPPP shall be monitored for effectiveness by City of Soledad Public Works. The following measures shall be implemented, where appropriate, to control erosion:

1. Keep construction machinery off of established vegetation as much as possible, especially the vegetation on the upwind side of the construction site;

2. Establish specific access routes at the planning phase of the project, and limits of grading prior to development, which should be strictly observed;

3. Utilize mechanical measures (i.e. walls from sand bags and/or wooden slat or fabric fences) to reduce sand movement;

4. Immediate revegetation (plus the use of temporary stabilizing sprays), to keep sand movement to a minimum; and

5. For larger-scale construction, fabric or wooden slat fences should be placed around the construction location to reduce sand movement.

4.6-5 Areas disturbed by grading shall be stabilized with adequate landscaping vegetative cover. A revegetation and landscaping plan shall be prepared by a landscape architect with experience in working with the type of soils that are

characteristic of the site, subject to the review and approval of the City of Soledad. Prior to the issuance of any certificate of occupancy and concurrent with project construction, disturbed areas shall be re-vegetated consistent with the City approved landscaping plan. All project replanting shall be continually monitored by the landscape architect for a duration of three years. The landscape architect shall submit annual monitoring reports to the City of Soledad after each successive year detailing the success of landscaping. Success shall be based on an 80% survival rate. If it is determined that the replanting has not been successful, additional replanting shall be required by the City of Soledad.

4.6-6 All drainage from improved surfaces shall be captured by closed pipe or lined ditches and carried to neighborhood storm sewers or natural drainages. At no time shall any concentrated discharge be allowed to spill directly onto the ground adjacent to structures or to fall directly onto steep slopes. The control of runoff is essential for erosion control and prevention of water ponding against foundations and other improvements. The project shall implement Low Impact Development (LID) strategies, as determined appropriate by the City of Soledad consistent with the requirements of Mitigation Measure 4.8-4. LID strategies shall be implemented in connection with the proposed project to the satisfaction of the City of Soledad. Prior to the issuance of any grading and/or building permit for each new structure, the project applicant shall submit an erosion control plan consistent with this measure, subject to the review and approval of the City of Soledad Public Works Director.

Liquefaction

The Miravale III EIR determined that the project could be exposed to localized liquefaction and collapse. This would represent a potentially significant impact that can be reduced to a less–than- significant level with implementation of the following mitigation measures.

Mitigation Measure

4.6-7 In order to reduce the risk of localized liquefaction and collapse, and allow for adequate foundation and structural fill support, grading plans shall be consistent with a project-specific geotechnical analysis. The project geotechnical engineer shall prepare a quantitative assessment of liquefaction and seismically-induced settlement potential for the project as part of a comprehensive site geotechnical evaluation, prior to the recordation of each final map. Measures to ensure adequate reduction of risk to standard acceptable levels in accordance with standard geotechnical practice shall be incorporated into project design and specifications, subject to the review and approval of the City of Soledad Public Works Director.

Landslide, Debris Flow, Lateral Spreading

The Miravale III EIR determined that development within certain areas of the project site could be exposed to potential adverse effects from on- or off-site landslides and lateral spreading that may result in damage to proposed structures, which represents a potentially significant impact. However, the EIR concluded that the impact could be reduced to a less-than- significant level with implementation of the following mitigation measures:

Mitigation Measure

4.6-8 Portions of the project located within debris flow hazard areas as described in the Geological Hazards Investigation Update prepared by Nolan Associates (September 2006, see pg. 14) shall incorporate design measures to mitigate this hazard to acceptable levels in accordance with standard engineering practices. Suitable measures include: 1) Restricting development to outside these areas; 2) Constructing artificial channels or diversion walls, designed to divert fluidized debris away from habitable structures; or 3) Constructing impact walls, designed to withstand anticipated debris flow volumes and velocities. An engineering geologist shall be retained to provide site-specific geologic design criteria for debris flow hazard areas once the final project plans are available. Diversion or retaining structures shall be designed based on recommendations by a geotechnical engineer, subject to review and approval of the City of Soledad Public Works Director. Prior to the recordation of each final map, the project applicant shall submit evidence demonstrating that adequate design measures are incorporated to mitigate potential hazards to acceptable engineering standards, subject to the review and approval of the City of Soledad.

Expansive Soils

The Miravale III EIR determined that the project could be exposed to localized soil expansion, which would represent a potentially significant impact. However, the EIR concluded that the impact could be reduced to a less-than-significant level with implementation of the following mitigation measures.

Mitigation Measure

4.6-9 In order to minimize potential hazards associated with expansive soils, the expansion potential of site soils shall be evaluated as part of a site-specific geotechnical study to ensure hazards are reduced to an acceptable level of geotechnical and Uniform Building Code practices. The recommendations of a geotechnical engineer for mitigating soil shrink-swell hazards shall be incorporated into project design. These measures may include replacement of soil with engineered backfill or treatment of expansive soil with lime. Prior to the

recordation of each final map, the project applicant shall submit evidence demonstrating that adequate measures are incorporated to mitigate potential hazards to acceptable engineering standards, subject to the review and approval of the City of Soledad Director of Public Works.

Proposed Project

The proposed project is reduced in size from the previously proposed plan and does not include hillside development above the 400 foot elevation contour. However, development consistent with the proposed specific plan would also be susceptible to similar geologic hazards including seismic ground shaking, liquefaction, landslide, debris flow, and lateral spreading. Due to the elimination of hillside development in the proposed plan, adherence to the Hillside Development Standards and Guidelines would not be applicable to this project, and while to a lesser degree, there remains the potential for erosion on the project site. Mitigation measure 4.1-7 (refer to Section 4.1) would still be required to address erosion impacts on hillsides below the 400-foot contour. Due to the currently proposed development's proximity to the debris flow hazard area, mitigation measure 4.6-8 is applicable to the currently proposed project. While implementation of the project would present fewer geologic hazards and result in less exposure to such hazards, the mitigation measures identified in the Miravale III EIR, and noted above would still be required to reduce geologic hazards to a less than significant level.

Geology, Soils, and Minerals Resources Conclusion

The specific plan would not result in new significant geologic impacts or substantially increase the severity of previously identified significant effects. Implementation of the plan would have a reduced potential for geologic hazards and expose fewer people to such hazards than the previously proposed plan. No new information has been identified that indicates the proposed project would have new or more significant impacts than were identified for the original project.

3.8 HAZARDS AND HAZARDOUS MATERIALS

Miravale III Specific Plan EIR Analysis

A Phase I Environmental Site Assessment was completed for the Miravale III Specific Plan project by D&M Consulting Engineers, Inc. (September 7, 2006). In addition, a Phase 1 Environmental Site Assessment was prepared for a portion of the project site in 1995 by Terratech, Inc. The following analysis contained in the Miravale III EIR was based, in part, on these reports.

Hazardous Material/Waste Sites

According to the Miravale III Specific Plane EIR, based on review of the hazardous materials database report, observations from the site reconnaissance, and results of the owner/operation managers' interviews, it was determined that the following potentially hazardous environmental conditions exist within and near the project site:

- Pesticide and metal residuals from longtime agricultural use on most of the site;
- Specific areas where agricultural chemicals were stored, and especially mixed;
- Specific areas where burning of grape stakes has occurred;
- Lead-based paint and pesticide residues around structures (both current and former);
- Soil staining in areas such as the various earthen building floors;
- Soil beneath the maintenance pit in the vineyard shop;
- Soil beneath the pole-mounted transformers that apparently malfunctioned;
- Infiltration of possible contaminants at the wash rack drain and shop leachfield; and
- Possible impacts from the closed landfill adjacent to north end of Parcel 26.

The Miravale III Specific Plan EIR determined that in addition to the above potential hazards, demolition of the on-site structures (excluding the Lorentzen house which would be relocated to avoid impacting a historically significant structure) including the barn and various agricultural buildings, could result in the exposure of construction personnel to asbestos-related hazards. The project proposed a variety of uses in areas that may be contaminated with hazardous materials, release of which could pose a health risk to construction workers and future uses on the site. This was determined to be a significant impact that could be reduced to a less-than-significant level with the following mitigation measures.

Mitigation Measures

4.7-1 Prior to the recordation of any final map, the applicant shall arrange for a Phase II Environmental Site Assessment to be prepared which assesses the localized environmental conditions described in the Phase I Environmental Site Assessment prepared by D&M Consulting Engineers, Inc. (September 2006) and identifies any required remedial actions for the safe handling, removal and special needs for any identified materials. The Phase II Assessment shall include site-specific soil sampling in order to assess the presence of potential soil contamination and to identify special needs for soil handling during construction/grading activities and possible health risks to construction workers

and future users consistent with the recommendations contained in the Phase 1 Environmental Site Assessment prepared by D&M Consulting Engineers, Inc. If results indicate the presence of such materials in excess of screening levels for residential, educational, or commercial uses, a Remediation Plan shall be prepared and implemented to reduce contamination to acceptable levels, maintain the safety of construction workers and future site users, and assure proper management of contaminated materials in accordance with state and local regulatory requirements. This plan shall be subject to review and approval by the Monterey County Division of Environmental Health. Prior to the issuance of any building and/or grading permit, the project applicant shall submit evidence to the City of Soledad for review and approval demonstrating compliance with this measure.

4.7-2 Prior to commencement of new development, the applicant shall obtain approval of a Soil Management Plan from the Monterey County Division of Environmental Health, which establishes management practices for handling potentially contaminated soil, if encountered, during construction/grading activities.

4.7-3 In order to reduce human health risks to construction personnel and future site occupants, the project proponent shall retain a qualified consultant to survey all buildings to be demolished for asbestos under the National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines prior to demolition activities. If asbestos containing material is documented within existing on-site structures, all potentially friable asbestos shall be removed prior to building demolition in accordance with NESHAP guidelines. Prior to the issuance of a grading permit, the project proponent shall submit written evidence to the City of Soledad Director of Public Work from a qualified consultant demonstrating that all asbestos containing material, if present, has been properly removed and demolition activities may proceed without exposing construction personnel to asbestos related-hazards.

4.7-4 In order to reduce human health risks to construction personnel and future site occupants, the project proponent shall retain a qualified consultant to conduct a lead-based paint survey to evaluate the presence of lead-based paint residues in site soils adjacent to existing structures. If lead contamination is documented on-site, all peeling and flaking lead-based paint shall be removed and properly disposed of separately from building debris, in accordance with current Department of Toxic Substances Control policies. In addition, all existing structures within the Specific Plan area that were constructed prior to 1978 shall be surveyed for lead-based paint prior to any demolition activities. Prior to the issuance of any permit for each phase of development, the project proponent shall

submit written evidence from a qualified consultant documenting that all lead-based paint hazards have been appropriately removed and disposed of in accordance with industry standards, subject to the review and approval of the City of Soledad.

Hazardous Materials within One-Quarter Mile of School

The Miravale III EIR found that due to the proximity of the old Soledad Sanitary Landfill site to the proposed school sites, there was the potential for hazardous emissions and/or other environmental hazards to affect the health and safety of students attending new schools within the project area. Although the landfill was listed as "closed" and no known hazardous incidents had been reported, it was found that releases of emissions may, nevertheless, adversely affect the health of students which is a potentially significant impact. The EIR found that this impact could be reduced to a less-than-significant level with the following mitigation measure.

Mitigation Measure

4.7-5 If, during the course of the Phase II Environmental Site Assessment, it is determined that the existing Soledad Sanitary Landfill would expose the proposed school sites to an environmental hazard that cannot be reduced to an acceptable level through remediation, the project applicant, in conjunction with the Soledad Unified School District and the City of Soledad, shall identify new school sites within the Miravale III project area that would not be exposed to known environmental hazards, prior to the recordation of any final map. If new school locations are necessary, the applicant shall amend the Specific Plan and submit a revised tentative map demonstrating the new school locations, subject to the review and approval of the City of Soledad, prior to the recordation of any final map. Any new school site shall be coordinated with the Soledad Unified School District.

Hazardous Materials Use

The Miravale III project included residential uses along a portion of the western edge of the project site adjacent to agricultural operations. The EIR found that this could result in exposure of residents to hazardous chemicals. However, the Miravale III EIR concluded that incorporation of the mitigation measures requiring agricultural buffers identified in the Agricultural Resources section impacts would be minimized and/or avoided.

The Miravalle III project proposed new residential, commercial, recreational uses, schools and public facility sites, and a golf course. The golf course proposed would have been surrounded by residences and located near the proposed school sites. The Miravale III EIR concluded that the golf course use could expose residents and students to pesticides and other potentially hazardous materials used to control or reduce the adverse effects of

harmful insects, unwanted plants, and pathogenic organisms, which is a significant impact. However, the EIR found that with implementation of the following mitigation measure, the impact could be reduced to a less-than-significant level.

Mitigation Measure

4.7-6 The applicant shall prepare a Chemical Application Management Plan (CHAMP). This plan shall detail the procedures to construct, operate, and maintain the golf course. The CHAMP shall provide technical public disclosure regarding pesticides, fertilizers and other chemicals to be used on the golf course, as well as methods of application and handling. This plan shall be submitted to the Monterey County Environmental Health Division for review and approval. Prior to the issuance of any permit for golf course development, the project applicant shall submit documentation to the City of Soledad demonstrating that a CHAMP has been prepared and approved by the County of Monterey. The following provisions shall be included in the CHAMP:

- Drought, pest, and disease resistant grass species shall be selected.
- Pesticides shall be handled, applied, and disposed of by a licensed (State-certified) spray technician.
- Only approved and legal chemicals shall be used. All county, state, and federal guidelines must be strictly adhered to regarding storage, handling, and application of pesticides.
- Advanced technology/monitoring equipment shall be used to insure minimal application of pesticides, herbicides, and fertilizers. This equipment shall be maintained and in proper calibration.
- A controlled and designated area/facility shall be used for the proper mixing and loading of pesticides into application equipment. The facility shall consist of an impermeable pad with controlled and contained drainage, and should be at least 50 feet from open ditches, ponds, or other water bodies. Rinse water shall be properly stored and hauled for disposal at an approved facility.
- Selection of pesticides shall be based on the ability to achieve treatment goals and criteria to minimize off-site movement. Selection of less toxic, less mobile, and less persistent pesticides shall be a priority management criterion.

- Pesticide applications shall be carefully timed and combined with other pest management practices; pests shall be accurately identified and pesticide applications made only when necessary, using the least amount required for all seasons.

- Pesticides shall not be applied when soil moisture is high during the rainy season. Applications shall be restricted prior to any anticipated late or early season storm events to preclude potential impacts from runoff.

- Irrigation applications shall be consistent with turf grass evapotranspiration requirements. Over-watering shall be avoided

Proposed Project

Hazardous Materials/Waste Sites

As with the Miravale III project, the proposed project includes uses in areas that may be contaminated with hazardous materials and demolition of buildings that may contain lead paint and asbestos, release of which could pose a health risk to construction workers and future uses on the site. Mitigation measures 4.7-1 through 4.7-4 would remain applicable to the currently proposed project and would reduce impacts to a less-than-significant level.

Hazardous Materials within One-Quarter Mile of a School

The proposed school-sites are located more than a mile from the Soledad Landfill, therefore, the Miravale III EIR mitigation measure 4.7-5 is no longer applicable to the proposed project.

Hazardous Materials Use

As with the Miravale III Specific Plan, the proposed specific plan includes areas of residential development that would be sited adjacent to agricultural lands located on the northern, eastern, and western boundaries of the project site, which has the potential to result exposure of residents to hazardous chemicals. Mitigation measures identified in the Miravale III EIR requiring adequate agricultural buffers (mitigation measures 4.2. 1 through 4.2.3) remain applicable to these areas and would reduce related impacts to less than significant.

Unlike the Miravale III Specific Plan, the proposed project does not include a golf course. Therefore, the mitigation measure identified in the Miravale III EIR (4.7-6) is not applicable to the project and there would be no impacts related to the release of hazardous materials associated with golf course maintenance.

Hazards and Hazardous Materials Conclusion

The proposed project would not result in new significant hazards or hazardous materials effects or substantially increase the severity of previously identified significant effects. The

proposed project does not include the golf course that was previously proposed and would avoid these hazardous materials impacts. The mitigation measure identified in the Miravale III EIR specific to this impact is not applicable to the currently proposed project. Changes in hazards or hazardous materials related circumstances have occurred that would lessen certain impacts, and no new information has been identified that indicates the proposed project would have new or more significant hazards or hazardous materials impacts than were identified for the original project.

3.9 HYDROLOGY AND WATER QUALITY

Miravale III Specific Plan EIR Analysis

The Miravale III EIR based the hydrology and water quality analysis on existing information and data provided in the 2004 City of Soledad Urban Water Management Plan (UWMP), a Water Supply Assessment (WSA) prepared for the project (Byron Buck, August 2007), and available drainage and hydrologic information from the 2007 City of Soledad Storm Drain Master Plan (SDMP).

Surface Water/Water Quality

The Miravale III EIR concluded that construction and operation of the project could impact water quality through substantial soil erosion during grading activities, loss of topsoil, and surface runoff from the proposed development. This is a potentially significant impact that can be reduced to a less-than-significant level with implementation of mitigation measures 4.6-4 through 4.6-6 contained in the geology and soils section and the following mitigation measures.

Mitigation Measures

4.8-1 In order to ensure that impacts are minimized to the greatest extent feasible, the project shall be designed to meet the BMP standards for operational phase storm water runoff and to maintain the onsite BMPs. The project shall implement BMPs to manage water quality by providing onsite runoff treatment in line with the onsite infiltration system. Prior to the issuance of any grading and/or building permit, the project applicant shall prepare a Construction Management Plan that identifies a designated construction supervisor responsible for the continued implementation of all construction BMPs throughout the duration of project construction. Moreover, the Construction Management Plan shall also identify BMPs to be implemented as part of the project and associated monitoring activities. The Construction Management Plan shall be reviewed by the City of Soledad Public Works Director prior to the issuance of any permit.

4.8-2 In order to prevent excess sediment buildup and ensure that all percolation basins are functioning in accordance with project-level plans, the project applicant and/or his/her successor in interest, shall be responsible for the long-term maintenance of all percolation basins and related private on-site drainage improvements and shall enter into a maintenance agreement with the city to provide for such. Bi-annually a basin maintenance report shall be submitted to the City of Soledad, subject to the review and approval of the Public Works Director, demonstrating that the basins have been properly maintained and cleaned in accordance with City standards. Prior to the issuance of any building and/or grading permit, the project applicant shall enter into a maintenance agreement with the City of Soledad.

Surface Drainage/Flooding

The Miravale III EIR found that while the proposed project site is not located within a flood hazard area as delineated by the Federal Emergency Management Agency (FEMA), localized flooding had been known to occur within the project area and surrounding vicinity. Development of the proposed project, which would result in substantial grading, changes in topography, and increased impervious surface area, has the potential to result in on- and off-site flooding due to changes in existing drainage patterns. Additionally, the EIR determined that the project's preliminary design was inadequately sized and had the potential to result in additional impacts related to flooding. As a result, project specific mitigation was warranted in order to ensure that final-design level plans were consistent with adopted city standards. Implementation of the following mitigation measures were determined to be necessary to ensure that impacts would be reduced to a less-than-significant level.

Mitigation Measures

4.8-3 In order to ensure that project-induced impacts related to changes in the existing drainage patterns on the project site are minimized, the project applicant shall submit design-level improvement plans for the project's storm drainage collection and retention system. Final design-level plans shall be supported with appropriate soils and hydrologic data in accordance with City standards.

All conveyance system and retention basins shall be sized and designed in accordance with applicable City design standards and shall be appropriately sized to accommodate stormwater runoff from a 100-year storm event. Prior to the recordation of any final map, the project applicant shall submit all design-level plans and supporting details to the City of Soledad Director of Public Works for review and approval. The VTM and Specific Plan shall be revised as necessary to reflect final locations of drainage facilities, subject to the review and approval of the City of Soledad.

4.8-4 In order to reduce the extent of impervious surface coverage and potential drainage/flooding impacts, Low Impact Development (LID) strategies shall be implemented, to the maximum extent feasible, in connection with all new development within the Specific Plan area. Prior to the approval of any final map or approval of any permit for all new residential and commercial developments, the project applicant shall submit design-level site and improvement plans to the City of Soledad for review and approval that incorporate the latest approved LID strategies and best practices as applicable, and the City shall ensure that all such measures are included in the final design plans, Examples of various LID strategies and best practices are identified as follows:

- Where possible, landscaped or grassy areas shall be substituted for impervious surfaces such as building entrances, traffic medians, etc.
- Permeable pavements such as crushed aggregate, turf lock or unit pavers shall be used in place of sidewalks, walkways or overflow parking areas wherever design allows.
- Bioretention cells, planter boxes, vegetated swales, and greenbelt buffer zones shall be implemented in landscaped areas, along streets and sidewalks wherever feasible.
- Final roadway design and street layout shall convey surface water runoff and storm flows into bioretention cells and swales.
- All commercial development shall integrate bioretention into parking lot islands or filter strips distributed throughout the parking area(s) to infiltrate, store and/or convey storm water flows. In addition, permeable paving materials shall be used in spillover parking that is used only for peak demand periods.
- Alternative types of LID strategies and measures may also be approved provided evidence is submitted to the City of Soledad by a qualified engineer demonstrating that said strategies will achieve the intended result of this mitigation measure.

Proposed Project

Since the certification of the Miravale III EIR, the city revised its Urban Water Management Plan in 2016 (AKEL Engineering Group) and adopted the *Storm Drain Master Plan Update* (2015). An updated water supply assessment was also prepared for the project (AKEL Engineering Group 2017). The updated plans do not call for significant changes in the past

plans and the policies and programs of these revised and updated plans would not significantly alter the hydrology and water quality findings of the Miravale III EIR. No additional mitigations are required.

Surface Water/Water Quality

Construction and operation of the proposed project could impact water quality through substantial soil erosion during grading activities, loss of topsoil, and surface runoff similar to those identified in the Miravale III EIR, which is a potentially significant impact. While implementation of the currently proposed specific plan would require less grading than the previous proposed project, and does not include hillside development, mitigation measures 4.6-4 through 4.6-6 identified in the Geology and Soils section of the Miravale III EIR in addition to the 4.8-1 and 4.8-2 would still be required to ensure water quality impacts would be less than significant.

Surface Drainage/Flooding

The specific plan includes requirements for the provision of storm water collection and conveyance and includes policy standards for design and performance of the storm drain and storm water facilities system, and for implementation of pre- and post-construction best management practices and low impact design to capture and retain flows on the site. The proposed system consists of storm drains, collection pipes, a drainage bio-swale within the linear park, a retention basin to capture post-development runoff, and other improvements to capture, retain, and percolate storm water within the project site consistent with the requirements of the Central Coast Regional Water Quality Control Board. Storm water flows would be collected in the linear park and through an underground storm drain system and directed to a retention pond (basin) located within the southwest corner of the project site. The linear park would serve as a bio-swale, following the existing topography and leading from upper elevations to the storm water retention basin. Storm water within developed areas would be collected and conveyed in a curb, gutter and underground storm drain system to the storm water retention basin. The basin, which may serve as a dual-use facility for recreational purposes, would be sized to accept the increase in flow resulting from full buildout of the uses identified in the specific plan. The specific plan requires storm water and drainage facilities to be designed to accommodate a 100-year storm event. The preliminary design of the new storm water system within the project site is shown conceptually on Figure 2-8, Conceptual Storm Water Plan, presented earlier.

Each phase of development will incorporate infiltration-based systems to treat and retain the runoff associated with the 95th Percentile Storm. All runoff associated with storms larger than the 95th Percentile Storm may be directed to the linear park and retention basin. This approach complies with the Post Construction Stormwater Management Requirements for Development Projects in the Central Coast Region, Resolution No. R3-2013-0032, dated July 12, 2013. Should there be a storm runoff overflow from the plan area, pipes will be required

to connect with the existing Upper San Vicente drainage area, consistent with the pipe sizing and capacity improvements identified in the storm drain master plan update (City of Soledad 2015). Flows in storms of greater intensity than an approximately 100-year return period may be discharged to the downstream city storm drainage facilities consistent with the city's *Storm Water Management Plan* (2010). Any runoff that would be discharged from the storm water retention basin would be treated prior to release to existing downstream storm water facilities located on San Vicente Road, and would be released at a rate equal to or less than the historic flows of the site prior to development.

Due to the project's preliminary design of sized storm water infrastructure, elimination of hillside development, smaller area of site disturbance and potential for erosion, and reduced demand for storm water capacity, the project related impacts would be lesser than those identified in the Miravale III EIR. However, to ensure that project impacts related to changes in the existing drainage patterns on the project site are minimized the Miravale III EIR mitigation measures 4.8-3 and 4.8-4 remain applicable.

Hydrology and Water Quality Conclusion

The specific plan would not result in new significant hydrological or water quality effects or substantially increase the severity of previously identified significant effects, no changes in hydrology or water quality related circumstances have occurred, and no new information has been identified that indicates the proposed project would have new or more significant hydrology or water quality impacts than were identified for the original project.

3.10 LAND USE AND PLANNING

Similar to the project studied in the Miravale III EIR, the proposed project site adjoins the city limit and would not physically divide the community. As noted in Section 3.6 of this EIR addendum, there are no habitat or natural community conservation plans that apply to the project site. Therefore, the project would not conflict with any applicable Habitat or Natural Community Conservation Plans.

Miravale III Specific Plan EIR Analysis

The Miravale III EIR identified that the proposed project would conflict with several general plan policies intended to avoid and/or mitigate environmental impacts to biological resources and aesthetics and that this was a significant and unavoidable impact. The Miravalle III EIR also identified that the Miravale III Specific Plan has the potential to conflict with adopted planning documents pertaining to public services; however this impact could be reduced to a less-than-significant level with mitigation. These impacts are discussed in greater detail below.

Aesthetic Resources

The Miravale III EIR identified significant and unavoidable impacts due to inconsistencies with general plan policy policies L-44, L-45, L-46, C/OS-7, and policy C/OS-8, which are intended to avoid and/or mitigate environmental impacts to aesthetic resources that would result from development in the highly scenic Gabilan Mountain Range foothills, in particular areas above the 400-foot elevation contour.

The previously-proposed project included development of residential uses and related infrastructure above the 400-foot elevation contour. A number of mitigation measures are identified that would reduce the impacts to the visual quality and character of the portions of the site above the 400-foot elevation contour, but not to a less than significant level. The Miravale III EIR concluded that the project would remain inconsistent with these policies, in particular policy C/OS-7, which prohibits structures on ridgelines and steep slopes above the 400 foot elevation contour, and policy C/OS-8, which requires private development to designate hillside areas above the 400 foot elevation contour as Open Space/Grazing, Public Facility (parkland), or Agriculture.

Biological Resources

The Miravale III EIR identified significant and unavoidable impacts due to inconsistencies with general plan policy C/OS-8 which is intended to avoid and/or mitigate environmental impacts to biological resources resulting from development above the 400 foot elevation contour. The Miravale III EIR found that project development would fragment existing wildlife habitat on the site, and would encroach into the foothills of the Gabilan Mountain Range which is an important wildlife corridor, particularly in the grassland portions of the site. The Miravale III EIR identified potentially significant impacts to protected species and their habitat that would result from the proposed development of the grassland areas and portions of the site above the 400 foot elevation contour, and concluded that the impact could not be fully mitigated without project redesign. The EIR found that while implementation of identified mitigation measures (refer to Section 3.6 of this EIR addendum) would minimize the project's impacts, they could not be reduced to a less-than-significant level. Mitigation measures were identified but the impacts remain significant and unavoidable. Redesign of the project consistent with general plan policy C/OS-8 would reduce the identified impacts to less than significant.

Public Services

The Miravale III EIR identified significant impacts due to potential conflicts with then-adopted planning documents pertaining to public services and concluded that implementation of Mitigation Measure 4.9-1 would reduce the project's impact to less than significant.

Mitigation Measure

4.9-1 In order to maintain project consistency with adopted City-wide facility planning documents, the project applicant/developer shall revise Section 5.0 of the Specific Plan to incorporate revisions identified by the City of Soledad Director of Public Works, prior to project approval. The following policy revisions have been identified as necessary.

Revise Wastewater Policy 2 to read as follows, "Design and construct the wastewater treatment system for Miravale III in accordance with applicable requirements of the Soledad Urban Water Management Plan, Long-Term Wastewater Management Plan, and the Recycle Water Service Ordinance No. 645.

Revise Water Policy 1 to read as follows, "Design and construct the water supply and distribution system for Miravale III that expands upon and is integrated with the City's water distribution system and which meets the needs of future project developments of the Specific Plan area consistent with the Urban Water Management Plan and the City's 2005 Water Master Plan."

Revise Stormwater Policy 5 to read as follows, "Design and construct a stormwater collection and retention system that adequate retains peak storm flows onsite, avoids aggravating or causing offsite downstream from the project site, and ensures separation of stormwater drainage from Recycled water generated within the Plan area and that is consistent with the 2007 Stormwater Management Plan, Stormwater Master Plan, and Ordinance No. 617"

Add a new policy to the Section 5.2.2 Law Enforcement and Fire Protection/Medical Services. The new policy shall read as follows:

"9. Police and fire services will be maintained with funding from a public safety benefit assessment district or similar district."

Proposed Project

Since the Miravale III EIR was certified, the city entered into a memorandum of understanding with the County of Monterey. The city also updated its urban water management plan, and storm drain master plan, and adopted a Downtown Specific Plan that will guide development and related infrastructure improvements along Front Street and other areas in the downtown. Similar to the General Plan Consistency Alternative identified in the Miravale III EIR, the proposed project would result in less intensive urban development of the project site. The proposed project reduces potential impacts to the Gabilan Mountain Range foothills, which is considered a scenic vista and contains important wildlife habitat.

Consistency with the Soledad General Plan

As previously identified, the proposed project includes several general plan amendments in order to ensure that the proposed project is consistent with the city's general plan. The necessary general plan amendments include revisions to several land use and circulation diagrams, land use descriptions of the expansion areas, modification of various tables to demonstrate the change in holding capacity, and policy modifications/revisions.

The proposed project may include infrastructure placement above the 400 foot contour consistent with the general plan Land Use Element goals, but does not otherwise include residential development above the 400 foot elevation contour, which was the source of the Miravale III Specific Plan project inconsistency with the general plan. An updated general plan consistency analysis is presented in Appendix C of this EIR addendum. Subject to approval of the necessary general plan amendments (refer to Section 2.3) the proposed project would be consistent with applicable land uses policies and regulations. No significant impacts due to inconsistency with general plan policies would occur. The following paragraphs summarize the proposed project's consistency with general plan policies intended to mitigate or avoid impacts to aesthetic and biological resources, and with planning documents intended to guide the provision of public services.

Aesthetic Resources

Grading would no longer be necessary within the foothill areas and changes to topography would be minimal. Additionally, due to the overall reduction of units, the proposed project would also reduce the extent of visual impacts associated with development of this alternative. More specifically, the development of 2,392 residential units would be less visible from adjacent public vantage points due to the reduction in developable area below the 400 foot contour line. Additionally, less commercial area would be developed and potential aesthetic impacts associated with the development of commercial uses adjacent to residential areas would also be minimized. To the extent that the project would reduce the amount of units, the proposed alternative would still result in the conversion of a previously undeveloped site into urban uses and would therefore transform the visual character of the site permanently.

Unlike the previously proposed project, the currently proposed project does not include residential development above the 400-foot elevation contour and would not significantly degrade the aesthetic value of existing visual character of the surrounding hills and mountains. As noted in Section 3.1 Aesthetics, mitigation measures identified in the Miravale III EIR addressing environmental impacts related to residential hillside development above the 400-foot elevation contour, including mitigation measures 4.1-2 and 4.1-3, are not applicable to the proposed project, since residential development is no longer proposed on

the aesthetically valuable hillsides above the 400-foot elevation contour. Project design may necessitate infrastructure improvements above the 400 foot contour, however, other development above the 400-foot contour line is no longer proposed. Therefore, the project is consistent with general plan policies L-44, L-45, L-46, C/OS-7, and policy C/OS-8.

Biological Resources

Development of the proposed project would substantially lessen potential impacts to biological resources located within the project area. By eliminating development within the foothill portions of the project site, the proposed project would not result in the loss of an area of significant biological value. This area would remain as open space consistent with the general plan policy C/OS-8 and would retain its natural features. As a result, potentially significant impacts to resources associated with the loss of open space and related habitat would be reduced to less than significant. Therefore the proposed project is consistent with general plan policy C/OS-8.

Public Services

The proposed project would require fewer services than the project studied and addressed in the Miravale III EIR. A new plan for services and updated specific plan have been prepared for the proposed project. As demonstrated by the Plan for Services, the proposed specific plan and the analysis in Section 3.13 and 3.15 of this EIR addendum, adequate public services are available to accommodate development of the proposed uses identified in the Miramonte Specific Plan. The proposed project is consistent with the applicable planning documents and has included policy provisions that incorporate the items identified in mitigation measure 4.9-1. Therefore, mitigation measure 4.9-1 is not applicable to the currently proposed project.

Consistency with LAFCO policies

Consistency with LAFCO policy guidelines are discussed in the proposed Miramonte Specific Plan Section 2.2. The discussion includes a description of the Monterey County/City of Soledad memorandum of understanding. Consistency with LAFCO Sphere of Influence policies is presented in Table 3-1, LAFCO Sphere of Influence Policy Consistency.

Annexation Policies

Consistency with LAFCO annexation policies is presented in Table 3-2, LAFCO Annexation Policy Consistency.

Table 3-1 LAFCO Sphere of Influence Policy Consistency

LAFCO Sphere of Influence Policy	Specific Plan Consistency
II-1. LAFCO intends that its Sphere of Influence determination will serve as a master plan for the future organization of local government within the county. The spheres shall be used to discourage urban sprawl; limit proliferation of local governmental agencies; encourage efficiency, economy and orderly changes in local government; promote compact, community centered urban development; and minimize adverse impacts on lands classified as prime agriculture.	The proposed sphere of influence boundary is consistent with the geographic development limits established by the memorandum of understanding between the city and Monterey County. Therefore the proposed sphere of influence accomplishes the stated purposes of this policy and is consistent with this policy.
II-2. The Sphere of Influence lines shall be a declaration of policy which shall be a primary guide to LAFCO in the decision on any proposal under its jurisdiction. Every determination made by LAFCO shall be consistent with the Spheres of Influence of the agencies affected by those determinations.	The specific plan's sphere of influence will set the geographic limits within which the city will apply to the LAFCO for annexations, consistent with this policy (see Specific Plan Land Use Goal LU-1).
II-3. Any proposal which is inconsistent with an agency's adopted Sphere of Influence shall not be approved until LAFCO, at a noticed public hearing, has considered an amendment or revision to that agency's Sphere of Influence.	The specific plan's sphere of influence will set the geographic limits within which the city will apply to the LAFCO for annexations, consistent with this policy (see Specific Plan Land Use Goal LU-1).
II-4. Inclusion within an agency's Sphere of Influence does not assure annexation to that agency. LAFCO shall evaluate boundary change proposals as they relate to all of the relevant factors listed in the [Cortese Knox Hertzberg] Act.	The specific plan's sphere of influence will set the geographic limits within which the city will apply to the LAFCO for annexations, consistent with this policy (see Specific Plan Land Use Goal LU-1). The city will phase annexations and development within the plan area consistent with the phasing parameters presented in Section 6.4, Phasing. The phased annexation is consistent with this policy.
II-7. The adopted Sphere of Influence shall reflect city and county General Plans, plans of regional agencies, growth management policies, annexation policies, resource management policies, and any other policies related to ultimate boundary or service area of an affected agency unless those plans or policies conflict with the legislative intent of the [Cortese Knox Hertzberg] Act. Where inconsistencies between plans exist, LAFCO shall rely upon that plan which most closely follows the Legislature's directive to discourage urban sprawl, direct development away from prime agricultural land and open-space lands, and encourage the orderly formation and development of local governmental agencies based upon local conditions and circumstances.	The proposed sphere of influence boundary is consistent with the geographic development limits established by the memorandum of understanding between the city and Monterey County. The memorandum of understanding acknowledges the need for development to occur beyond the present city limits, and directs that growth to those areas where that growth will have the least adverse impact on agricultural lands. The proposed sphere of influence boundary is consistent with the geographic development limits established by the memorandum of understanding, and therefore, the specific plan is consistent with this policy.
III-1. LAFCO will designate a Sphere of Influence for each local agency representing the agency's probable physical boundary within a zero to twenty year period.	The geographic limits for the city's ultimate sphere of influence are established in the memorandum of understanding, and the specific plan sphere of influence boundaries are consistent with those limits.
III-3. LAFCO may establish urban transition areas within adopted Spheres of Influence to discourage premature pressure for development. Transition areas consist of the residual lands between designated urban service areas and the ultimate Sphere of Influence boundary. This land will most likely be used for urban expansion within approximately five (5) to twenty (20) years. Territory included within urban transition areas, but not within urban service areas, generally will not be considered eligible for annexation to receive urban services within five years.	Although there are no urban transition areas included within the specific plan, the city will phase annexations and development within the plan area consistent with the parameters presented in Section 6.4, Phasing. This approach will result in the gradual and orderly conversion of land to urban uses, consistent with this policy.

LAFCO Sphere of Influence Policy	Specific Plan Consistency
III-5. Territory not in need of urban services, including open space, agriculture, recreational, rural lands or residential rural areas, shall not be assigned to an agency's Sphere of Influence unless the area's exclusion would impede the planned, orderly and efficient development of an area.	This policy is applicable to the Hillside Open Space. The specific plan includes the Hillside Open Space within the proposed sphere of influence, and anticipates eventual annexation, so that the city or an assigned entity can provide maintenance of the designated trail system, provide alternative energy, provide other recreational activities, locate infrastructure to serve the plan area (e.g. water tank), conduct fire fuel reduction as needed, and provide efficient emergency response services within the area. The area is to be placed under a conservation easement with land uses limited to those specified by this plan or further activated in a development agreement.
IV-14. For annexations and Sphere of Influence applications, Monterey County LAFCO shall consider as part of its decision whether the proposal mitigates its regional traffic impacts by, for example, monetary contribution to a regional transportation improvement fund as established by the Transportation Agency for Monterey County or otherwise.	Development within the plan area would pay the Transportation Agency for Monterey County regional traffic impact fee, and therefore is consistent with this policy.
IV-15. For annexations and Sphere of Influence applications, Monterey County LAFCO shall consider as part of its decision whether the city in which the annexation or Sphere of Influence amendment is proposed has included certain goals, policies, and objectives into its General Plan that encourage mixed uses, mixed densities, and development patterns that will result in increased efficiency of land use, and that encourages and provides planned, well-ordered, efficient urban development patterns.	Consistent with the city's general plan, which identifies the plan area as part of the Mirrasou Specific Plan Area, the specific plan includes numerous densities and types of residential units, including more than 40 percent medium and high density (up to about 23 units per acre) units, which will provide for an efficient land use development pattern. The specific plan includes more units within its boundaries than were planned for the overall Mirrasou Specific Plan Area, and includes elimination of the remaining Mirrasou Specific Plan Area as a future urban development area. The specific plan is consistent with this policy

Table 3-2 LAFCO Annexation Policy Consistency.

LAFCO Annexation Policy	Specific Plan Consistency
II-2. To the greatest possible extent, boundaries should follow existing political boundaries and natural or man-made features such as rivers, lakes, railroad tracks, and freeways. Where boundaries do not meet this standard, the proponent shall justify the reasons for non-conformance.	Exact annexation boundaries are not proposed within the specific plan, although a set of parameters are included to focus the order of land development. Boundaries are likely to follow the linear park and collector streets within the specific plan. These features will provide an interim buffer between urban development and the remaining agricultural lands. This guidance within the specific plan will ensure orderly annexation and consistency with this policy.
II-4. Whenever practicable, boundary lines of areas proposed to be annexed to cities and/or districts shall be located so that all streets and rights-of-way will be placed within the same jurisdiction as the properties which abut thereon and/or for the benefit of which such streets and rights-of-way are intended.	The plan area is bordered on the west by and served by San Vicente Road, an arterial street that provides traffic circulation to and from U.S. Highway 101. The portion of San Vicente Road adjacent to the plan area will be included in annexations, as will a strip of land to the south of the plan area necessary for ultimate expansion of San Vicente Road to four lanes. The specific plan is consistent with this policy
II-7. The following guidelines related to road right-of-way apply to all proposals submitted to LAFCO. a. The following should not be allowed: (1) City limits which include a portion of the road right-of-way. (2) Road islands of county maintained roads. (3) Islands of road caused by annexation on both sides. (4) Strip annexation roads. c. The following should be annexed to the city. These roads would have direct access to the annexing property and would serve the residents of the property: (1) Minor or local roads. (2) When the street will be used for the city sewer lines, water lines, or storm drains. (3) Piece-meal development by developer causing difficult coordination between two or more agencies. (4) Where the annexation will complicate drainage or traffic control.	The proposed sphere of influence includes the entirety of the right-of-way necessary for development of San Vicente Road, which borders the plan area to the west and provides access from the south. The specific plan boundary includes all of the local roads and utility easements necessary to serve future development within the plan area. The specific plan is consistent with this policy.
II-10. Boundaries should reasonably include all territory which would reasonably benefit from agency services.	The proposed boundaries encompass all of the areas that would need to receive services from the City of Soledad.
IV-1. Each proposal should be consistent with the appropriate city or county general and specific plans. Where the proposal does not abide by these plans, the proponent shall specify the reasons for plan non-conformance.	The specific plan includes additional residential units than proposed for the area in the General Plan. Therefore, the specific plan includes a General Plan amendment to transfer the additional units from other plan areas within the General Plan, so that overall General Plan build-out remains the same. Therefore the specific plan will be consistent with the General Plan and consistent with this policy.
VII-1. LAFCO shall discourage proposals that would have adverse financial impacts on the provision of governmental services or would create a relatively low revenue base in relationship to the cost of affected services. Applications shall describe related service	The specific plan would not have an adverse fiscal impact on the Soledad General Fund. Further, the specific plan requires the development to participate in special financing districts to fund maintenance of

LAFCO Annexation Policy	Specific Plan Consistency
and financial impacts (including revenues and expenditures) on the county, cities, and/or special districts and provide feasible measures which would mitigate such adverse impacts.	streets, storm drains, and parks providing a funding source outside of the Soledad General Fund in.
VII-3. Applications must indicate that the affected agencies have the capability to provide service. Territory shall be annexed to a city or special district only if such agency has or soon will have the capability to provide service.	The specific plan includes provision of a new fire station site, a police substation site, and parks that would facilitate cost effective provision of these services. The cost of these services is not anticipated to be substantially in excess of costs currently borne by development within the boundaries of the City of Soledad. The specific plan includes stipulations that the Miramonte development will participate in impact fee programs and special financing districts necessary to provide funding for the construction and operation of these facilities.
VII-6. LAFCO discourages proposals which will facilitate development that is not in the public interest due to topography, isolation from existing developments, premature intrusion of urban-type developments into a predominantly agricultural area, or other pertinent economic or social reason.	The plan area is contiguous to existing development on the south, and provides three street connections to the existing developed parts of the city. Urban development, excepting water tanks and trails, is kept below the 400-foot elevation contour in accordance to General Plan policies. The specific plan includes a set of phasing parameters that are designed to prevent premature conversion of agricultural land. The specific plan is consistent with this policy.
VIII-3. Proposals which contain territory which is not within a city or district's adopted urban service area and have an expected build-out extending beyond a five- to seven-year period may be considered appropriate for phasing. For the purpose of this policy, "phasing" shall be defined as a planned incremental approval of a project and "buildingout" shall be interpreted as 70 to 80 percent developed. When an exception from this policy is desired, the proponent shall justify to LAFCO the reasons why phasing is not appropriate. Included within the justification for exception, the proponent shall demonstrate the jurisdiction's ability to provide necessary public services.	The plan area is currently outside the city's sphere of influence and urban service area. Build-out of the specific plan is expected to take more than seven years. The specific plan includes a set of phasing parameters that are designed to facilitate efficient provision of services, provide for adequate circulation, and prevent premature conversion of agricultural land. Because the specific plan includes a phasing program, it is consistent with this policy.
XIII-1. For annexations and Sphere of Influence applications, Monterey County LAFCO shall consider as part of its decision whether the city in which the annexation or Sphere of Influence amendment is proposed has included certain goals, policies, and objectives into its General Plan that encourage mixed uses, mixed densities, and development patterns that will result in increased efficiency of land use, and that encourages and provides planned, well-ordered, efficient urban development patterns.	Consistent with the city's general plan, which identifies the plan area as part of the Mirrasou Specific Plan Area, the specific plan includes numerous types of residential units, including more than 40 percent medium and high density (up to about 23 units per acre) units, which will provide for an efficient land use development pattern. The specific plan includes a mixed use overlay on several parcels. The Miramonte Specific Plan represents the full residential buildout potential for the Mirrasou Specific Plan Area as well as 525 units of the identified residential potential of the Northwest Expansion Area. The specific plan effectively consolidates growth into a smaller geographic area, effectively preserving agricultural land and open space. For consistency, a general plan amendment is required to identify a reduced development potential of 525 units in the Northwest Expansion Area. The specific plan is consistent with this policy.

Preservation of Open Space and Agricultural Land

Pursuant to Government Code Section 56301, one of the primary focuses of LAFCO policy is the preservation of open space and agricultural lands located outside city boundaries. Most of the land within the plan area is designated as Prime Farmland on the Important Farmlands Map. Monterey County LAFCO uses the agricultural and open space policies presented below in assessing boundary change applications that include Prime Farmland. Consistency with LAFCO agricultural/ open space policies is presented in Table 3-3, LAFCO Agricultural/Open Space Policy Consistency.

Table 3-3 LAFCO Agricultural/Open Space Policy Consistency

LAFCO Agricultural and Open Space Policy	Specific Plan Consistency
II-1. A Proposal must discuss how it balances the state interest in the preservation of open space and prime agricultural lands against the need for orderly development. (Government Code section 56001.) Proposals that fail to discuss this balance, in the opinion of the executive officer, will be deemed incomplete. Proposals may be denied if they fail to demonstrate to the satisfaction of LAFCO that the need for orderly development is balanced against the preservation of open space and prime agricultural lands.	The memorandum of understanding acknowledges the need for development to occur beyond the present city limits, and directs that growth to those areas where that growth will have the least adverse impact on agricultural lands. The proposed sphere of influence boundary is consistent with the geographic development limits established by the memorandum of understanding. The specific plan includes a set of phasing parameters that are designed to prevent premature conversion of agricultural land. Annexation boundaries are likely to follow the linear park and collector streets within the specific plan. These features will provide an interim buffer between urban development and the remaining agricultural lands. The Miramonte Specific Plan represents the full residential buildout potential for the Mirrasou Specific Plan Area as well as 525 units of the identified residential potential of the Northwest Expansion Area. The specific plan effectively consolidates growth into a smaller geographic area, effectively preserving agricultural land and open space. For consistency, a general plan amendment is required to identify a reduced development potential of 525 units in the Northwest Expansion Area. The intensification of development within the plan area will preserve the agricultural land within the remaining Mirrasou Specific Plan, estimated to be about 30 acres, as well as additional open space below the 400-foot contour, estimated to be about 90 acres. Within the plan area, about 150 acres of hillside land above the 400-foot contour will be preserved as open space, consistent with the city's general plan. The specific plan preserves agricultural land and open space and is consistent with this policy.
II-2. A Proposal must discuss its effect on maintaining the physical and economic integrity of agricultural lands. (Government Code section 56668 (a).) Proposals that fail to discuss their effect, in the opinion of the executive officer, will be deemed incomplete. Proposals may be denied if they fail to demonstrate to the satisfaction of LAFCO that the physical and economic integrity of agricultural lands is maintained.	The specific plan will result in the preservation of about 30 acres of agricultural land to the north of the plan area by way of consolidating residential units into the plan area. On an interim basis, the phased annexation of land will include broad buffers in the form of the linear parkway and collector streets to maintain agricultural lands separate from urban uses as development occurs within the plan area.

LAFCO Agricultural and Open Space Policy	Specific Plan Consistency
	Remaining agricultural land, whether interim or permanent, will be contiguous to other agricultural land, to facilitate efficient ongoing use for agriculture. With these measures built into the specific plan, the specific plan will be consistent with this policy.
II-3. A Proposal must discuss whether it could reasonably be expected to induce, facilitate, or lead to the conversion of existing open-space land to uses other than open-space uses. (Government Code section 56377.) Proposals that fail to discuss potential conversion, in the opinion of the executive officer, will be deemed incomplete. Proposals may be denied if they fail to demonstrate to the satisfaction of LAFCO that: a) they guide development or use of land for other than open-space uses away from existing prime agricultural lands in open-space use and toward areas containing nonprime agricultural lands (Government Code section 56377 (a)); and b) development of existing vacant or nonprime agricultural lands for urban uses within the existing jurisdiction of a local agency or within the Sphere of Influence of a local agency will occur prior to the development of existing open-space lands for non-open-space uses which are outside of the existing jurisdiction of the local agency or outside of the existing Sphere of Influence of the local agency (Government Code section 56377 (b)).	The specific plan will convert the agricultural land within the plan area to urban uses. This is consistent with the memorandum of understanding which establishes geographic development limits to direct growth to locations that will have the least adverse impact on agricultural lands. The specific plan includes a set of phasing parameters that are designed to prevent premature conversion of agricultural land. The specific plan will also permanently preserve 150 acres of hillside open space, located above the 400-foot elevation contour. The specific plan includes means of preserving agricultural land on an interim basis and permanently preserves open space land, and is consistent with this policy.
II-4. A Proposal must, if applicable, provide for pre-zoning (Government Code section 56375 (a)), and must demonstrate that it is consistent with the General Plans and Specific Plans of the existing local agency and any immediately adjacent local agency (Government Code sections 56375 (a) and 56668 (g)). Proposals may be denied if they are not consistent with such plans, or, if not pre-zoned, if the Proposal does not demonstrate to the satisfaction of LAFCO that the existing development entitlements are consistent with the local agency's plans.	The specific plan includes provisions for pre-zoning of land in conjunction with annexation applications, and therefore, is consistent with this Policy.

Housing and Jobs

Table 3-4, LAFCO Housing and Jobs Policy Consistency, summarizes the project consistency with housing and jobs policies used by LAFCO when making determinations on boundary amendments.

Table 3-4 LAFCO Housing and Jobs Policy Consistency

LAFCO Housing and Jobs Policy	Specific Plan Consistency
II-1. It is the policy of LAFCO that, consistent with section 56300 (a) of the Act, Proposals must demonstrate through both quantitative and qualitative methods the relationship between the Proposal and the surplus or deficiency of local and county-wide housing supply and demand, and employment availability and creation. Additionally, the Proposal must demonstrate how its pattern of land use and transportation complements local and regional objectives and goals for the improvement of air quality and reduction of greenhouse gas (GHG) emissions and local vehicle miles traveled (VMT). These factors and their impacts, if any, shall be considered by the Commission in acting upon the Proposal.	The Association of Monterey Bay Area Governments assigned the city a Regional Housing Needs Assessment housing target of 191 units for the 2014 – 2023 time period. The specific plan includes 2,392 housing units, which more than meets this target. The specific plan also includes housing for lower income households and seniors. Development of the specific plan commercial uses and public services (e.g. schools, parks, public safety, etc.) and the increase in population resulting from new residential units creating demand, will result in the establishment of new jobs within the plan area and in the community of Soledad. The specific plan is designed to promote walking and bicycling, with an integrated trail system that connects every sub-area to each other and to the schools and commercial area. The land use and circulation pattern will promote reduced vehicle miles for shopping and school trips. The specific plan provides much needed housing, additional job opportunities, and a trail system to reduce automobile trips. The specific plan is consistent with this policy.

Monterey County/City of Soledad Memorandum of Understanding

The city entered into a memorandum of understanding with Monterey County on March 15, 2016 (included as an appendix to the Miramonte Specific Plan). The memorandum of understanding contains specific requirements regarding the conversion of agricultural land to urban uses and binds the city to a number of principles related to growth beyond the current sphere of influence. The proposed project is consistent with the provisions of the memorandum of understanding. Project consistency with the memorandum of understanding is summarized in Table 3-5, Consistency with Monterey County/City of Soledad Memorandum of Understanding.

Table 3-5 Consistency with Monterey County/City of Soledad Memorandum of Understanding

Memorandum of Understanding Provision	Specific Plan Consistency
a) To limit future long-term development within the area shown on Exhibit 'A' [see Appendix B] and designated as "Urban Growth Boundary" (the "UGB"). The purpose of the UGB is to bound and enclose the land intended for development within the 2005 Soledad General Plan.	The plan area falls within the area that the memorandum of understanding identifies for future growth. The specific plan is consistent with this provision of the memorandum of understanding.
b) To manage development of land within the UGB utilizing the best available "sustainable" practices. The intent of the city is supported by city's General Plan Policy L-2, which partially reads as follows: "Further annexations to the city may occur when a) a substantial portion of the development capacity within the	The specific plan includes about 150 acres of open space, about 35 acres of parkland, and two school sites. Scenic vistas are preserved by the provision of open space land above the 400-foot elevation contour. The specific plan is consistent with this provision of the memorandum of understanding.

Memorandum of Understanding Provision	Specific Plan Consistency
existing city limits has been developed, b) a substantial public benefit can be realized through the annexation, such as the provision of public open space, additional parkland, or the protection of scenic vistas, or natural resources..."	
c) To encourage proposals for infill development on vacant or underutilized sites within the existing city limits east of Highway 101 whenever possible, to avoid urban sprawl and postpone the conversion of agricultural land to urban uses.	Most of the annexed portion of the Miravale II Expansion Area is built out at this time, and will be further built out by the time the specific plan is adopted and entitlements are approved. The specific plan would provide additional land for future growth. The specific plan is consistent with this provision of the memorandum of understanding.
d) To require specific plans to include residential densities that ensure a compact urban form that helps protect agricultural land from premature conversion.	The specific plan includes several densities and types of residential units, including more than 40 percent medium and high density (up to about 23 units per acre) units, which will provide for an efficient land use development pattern. The Miramonte Specific Plan represents the full residential buildout potential for the Mirrasou Specific Plan Area as well as 525 units of the identified residential potential of the Northwest Expansion Area. The specific plan effectively consolidates growth into a smaller geographic area, effectively preserving agricultural land and open space. The intensification of development within the plan area will preserve the agricultural land within the remaining Mirrasou Specific Plan Area, estimated to be about 30 acres, as well as additional open space below the 400-foot contour, estimated to be about 90 acres. Within the plan area, about 150 acres of hillside land above the 400-foot contour will be preserved as open space, consistent with the city's general plan. The specific plan is consistent with this provision of the memorandum of understanding.
e) To establish a Permanent Agricultural Edge for the purpose of maintaining a clearly defined northwest and southeast boundary between the urbanized incorporated areas of city and the agricultural areas within the unincorporated County as shown on Exhibit 'A' and identified as "Permanent Agricultural Edge" [see Appendix B]. A "Temporary Agricultural Edge" is hereby established east of Bryant Canyon Road, as specifically shown on Exhibit 'A'. The Temporary Agricultural Edge may be eliminated through an amendment to this Agreement.	The Permanent Agricultural Edge identified in the memorandum of understanding is not located within or adjacent to the plan area. No Permanent Agricultural Edge, as defined in the memorandum of understanding is required in the plan area. The specific plan is consistent with this provision of the memorandum of understanding.
f) To utilize agricultural buffers within the UGB to address the compatibility between the development of urban land uses and existing or planned agricultural uses. The city's General Plan requires development within or adjacent to designated agricultural areas to minimize conflicts with adjacent agricultural uses. The county requires an agricultural buffer as typically 200 feet in width and includes other vegetation, walls, or other screening deemed necessary to ensure that property owners on both sides of the buffer may enjoy full and unencumbered use of their property for its designated use without experiencing significant deleterious effect from neighboring use.	The residential study area is the only specific plan component that is immediately adjacent to cultivated agricultural lands outside the plan area. A 100-foot wide buffer is required along the northern boundary of the residential study area site is large enough to accommodate a buffer during the site planning process. On the east side and the remainder of the north side, a buffer to the ranchland is provided by the Hillside Open Space, the dirt roadway, and rear building setbacks of the adjacent houses in Sub-area 1. On the west side, a buffer to the cultivated farmland is provided by San Vicente Road and rear building setbacks in Sub-area 10 and 11, the drainage basin/park, and landscape areas. The specific plan is consistent with this provision of the memorandum of understanding.

Memorandum of Understanding Provision	Specific Plan Consistency
g) To actively participate with the county, LAFCO and other cities within the Salinas Valley to develop a Valley-wide Agricultural Land Mitigation Program to address the loss of agricultural land due to development and conversion to urban uses.	The plan area includes Prime Farmland that would be converted to urban uses. Four options for compensation for the loss of agricultural land are provided in the memorandum of understanding, as described in the section following this table. Development within the specific plan will participate in the established mitigation program, consistent with this provision of the memorandum of understanding.
h) To utilize permanent agricultural buffers along the UGB to ensure compatibility between the development of urban land uses and agricultural uses in the unincorporated area. The city agrees to actively participate with the county, LAFCO and other cities in the Salinas Valley to develop a Valley-wide Agricultural Buffer Program to ensure compatibility of urban land use with agricultural uses in the unincorporated area.	The Permanent Agricultural Edge identified in the memorandum of understanding is not located within or adjacent to the plan area. No Permanent Agricultural Edge is required in the plan area. The specific plan is consistent with this provision of the memorandum of understanding.

The memorandum of understanding further requires that timing of annexation applications submitted for consideration by LAFCO will be based upon the approval by the city of a specific plan, which includes a phasing plan, a plan for services and public facilities and financing plans that demonstrate compliance with LAFCO standards. A plan for services has been prepared and a comprehensive fiscal analysis and financing plan are being prepared for City Council approval prior to approval of the proposed project. The proposed Miramonte Specific Plan Section 6.4, Phasing, includes phasing parameters for development.

Downtown Specific Plan

Since the Miravale III EIR was prepared, the city adopted the *City of Soledad Downtown Specific Plan* (City of Soledad 2012), which identifies the vision for the downtown area along Front Street and includes design standards for development within the city's historic downtown and adjacent residential areas. The Downtown Specific Plan boundary extends along Front Street to just south of the U.S. Highway 101/Moranda Road interchange southbound off ramp. The plan is intended to guide initiatives that capitalize on the city's unique assets with the overarching goal of revitalizing downtown and bring new life to the city's historic Front Street corridor by encouraging commercial and entertainment uses that will draw locals and visitors, and reducing development obstacles, such as environmental review, parking, and permit processing. The plan includes block and street standards calling for small town scale, walkable blocks and pedestrian-oriented streetscapes along Front Street. As shown in the Downtown Specific Plan Table 5.8b, street standards for Front Street consist of two travel lanes separated by a center landscaped median with diagonal parking, sidewalks and street trees.

Although the project is not located within or immediately adjacent to the Downtown Specific Plan area, development of the specific plan uses would generate traffic that would negatively affect a number of intersection and roadway segment operations along Front Street. Traffic

impacts to the downtown specific plan area and mitigation measures to address them are discussed in Section 3.14, Traffic and Circulation, and in Section 4.0, Cumulative Impacts. Clarifying language has been added to traffic mitigation measures to ensure consistency with the Downtown Specific Plan street standards. Subject to implementation of the revised measures, the proposed project is consistent with the Downtown Specific Plan.

Land Use and Planning Conclusion

Subject to the approval of the necessary general plan amendments by the City of Soledad City Council, and implementation of the mitigation measures identified in this EIR addendum, the proposed project is consistent with the policies of the general plan and LAFCO, and with the provisions of the memorandum of understanding. As such the proposed project eliminates the significant and unavoidable impacts resulting from the plan inconsistencies of the former project. The proposed project would not result in new significant impacts or substantially increase the severity of previously identified significant effects, no significant changes in land use planning and policy-related circumstances have occurred that would cause the project to result in new or greater significant impacts, and no new information has been identified that indicates the proposed project would have new or more significant impacts related to land use and planning than those that were identified and addressed by the Miravale III EIR.

3.11 NOISE

Miravale III Specific Plan EIR Analysis

A noise report was prepared for the Miravale III Specific Plan by Illingworth & Rodkin, Inc. in March 2007. The following analysis in the Miravale III EIR was based, in part, on this noise report.

Noise and Land Use Compatibility

The Miravale III EIR determined that future residential uses developed at the project site would be exposed to exterior noise levels greater than 65 dBA CNEL, which exceeds the noise and land use compatibility standards presented in the city's general plan. Interior noise levels would be expected to exceed 45 dBA CNEL without the incorporation of noise insulation features into the project's design. The EIR concluded that this would be a significant impact but that it could be reduced to a less-than-significant level with the mitigation below:

Mitigation Measures

4.10-1 Maintain a sufficient buffer distance between transportation noise sources and future sensitive land uses, or alternatively, construct noise barriers or create acoustically shielded outdoor use areas utilizing buildings to achieve noise

exposures of 65 dBA CNEL or less. The specific determination of necessary mitigation measures will occur during project level environmental review and design. Results of the analysis shall be submitted to the City prior to issuance of a building permit.

4.10-2 Retain a qualified Acoustical Specialist to prepare for City review and approval a detailed acoustical analysis of interior noise reduction requirements and specifications for all projects proposed within the 60 dBA CNEL contours of area roadways, in accordance with State and City standards. Interior noise levels must be maintained at or below 45 dBA CNEL. Building sound insulation requirements will include forced air mechanical ventilation in noise environments exceeding 60 dBA CNEL. Special building construction techniques (e.g., sound-rated windows and building facade treatments) may be required where exterior noise levels exceed 65 dBA CNEL. These treatments include, but are not limited to, sound rated windows and doors, sound rated exterior wall assemblies, and acoustical caulking. The specific determination of required treatments will be made on a unit-by-unit basis during project design. Results of the analysis, including the description of the necessary noise control treatments, will be submitted to the City along with the building plans prior to issuance of a building permit. Feasible construction techniques such as these would adequately reduce interior noise levels to 45 Ldn or lower.

4.10-3 Non-residential development will comply with the noise standards established in the Zoning Code at existing or planned residential properties in the vicinity. Further, efforts will be made to reduce noise impacts through the following planning and equipment requirements:

- Development site planning will be utilized in a fashion that reduces noise impacts for nearby sensitive receptors, such as by not locating loading docks near residences.
- Equipment screens, fan silencers, and engine mufflers will be used to mitigate noise from mechanical equipment.
- Noise barriers will be used to control noise from parking and vehicle circulation.
- For recreational uses, proposed development must consider impacts upon the adjacent residential development in terms of the location of active sports areas, their orientation on the site, whether or not lights are included, and speech amplification systems.

Project Generated Traffic Noise

Traffic volume information from the traffic impact analysis by Hexagon Transportation Consultants, Inc. was used in the noise report prepared for the proposed Miravale III project. According to the noise report, traffic volume increases from the project would increase traffic noise along the local roadway network. In some locations, there would be a substantial, permanent increase in noise levels at sensitive receptors. The Miravale III EIR concluded that the measures identified in the noise report that would be available to reduce the project noise level increases (repaving of area roadways, the replacement or construction of noise barriers, traffic calming, and sound insulation) involves other non-acoustical considerations. Other engineering issues may dictate continued use of dense grade asphalt. Noise barriers and sound insulation treatments must be done on private property necessitating agreements with each property owner. Therefore, it may not be reasonable or feasible to reduce project-generated traffic noise at all affected receivers. If the City determines that the mitigation measures would not be feasible, the impact would be considered significant and unavoidable.

Mitigation Measure

4.10-4 The project shall incorporate noise reduction methods, subject to the review and approval of the City of Soledad. Methods to reduce noise on the project site may include the following measures:

- Pave and re-pave streets with "quieter" pavement types, such as Open-Grade Rubberized Asphaltic Concrete, that would reduce noise levels by 2 to 3 dBA depending on the existing pavement type, traffic speed, traffic volumes, and other factors. All new and improved streets within the project area shall use quieter pavement types.

- Implement new or larger noise barriers that may reduce noise levels by 5 dBA CNEL in areas that would not impair access requirements. Final design of such barriers, including an assessment of their feasibility and reasonableness, must be approved by the City during project-specific development applications. An increase in barrier height per foot equates to approximately 1 dBA noise reduction. However, noise barriers must be considered as a last resort to alternative noise reduction methods per the City of Soledad General Plan.

- Install traffic calming measures to slow traffic and provide qualitative improvement by smoothing out the rise and fall in noise levels caused by speeding vehicles. For each 5 mph reduction in average speed, noise generation is reduced by approximately 1 dBA.

- Provide affected residences with building sound insulation, such as sound rated windows and doors on a case-by-case basis to reduce interior noise levels to below the 45 dBA CNEL noise standard. A combination of mitigation measures such as the repaving of area roadways, the replacement or construction of noise barriers, traffic calming, and sound insulation could be implemented to reduce the effects of project generated traffic noise at affected residences along identified segments of as San Vincente Road, West Street, and Main Street.

Case studies have shown that the replacement of dense grade asphalt (standard type) with open-grade or rubberized asphalt can reduce traffic noise levels along residential-type streets by 2 to 3 dBA. A possible noise reduction of 2 dBA would be expected using conservative engineering assumptions. Table 4.10-6 in the Miravale III EIR shows the expected project noise level increases assuming the replacement of existing pavement with open-grade or rubberized asphalt. Project-generated traffic noise increases along West Street, between Market Street and Gabilan Drive could be mitigated to a less-than-significant level as the mitigated traffic noise increase would be 3 dBA CNEL and the resulting noise level would be less than 65 dBA CNEL. In order to provide permanent mitigation, subsequent repaving would also have to be "quieter" pavements. As identified in the Noise Assessment, newer residential land uses constructed in the vicinity of San Vincente Road have existing noise barriers that would provide additional shielding in rear yard areas.

Exterior noise levels, although substantially increased over existing conditions, would be less than 65 dBA CNEL in the rear yards of these homes. It is likely that these recently constructed residences were planned and constructed recognizing the future development at Miravale III. Existing noise barriers in older developments may also be sufficient to reduce exterior noise levels in rear yard areas to 65 dBA CNEL or less. Even with mitigation, noise levels might still be substantially and permanently increased in nearby residential areas. Some noise reduction levels require individual homeowner cooperation; therefore, they cannot be guaranteed. The noise impact, therefore, is considered significant and unavoidable.

Construction Noise

The Miravalle III EIR found that existing and proposed noise-sensitive land uses would be exposed to construction noise levels in excess of the significance thresholds for a period of more than one construction season (one year). The city considers construction noise lasting more than one year to be significant. The EIR concluded that although mitigation measures would reduce noise generated by construction, the impact would remain significant and unavoidable as a result of the extended period of time that adjacent receivers would be exposed to construction noise.

Mitigation Measures

4.10-5 Noise-generating activities at the construction site or in areas adjacent to the construction site associated with the project in any way should be restricted to the hours of 7:00 a.m. to 7:00 p.m., Monday through Friday, and 8:00 a.m. to 6:00 p.m. on Saturdays, unless otherwise approved by the City. No construction activities should occur on Sundays or holidays, including New Years and 4th of July.

4.10-6 Equip all internal combustion engine driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment. 4.10-7 Locate stationary noise generating equipment (e.g., portable concrete crusher) as far as possible from sensitive receptors. Construct temporary noise barriers to screen stationary noise generating equipment when located near adjoining sensitive land uses.

4.10-8 Utilize "quiet" air compressors and other stationery noise sources where technology exists.

4.10-9 Route all construction traffic to and from the project site via designated truck routes where possible. Prohibit construction related heavy truck traffic in residential areas where feasible.

4.10-10 Control noise from construction workers' radios to a point that they are not audible at existing residences bordering the project site.

4.10-11 Consider the use of multiple-pile drivers to expedite construction where pile driving is required. (Although noise levels generated by multiple pile drivers would be higher than the noise generated by a single pile driver, the total duration of pile driving activities would be reduced.)

4.10-12 Use temporary noise control blanket barriers to shroud pile drivers or erect in a manner to shield the adjacent land uses. Such noise control blanket barriers can be rented and quickly erected.

4.10-13 Pre-drill foundation pile holes to minimize the number of impacts required to seat the pile. Predrilling reduces the number of blows required to seat the pile and is a standard construction noise control technique.

4.10-14 The contractor shall prepare a detailed construction management plan identifying the schedule for major noise-generating construction activities. The construction management plan shall identify a procedure for coordination with the adjacent noise sensitive facilities so that construction activities can be scheduled to minimize noise disturbance. Prior to the issuance of any grading and/or building permit, the project applicant shall submit a detailed construction management plan to the City of Soledad for review and approval.

4.10-15 The project applicant shall designate a "disturbance coordinator" who shall be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall require that reasonable measures warranted to correct the problem are implemented. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule. Prior to the issuance of any grading and/or building permit, the project proponent shall provide the City of Soledad with the contact information for the designated "disturbance coordinator."

Proposed Project

Noise and Land Use Compatibility

The proposed project site, while smaller than the previously proposed site, occupies a portion of the same project site and would result in similar impacts to those identified in the Miravale III EIR. Thus, the noise impacts of the proposed project also would exceed the noise and land use compatibility standards identified in the general plan. The mitigation measures identified in the Miravale III EIR are applicable to the currently proposed project and would reduce impacts to a less-than-significant level. For clarification, mitigation measure 4.10-1 is modified as follows:

Mitigation Measure

4.10-1 Maintain a sufficient buffer distance between transportation noise sources and future sensitive land uses, or alternatively, construct noise barriers or create acoustically shielded outdoor use areas utilizing buildings to achieve noise exposures of 65 dBA CNEL or less. The specific determination of necessary mitigation measures will be included in the detailed acoustical analyses (see mitigation 4.10-2) ~~occur during project level environmental review~~ and design of future development projects within the specific plan area. Results of the analysis shall be subject to review and approval by the ~~submitted to the~~ City Planning Department and all recommendations shall be incorporated into the project prior to each final map and issuance of a building permit.

Project Generated Traffic Noise

Due to the decreased size of the project, traffic noise levels resulting from project generated traffic would be reduced. However, the project's size remains significant enough such that traffic volume increases from the project would increase noise along the local roadway network that would result in a substantial, permanent increase in noise levels at sensitive receptors.

Similar to the Miravale III project, measures available to reduce the project noise level increases (repaving of area roadways, the replacement or construction of noise barriers, traffic calming, and sound insulation) involves other non-acoustical considerations. Other engineering issues may dictate continued use of dense grade asphalt. Noise barriers and sound insulation treatments must be done on private property necessitating agreements with each property owner. Therefore, the city may determine that it is not feasible to reduce project-generated traffic noise at all affected receivers; in which case the impact would be significant and unavoidable.

The impact, therefore, is considered significant and unavoidable.

Construction Noise

The Miravale III EIR determined that existing and proposed noise-sensitive land uses would be exposed to construction noise levels in excess of the significance thresholds for a period of more than one construction season. The proposed project would likely require similar construction equipment that would result in comparable noise levels during construction. Due to the reduced size of the proposed project compared to the previously proposed project and new timeline for construction, the project would result in a decreased length of time that adjacent receivers would be exposed to construction noise. However, like the Miravale III project, construction would likely continue beyond one construction season (one year). The city considers construction noise lasting more than one year to be significant. The mitigation measures identified in the Miravale III EIR are applicable to the project and would reduce noise generated by construction. However, the impact would remain significant and unavoidable as a result of the extended period of time that adjacent receivers would be exposed to construction noise.

Noise Conclusion

The specific plan would not result in new significant noise effects or substantially increase the severity of previously identified significant effects, no significant changes in noise related circumstances have occurred, and no new information has been identified that indicates the proposed project would have new or more significant noise impacts than were identified in the Miravale III EIR.

3.12 POPULATION AND HOUSING

Miravale III Specific Plan EIR Analysis

Population Growth – General Plan Residential Holding Capacity

The Miravale III Specific Plan EIR determined that implementation of the Miravale Specific Plan would result in an increase in overall residential holding capacity identified in the 2005

General Plan EIR for portions of the Mirassou, San Vincente and Northwest Expansion Areas within the project area and could be considered growth inducing if annexations and development in the remaining expansion areas exceed development potential addressed in the General Plan EIR. The Miravale III EIR concluded that this would represent a potentially significant impact; however, found that the impact could be reduced to a less-than-significant level with implementation of the following mitigation measures.

Mitigation Measures

4-11.1 Phase approval of development applications and annexations in the Mirrasou Specific Plan Area, the San Vicente West Specific Plan Area and Northwest Expansion Area to maintain holding capacity and population projections in Table 4.11-5 of the General Plan EIR. Monitor development approvals in these expansion areas to limit overall density and population growth to the holding capacity identified to ensure consistency with projections in approved City planning documents.

4-11.2 Implement General Plan policies L-2 to L-7 and other applicable policies for phased development and population growth in the project and expansion areas. General Plan policies L2 to L-7, (below) identify expansion area requirements and applicable policies for annexation of these areas:

L-2 Further annexations to the City may occur when a) a substantial portion of the development capacity within the existing city limits has been developed, b) a substantial public benefit can be realized through the annexation, such as the provision of public open space, additional parkland, or the protection of scenic vistas, or natural resources, or c) a special type of use is proposed that cannot be practically accommodated in the existing city limits, and d) the project can be found to provide a financial benefit to the City or to be fiscally neutral. The Planning Commission shall review the merits of a request for annexation based on these criteria, and make a recommendation to the City Council.

L-3 A specific plan shall be required for all annexations and development of properties designated Expansion Area. Specific plans shall be prepared in accordance with the standards provided in Appendix B of the General Plan.

L-4 The City shall promote patterns of development that allow for the efficient and timely extension of infrastructure and services.

L-5 New development shall not be allowed unless adequate public services are available to serve such new development, or that can be provided at the time of development.

L-6 New development shall pay its fair share of providing additional public services needed to accommodate such development.

L-7 Master plans for sewer, water, roads, drainage and other public improvements shall be required for new development on large undeveloped parcels and may be included in the specific plan required by policy L-3, and as determined by the City. The additional population increase (15,201) associated with buildout of the project site over the projected 15-20 years of project development represents approximately 54 percent of Soledad's existing (2008) population. Depending upon the timing of project development, this additional population represents a major portion of the projected City wide population of 28,000 by year 2020. This growth in population would increase demands on existing community facilities, requiring construction of new facilities that could cause significant environmental effects. The project also proposes office and commercial uses that would have a direct, economic growth-inducing impact by providing new employment. The project would generate an estimated 550 jobs at the project site. Residential development and residential-serving commercial development is included in the Land Use Plan to meet the needs of new employees.

The required fiscal analysis shall be completed by a qualified, independent consultant, utilizing realistic and verifiable assumptions concerning investment earnings, interest rates, property taxes, transient occupancy tax, projected home/property sale prices and sales rates, etc.

Population Growth- Growth Inducing Impacts

The Miravale III EIR found that the additional 15,201 people associated with buildout of the project site over the projected 15-20 years of project development represent approximately 54 percent of Soledad's 2008 population. Depending upon the timing of project development, this additional population represents a major portion of the projected citywide population of 28,000 by year 2020. The Miravale III EIR determined that this growth in population would increase demands on existing community facilities, requiring construction of new facilities that could cause significant environmental effects. The project also included office and commercial uses that would have a direct, economic growth-inducing impact by providing new employment. The project would generate an estimated 550 jobs at the project site. Residential development and residential-serving commercial development is included in the project land use plan to meet the needs of new employees. Although the project site is located in an area that has been identified for future population growth in city's general plan, based on the above discussion, the project would result in a significant growth-inducing impact through the introduction of new sources of employment and a significant

portion of the city's projected population growth, which would result in additional demands on existing facilities. This represents a significant and unavoidable impact that cannot be reduced to less-than-significant level with mitigation.

Housing Element

The Miravale III EIR found that the specific plan was inconsistent with the city's 2003 housing element as it did not fully integrate affordable housing with market rate housing as required by the housing element. This would represent a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation measure.

Mitigation Measure

4.11.3 The applicant shall enter into a Development Agreement per Program 4.3 of the City's Housing Element with the City that prescribes the parameters of the development of affordable housing consistent with the City's Housing Element, Inclusionary Housing Ordinance, and the revised Specific Plan. The Development Agreement shall be reviewed and approved by the City of Soledad prior to or concurrent with project approval.

Affordable Housing - Inclusionary Housing Ordinance Compliance

The Miravale III Specific Plan proposed 454 units restricted affordable pursuant to the City of Soledad's Inclusionary Housing Ordinance which represents only 11 percent of the total 4,200 units proposed. The inclusionary ordinance requires 20 percent of the affordable units to be restricted affordable units pursuant to execution of an Affordable Housing Agreement between the developer and city. Therefore, the plan would not be consistent with the city's Inclusionary Housing Ordinance which is a potentially significant impact. The EIR concluded that this impact could be reduced to a less-than-significant level with implementation of the following mitigation measure.

Mitigation Measure

4.11-4 Prior to project approval, the Specific Plan shall be revised to provide 20% of the units proposed in each Planned Development area and the Low Density Residential area to be affordable housing units. Alternatively, the project applicant shall dedicate real property for affordable housing or submit payment of in-lieu fees in order to ensure project consistency with the requirements of the City of Soledad's Inclusionary Housing Ordinance, subject to the approval of the City of Soledad. The project's consistency with the City's Inclusionary Housing Ordinance shall be evidenced in the Development Agreement (DA) prepared for the project, subject to the approval of the City of Soledad. The DA shall be reviewed concurrently with the project's General Plan amendments, Specific Plan and the Vesting Tentative Map.

Proposed Project

Population Growth – General Plan Residential Holding Capacity

Table 3-6, General Plan Holding Capacity, below, provides a summary of the General Plan development potential or "holding capacity," which is the number of dwelling units, commercial and industrial floor space, etc., that can be accommodated based on the amount of land designated for these uses.

Table 3-6 General Plan Holding Capacity

Land Use	Within City Limits	Within Expansion Areas	Total*
Residential	4,254 dwelling units	10,317 dwelling units	14,571 dwelling units
Commercial	951,351 square feet	2,554,680 square feet	3,506,030 square feet
Parks and Open Space	278	429 acres park and 515 acres open space	707 acres park and 515 acres open space

Source: City of Soledad General Plan 2005, Table 11-1

* May vary from original 2005 source table due to rounding, or addition errors in source table

Nearly 634 acres of the 647-acre specific plan is within the Mirrasou Specific Plan Area. Approximately 1.28 acres of the specific plan are within the Northwest Expansion Area and approximately 9.71 acres are within the San Vicente West Expansion Area. Approximately 2.05 acres are located in the North Entry Commercial Specific Plan Area and Entry Commercial Expansion Area. The Mirrasou Specific Plan Area consists of 1,165 acres, of which 650 are considered developable (below the 400-foot elevation contour). The specific plan consists of 633.88 acres of the 1,165 acre Mirrasou Specific Plan Area and 488.4 of 633.8 acres specific plan are considered to be developable. A comparison of the proposed specific plan with the city and the Mirrasou Specific Plan Area holding capacity is presented in table 3-7, General Plan Holding Capacity Comparison below:

Table 3-7 General Plan Holding Capacity Comparison

Land Use	General Plan Total Expansion Area Development Potential	Mirrasou Specific Plan Area Development Potential	Miramonte Specific Plan Development Potential
Residential	10,317 dwelling units	1,867 dwelling units	2,392 dwelling units
Commercial	2,554,680 square feet	100,000 square feet	100,000 square feet
Parks and Open Space	302 acres park and 515 acres open space	50* acres park and 515 acres open space	56.18 acres park and 140.4 acres open space

Source: City of Soledad General Plan 2005, page 11-19 and Table 11-1

Note: Acreage is incorrectly listed on Soledad General Plan 2005, Table 11-1

As shown in Table 3-7, the proposed specific plan exceeds the residential unit allowance as provided in the Mirrasou Specific Plan Area by 525 units. In contrast, the general plan identifies a total development potential of 10,317 dwelling units within its four expansion areas; 6,500 of these units are identified within the Northwest Expansion Area, adjacent to the western boundary of the Mirrasou Specific Plan Area (Table II-1 of the general plan). The proposed project represents the full residential buildout potential for the Mirrasou Specific Plan Area, as well as 525 units of the identified residential potential of the Northwest Expansion Area. The proposed specific plan includes policy to utilize the development potential of the Mirrasou Specific Plan Area and reduce the development potential of the Northwest Expansion Area by 525 units. A general plan amendment is required to identify a development potential of 5,975 units in the Northwest Expansion Area (6,500 identified in the current general plan less 525 reallocated to the Mirrasou Specific Plan Area). With the approval of the general plan amendment by the City Council, development of the uses identified in the proposed specific plan would be consistent with the general plan holding capacity and phased development would not be needed. The impact is less than significant and mitigation measures 4.11-1 and 4.11-2 are not required.

Population Growth - Growth Inducing Impacts

The proposed specific plan could result in a population addition of 9,712 people at build-out. This is a reduction in growth by 36.1 percent from the previously proposed project. The Miravale III EIR determined that growth in population would increase demands on existing community facilities, requiring construction of new facilities that could cause significant environmental effects. While the proposed project would also increase demands on existing facilities, it would do so to a lesser extent than the previously proposed project. The project also includes commercial uses that would generate approximately 218 jobs, with additional employment at the schools and other public facilities. This is an approximately 60 percent reduction in jobs from the Miravale III Specific Plan that would have the potential to result in direct, economic growth-inducing impact by providing new employment than proposed by the previous project. Although the project site is located in an area that has been identified for future population growth in city's general plan and would result in 36.1 percent less growth than the previously proposed project, based on the above discussion, the project would still result in a significant growth-inducing impact through the introduction of new sources of employment and a significant portion of the city's projected population growth. Consequently, additional demand would be placed on existing facilities. This remains a significant and unavoidable impact that cannot be reduced to less-than-significant level with mitigation.

Housing Element

The specific plan ensures integration of affordable housing both through design and location. The designated affordable housing is located in the specific plan core area adjacent to a park,

the elementary school, senior housing, commercial uses, and low density residential. The housing that meets the minimum 20 unit per acre standard is likewise located in the specific plan core area. Inclusionary units would be distributed throughout the plan area. The design guidelines ensure that affordable housing will blend visually with market rate housing. Locating duets or duplexes on corner lots with building massing consistent within the neighborhood and one garage accessed off each street will give the appearance of low-density family homes. The specific plan is consistent with the housing element's integrated affordable housing requirements. However, to ensure final plan consistency mitigation measure 4.11-3 identified in the Miravale III EIR remains applicable to this project.

Affordable Housing - Inclusionary Housing Ordinance Compliance

As previously discussed, the inclusionary ordinance requires 20 percent of the affordable units to be restricted affordable units pursuant to execution of an affordable housing agreement between the developer and city. Of the 2,392 proposed residential units, the specific plan includes approximately 800 affordable units (33.4 percent of the total units); 207 units would be affordable due to deed restrictions. An additional 419 units are assumed to be affordable because they will be developed at a density of 20 or more units per acre, which the Housing and Community Development Department considers affordable to low and very low income households for purposes of meeting the Regional Housing Needs Assessment targets used in housing elements (California Department of Housing and Community Development 2012 The inclusionary ordinance requires 20 percent of the affordable units to be restricted affordable units pursuant to execution of an affordable housing agreement between the developer and city. The specific plan is consistent with the ordinance, providing approximately 218 very low, 106 low, 235 moderate. Mitigation 4.11.4 identified in the Miravale III EIR is not required.

Population and Housing Conclusion

The specific plan would not result in new significant impacts or substantially increase the severity of previously identified significant effects, no significant changes in population related circumstances have occurred, and no new information has been identified that indicates the proposed project would have new or more significant impacts related to population and housing than were identified in the Miravale III EIR.

3.13 PUBLIC SERVICES AND RECREATION

Miravale III Specific Plan EIR Analysis

Police and Fire

According to the Miravale III EIR, project development would increase the Soledad population by 15,201 persons, effectively increasing the demand for both police and fire

services. The EIR concluded that increased demand for police and fire services could result in a significant impact if the demand is such that the expansion or construction of facilities is required. The project proposed at that time included a police and fire substation, the environmental effects of which were evaluated throughout the EIR. The EIR concluded that this impact could be reduced to a less-than-significant level with implementation of the following mitigation measures.

Mitigation Measures

4.12-1 Prior to the initiation of construction for Phase 2 of the proposed development, the proposed fire and police facilities located on West Street shall be constructed and operational. The project applicant shall also be responsible for providing the necessary funding to the City of Soledad or establishing the appropriate funding mechanism to ensure the provision of adequate police and fire staffing to meet the demands of the proposed project, as determined by the City of Soledad. Prior to the issuance of any building permit for new residential and commercial development in Phase 2, the project applicant shall obtain written documentation from the Soledad Fire and Police Departments indicating that the fire and police substations are operational and adequately staffed to meet the needs of the proposed project, subject to the review and approval of the City of Soledad. This mitigation measure shall not be construed as prohibiting the implementation of infrastructure necessary to serve the proposed facility or the needs of Phase 2 of the proposed project.

4.12-2 Prior to the issuance of building permits, the applicant/developer shall pay a City Public Facilities Development Impact Fee for each type of new development in accordance with the adjusted impact fee in effect at the time of building permit issuance. All fees shall be subject to the review and approval of the City of Soledad Community Development Director.

4.12-3 Prior to the recordation of each final map for development within areas currently designated as "State Responsibility Areas," the applicant shall submit evidence, subject to the review and approval of the City of Soledad Fire Department, demonstrating that a minimum 100-foot defensible space will be provided around any structure constructed within the foothill area. The defensible space shall be cleared of and maintained free of brush and combustible debris, and any landscaping placed within the defensible space shall be irrigated.

Schools

The Miravale III project would be served by the Soledad Unified School District. The Miravale III EIR anticipated buildout of the plan to generate 2,449 students for grades K-6,

625 students for grades 7-8, and 1,217 students for grades 9-12 (a total of 4,291 students). The collective capacity of the K-6 schools was 3,250, with 2,394 seats filled (856 seats available), the 7-8 school capacity was 652 with 630 seats filled (22 seats available), and the grades 9-12 capacity was 1,400 with 1,093 seats filled (307 seats available). Based on enrollment figures and project generated student population, project development would exceed the capacity of existing schools within the Soledad Unified School District and would require construction of new facilities. The EIR concluded that project adherence to the General Plan and Specific Plan education policies requiring that new school facilities are constructed and operational prior to the occupation of residences that require the facilities, as well as implementation of the mitigation identified below would ensure that project-related impacts were less than significant.

Mitigation Measures

4.12-4 Prior to project approval, the project applicant shall submit evidence, including a revised Specific Plan and tentative map, demonstrating that an additional two elementary school sites of sufficient size and a 40-acre high school site will be designated within the project boundaries to meet project demands, subject to the review and approval of the City of Soledad and the Soledad Unified School District. The 40-acre high school site shall be operational prior to the issuance of any certificate of occupancy for Phase II of the proposed project, unless otherwise approved by the City of Soledad and the Soledad Unified School District. In lieu of providing said high school facilities on-site, the project shall submit payment of its proportionate share of funding towards site acquisition and construction of new school facilities, prior to the recordation of any final map. Pro-rata payment of the cost of providing a second high school shall not be construed as waiver of the previous requirement that adequate high school capacity be available to meet project demands prior to occupancy of any housing constructed in Phase II of the project.

4.12-5 The applicant/developer shall pay a school impact fee for each type of development pursuant to the criteria set forth within California Government Code Section 65995. Prior to the issuance of building permits, the applicant shall pay required school mitigation fees. As indicated above, the fees set forth in Government Code Section 65996 constitute the exclusive means of both "considering" and "mitigating" school facilities impacts of projects [Government Code Section 65996(a)]. They are "deemed to provide full and complete school facilities mitigation" [Government Code Section 65996(b)].

Parks and Recreation

The Miravale III EIR determined that the project did not meet the minimum required parkland ratio of five acres per 1,000 residents and determined that additional park acreage was required. The EIR concluded that lack of sufficient park acreage was a potentially significant impact. The EIR found this impact could be reduced to a less-than-significant level with implementation of the following mitigation measure.

Mitigation Measure

4.12-6 In order to ensure adequate improved parkland is provided as part of project development, the applicant shall submit detailed plans, including a revised Specific Plan and Tentative Map, demonstrating that adequate parkland (5 acres/1,000 residents) is designated within the project boundaries consistent with the requirements of Appendix B of the General Plan, prior to project approval, subject to the review and approval of the City of Soledad. Prior to the recordation of each final map, the project applicant shall submit a comprehensive Park Master Plan to the City of Soledad for review and approval. This plan shall address park design and development consistent with the City's adopted Parks and Recreation Master Plan, along with maintenance, operation and financing components for each dedicated recreation parcel in that phase of development This plan shall also identify the appropriate types of improvements within each park parcel to meet the recreational needs of all age groups within that phase of the project.

In addition, the EIR determined that anticipated population growth of future residents of the project would also create additional demands on existing park and recreational facilities throughout the city such that physical deterioration of these facilities would occur, which is a potentially significant impact. However, the EIR concluded that this impact could be reduced to a less-than-significant level through adherence to the City of Soledad General Plan policies and the incorporation of the following mitigation measure.

Mitigation Measure

4.12-7 Prior to the issuance of any building permit, the applicant/developer shall submit payment of a Park Facilities Impact Fee in accordance with the adjusted impact fee in effect at the time of building permit issuance, if determined to be applicable. All fees shall be subject to the review and approval of the City of Soledad Community Development Director.

Proposed Project

Police and Fire

The currently proposed specific plan would increase the population by 9,712 people, which is less than the 15,201-person population increase anticipated by the Miravale III and, would

therefore, result in lesser increase in service demand. However, this population growth would still increase the service demand such that new facilities would be required and mitigation measures 4.12-4 and 4.12-5, identified in Miravale III EIR, would remain applicable. The following changes apply to mitigation measure 4.12-1 to ensure compatibility with the project as currently proposed as the project does not include phasing that is consistent with that identified in the Miravale III project.

Mitigation Measure

4.12-1 Prior to the ~~initiation of~~ occupancy of medium density residential north of the linear park or occupancy of low density residential north of both Orchard Lane and the linear park ~~construction for Phase 2 of the proposed development~~, the proposed fire and police facilities located on ~~West Street~~ Orchard Lane shall be constructed and operational. The project applicant shall also be responsible for providing the necessary funding to the City of Soledad or establishing the appropriate funding mechanism to ensure the provision of adequate police and fire staffing to meet the demands of the proposed project, as determined by the City of Soledad. Prior to the issuance of any building permit for new medium density residential development north of linear park or low density residential north of both Orchard Lane and the linear park ~~and commercial development in Phase 2~~, the project applicant shall obtain written documentation from the Soledad Fire and Police Departments indicating that the fire and police substations are operational and adequately staffed to meet the needs of the proposed project, subject to the review and approval of the City of Soledad. This mitigation measure shall not be construed as prohibiting the implementation of infrastructure necessary to serve the proposed facility or the needs of ~~Phase 2 of~~ the proposed project.

Schools

Like Miravale III, the plan area is served by Soledad Unified School District for grades K-12. Buildout of the proposed specific plan is expected to generate 1,062 students for grades K-6, 317 students for grades 7-8, and 468 students for grades 9-12 (a total of 1,847 students). The proposed project would provide two elementary school sites. The applicant and/or developer(s) will provide an offer to dedicate the school sites (i.e. turn over fee simple title to the land to the school district). In addition to the offer to dedicate land, the developer(s) will pay school impact fees as prescribed by the law in effect at the time of payment, unless otherwise dictated by a development agreement or permit conditions. The proposed specific plan includes a policy that requires that an agreement be established between the developer and/or successors in interest and the Soledad Unified School District that establishes the timing of the school construction or improvements and financing obligations. The proposed specific plan would generate 602 fewer children, will provide land for two new elementary

schools, and requires the payment of impact fees; therefore, mitigation measures 4.12-4 as revised below and 4.12-5 identified in the Miravale III EIR are still applicable. With implementation of the mitigation measure as revised, impacts would be less than significant.

Mitigation Measures

4.12-4 Prior to project approval, the project applicant shall submit evidence, ~~including a revised Specific Plan and tentative map,~~ demonstrating that an additional two ~~elementary~~ school sites of sufficient size ~~and a 40-acre high school site~~ will be ~~designated~~ dedicated within the project boundaries to meet project demands, subject to the review and approval of the City of Soledad and the Soledad Unified School District.. ~~The 40-acre high school site shall be operational prior to the issuance of any certificate of occupancy for Phase II of the proposed project, unless otherwise approved by the City of Soledad and the Soledad Unified School District.~~ An agreement shall be established between the developer and/or successors in interest and the Soledad Unified School District that establishes the timing of the school construction or improvements and financing obligations.

In addition to the dedication of land, ~~In lieu of providing said high school facilities on-site, the project shall submit payment of its proportionate share of funding towards site acquisition and construction of new school facilities, prior to the recordation of any final map~~ the developer(s) will pay school impact fees as prescribed by the law in effect at the time of payment, unless otherwise dictated by a development agreement or permit conditions.

~~Pro-rata payment of the cost of providing a second high school shall not be construed as waiver of the previous requirement that adequate high school capacity be available to meet project demands prior to occupancy of any housing constructed in Phase II of the project.~~

4.12-5 The applicant/developer shall pay a school impact fee for each type of development pursuant to the criteria set forth within California Government Code Section 65995. Prior to the issuance of building permits, the applicant shall pay required school mitigation fees. As indicated above, the fees set forth in Government Code Section 65996 constitute the exclusive means of both "considering" and "mitigating" school facilities impacts of projects [Government Code Section 65996(a)]. They are "deemed to provide full and complete school facilities mitigation" [Government Code Section 65996(b)].

Parks and Recreation

The specific plan incorporates a network of parks and pathways that form a comprehensive and thoroughly interconnected system through the plan area. Several open space and

recreational opportunities are provided including soccer or other sports fields, picnic areas, playgrounds, paved trails, and unimproved open space trails that total 196.4 acres of open space/parkland within the plan area.

The city's general plan has a *goal* of parks-to-population ratio goal of five acres per 1,000 residents (Goal 2 of the parks and recreation chapter). Policy PR-Ia of the general plan *requires* three acres per 1,000 residents, which is the maximum allowed per the Quimby Act. The anticipated population with buildout of the specific plan is 9,712 residents. To meet the city's general plan parkland *requirement* of three acres of parkland for every 1,000 residents, the specific plan would need to provide 29.1 acres of parkland. To meet the city's general plan *goal* of five acres of parkland for every 1,000 residents, the specific plan would need to provide 48.56 acres of parkland.

The specific plan calls for the provision of a minimum of five acres of parkland for every 1,000 residents in addition to the 140.4 acres of open space, which exceeds the city's parkland requirement as well as the city's general plan goal. The specific plan provides 56 acres of parkland in addition to open space and supplements the current city deficit by more than 140 acres. Because the currently proposed plan meets the city's acre per population requirements for parkland, a portion of mitigation measure 4.12-6 identified in the Miravale III EIR is not applicable to this project and is therefore edited as shown below. However, similar to Miravale III, anticipated population growth associated with the project would create additional demands on existing park and recreational facilities throughout the city such that physical deterioration of these facilities may occur, which is a potentially significant impact. Therefore, mitigation measure 4.12-7 remains applicable to the project to reduce potential impacts to a less-than-significant level.

Mitigation Measure

4.12-6 ~~In order to ensure adequate improved parkland is provided as part of project development, the applicant shall submit detailed plans, including a revised Specific Plan and Tentative Map, demonstrating that adequate parkland (5 acres/1,000 residents). is designated within the project boundaries consistent with the requirements of Appendix B of the General Plan, prior to project approval, subject to the review and approval of the City of Soledad.~~ Prior to the recordation of ~~each~~ the first final map, the project applicant shall submit a comprehensive Park Master Plan to the City of Soledad for review and approval. This plan shall address park design and development consistent with the City's adopted Parks and Recreation Master Plan, along with maintenance, operation and financing components for each dedicated recreation parcel in that phase of development This plan shall also identify the appropriate types of improvements within each park parcel to meet the recreational needs of all age groups within that phase of the project.

Public Services and Recreation Conclusion

The proposed project would not result in new significant impacts to public services or substantially increase the severity of previously identified impacts. The proposed project is smaller than the previously proposed project and would create less of a demand for public facilities. No new information has been identified that indicates the proposed project would have new or more significant public services impacts than were identified for the original project.

3.14 TRAFFIC AND CIRCULATION

A traffic impact analysis was prepared for the Miravale III EIR by Hexagon Transportation Consultants (August 15, 2007) (2007 report).

The *Miramonte Specific Plan Traffic Impact Analysis* (Higgins 2017a) and supplemental letters *Miramonte Specific Plan Traffic Study Supplemental Analysis, Soledad, CA* (Higgins 2017b), and *Miramonte Specific Plan Replace Proposed Farmer's Community Use to Single-family or Apartment Residential – Traffic Impact Evaluation*, Soledad CA (Higgins 2018) provide an update to the 2007 report based on the proposed project and current conditions. The 2007 report is included as an appendix to the Miravale III EIR. The 2017 documents are included in Appendix D and are referred to collectively as "2017 report". The 2018 supplemental letter is referred to as "2018 supplemental report"). The 2017 report provides and update of existing and estimated background and cumulative local and regional traffic conditions without the project in and near the City of Soledad and includes a comparison between the traffic impacts resulting from the Miravale III Specific Plan project with the traffic impacts of the proposed project, to determine if new or greater impacts and related mitigation measures would be required for the proposed project. The 2018 supplemental report evaluates the environmental effects of development of 314 single-family or multifamily residences, which is slightly different than the Farmer's Community use evaluated by the earlier 2017 reports, for the proposed Sub-are 13, Residential Study Area. Unless otherwise noted the following discussion is based primarily on each of these reports.

Miravale III Specific Plan EIR Analysis

Background

The city's traffic impact fee program identifies fees to be collected from proposed development as conditions of project approval and used towards identified improvements to the roadway system within and serving the City of Soledad. The Soledad Municipal Code Section 14.06.080.D.1 allows adjustment of a project's required traffic impact fees in consideration of other mitigating actions taken or agreed to by the developer, which have a reasonable relationship to the construction or acquisition of traffic facilities to meet needs

created by the new development. The city may also negotiate with a developer to construct a street or signal improvement (or portion thereof) contained in the city's planned traffic improvement project plan.

Participation in the Transportation Agency for Monterey County (TAMC) Regional Traffic Impact Fee program was adopted by the City Council in 2008 and is codified in Soledad Municipal Code Section 3.56.030. The municipal code acknowledges that regional improvements cannot be completely funded by a single development. In lieu of one single project absorbing the total cost of regional facility improvements, the regional development impact fee program was established to address needed improvements to state highways and regional roads within Monterey County.

Trip Generation

The Miravale III EIR reports that the project would generate 34,856 vehicle trips per day.

Potentially Significant Internal Circulation Hazards

The Miravale III EIR identified potentially significant traffic hazard impacts resulting from the placement of at-grade golf cart crossings on high traffic volume collector and arterial streets. The EIR concluded that this would be a significant impact but that it could be reduced to a less-than-significant level with the mitigation below:

Mitigation Measure

4.13-1 Due to large traffic volumes and vehicle speeds, at-grade golf cart crossings shall not be permitted along streets classified as collectors or arterials unless at a traffic light. Prior to the issuance of any building and/or grading permit for development associated with the golf course facility, the project applicant shall submit detailed design-level plans demonstrating compliance with this measure, subject to the review and approval of the Director of Public Works. Improvements shall be constructed in accordance with this measure prior to the issuance of any certificate of occupancy or final permit for development associated with the golf course.

Intersection Operations

Results of the intersection level of service analysis show that 11 study intersections would be impacted by the project according to applicable level of service standards. Two additional intersections would meet signal warrants with the addition of project traffic. Several of the impacts identified in the 2007 report involve significant physical improvements to not only intersection configurations, but also potential roadway widening. In some cases, the improvements identified below will be undesirable due to the need for right-of-way acquisition and/or create inconsistency with the city's general plan. The 2007 report revealed that several of the project's impacts could be mitigated with the construction of an extension

of Gabilan Drive that would provide an alternate route to U.S. Highway 101 as called for in the general plan. The general plan calls for Gabilan Drive to be a four-lane divided arterial extended west to U.S. Highway 101 and extension of Gabilan Drive as per the general plan will provide for a more direct route to the project site and alleviate identified impacts at several intersections. Therefore, the 2007 report recommended that rather than implement undesirable roadway widening (i.e., along Front Street), the project would instead be responsible for its fair-share towards the construction costs of the extension of Gabilan Drive to U.S. Highway 101 and widening of San Vicente Road from the project south to the Gabilan Drive extension.

The Miravale III EIR identified impacts at the following intersections that could be mitigated by compliance with standard conditions of approval:

- **West Street and Front Street.** Traffic generated by development associated with the Miravale III Specific Plan project would cause signal warrants to be met at this intersection, but would not cause unacceptable level of service operations. Signalization of the intersection and protected left-turn phasing of the signal for Front Street would improve conditions at this intersection. Participation in the city's traffic impact fee program is required for new development as a condition of approval. The project developer is responsible for the payment of the city's traffic impact fees as a condition of approval prior to issuance of a building permit. Participation in the city's traffic impact fee program mitigates the project's share of the impact to a less-than-significant level.
- **Main Street and Front Street**. Traffic generated by development associated with the Miravale III Specific Plan project would cause signal warrants to be met during the PM peak hour at the intersection of Main Street and Front Street; however, the intersection would operate at LOS D or better. However, with the construction of the Gabilan Drive extension to U.S. Highway 101, the signalization of this intersection would not be necessary. The 2007 report recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to U.S. Highway 101. The project developer is responsible for the payment of the city's traffic impact fees as a condition of approval prior to issuance of a building permit. Participation in the city's traffic impact fee program mitigates the project's share of the impact to a less-than-significant level.
- **San Vicente Road and Market Street**. Traffic generated by development of the Miravale III Specific Plan project would cause operations to degrade from acceptable LOS to unacceptable LOS E or worse at the intersection of San Vicente Road and Market Street during AM and PM peak hours. The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection and widening of San Vicente Road to accommodate

two lanes in each direction. However, with the construction of the Gabilan Drive extension to U.S. Highway 101, signalization of the intersection and widening of San Vicente Road in this vicinity would not be necessary. Therefore, the 2007 report recommends that the project contribute instead towards the construction of the extension of Gabilan Drive to U.S. Highway 101. The project developer is responsible for the payment of the city's traffic impact fees as a condition of approval prior to issuance of a building permit. Participation in the city's traffic impact fee program mitigates the project's share of the impact to a less-than-significant level.

- **West Street and Market Street**. Traffic generated by development of the Miravale III Specific Plan project would cause signal warrants to be met during at least one peak hour at the intersection of West Street and Market Street. The necessary improvements consist of the signalization of the intersection. However, with the construction of the Gabilan Drive extension to U.S. Highway 101, the signalization of this intersection would not be necessary. Therefore, the 2007 report recommends that the project contribute instead towards the construction of the extension of Gabilan Drive to U.S. Highway 101. The project developer is responsible for the payment of the city's traffic impact fees as a condition of approval prior to issuance of a building permit. Participation in the city's traffic impact fee program mitigates the project's share of the impact to a less-than-significant level.
- **East Street and Market Street**. Traffic generated by development associated with the Miravale III Specific Plan project would cause signal warrants to be met and cause operations to degrade from acceptable LOS to unacceptable LOS E or worse during at least one peak hour at the intersection of East Street and Market Street. The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection. The project developer is responsible for the payment of the city's traffic impact fees as a condition of approval prior to issuance of a building permit. Participation in the city's traffic impact fee program mitigates the project's share of the impact to a less-than-significant level.

The Miravale III EIR identified additional significant operational impacts that would require mitigation in addition to standard conditions of approval at the following local intersections:

Moranda Road and Front Street: This intersection meets signal warrants with or without the project. Traffic generated by development associated with the Miravale III Specific Plan project would project would cause operations to degrade from acceptable LOS to unacceptable LOS F at the intersection of Moranda Road and Front Street. The improvement necessary to mitigate background plus project impacts at this intersection consist of the addition of a second northbound through lane and eastbound free-right-turn lane. The implementation of this improvement would require that northbound Front Street be

widened to two lanes. The roadway segment analysis also indicates the need for widening of Front Street between Moranda Road and San Vicente Road. However, with the construction of the Gabilan Drive extension to U.S. Highway 101, the improvements to Front Street described above would not be necessary. Instead, improvements associated with the Gabilan Drive extension would be made at the intersection. The 2007 report recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to U.S. Highway 101. The EIR determined that implementation of the following mitigation measure would reduce the project's impact to operations at the Moranda Road/Front Street intersection to a less-than-significant level.

Mitigation Measure

4.13-2 Widen northbound Front Street to two lanes, add a second northbound through lane, eastbound free-right-turn lane and widen Front Street between Moranda Road and San Vicente Road. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance in order to mitigate the impact at this location. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad. Alternatively the project can contribute its fair share towards the construction of the extension of Gabilan Drive to U.S. Highway 101. If this alternative is chosen local roadways shall be monitored annually to ensure that are maintained in accordance with the City of Soledad's adopted standards until the extension is complete. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works.

Implementation of this mitigation measure would reduce the impact at this intersection to less than significant.

San Vicente Road and Front Street. This intersection meets the Caltrans signal warrant with or without the project. Traffic generated by development of the Miravale III Specific Plan project would cause operations to degrade from acceptable LOS C to unacceptable LOS F at the intersection of San Vicente Road and Front Street during at least one of the peak hours analyzed. The 2007 report found that improvement necessary to mitigate the project impact at this intersection would consist of the addition of two eastbound left-turn lanes and southbound free-right turn lane. The implementation of this improvement would require that northbound Front Street be widened to two lanes and northbound San Vicente Road be widened to three lanes. However, these improvements will require a significant amount of right-of-way acquisition and roadway widening of Front Street. With the construction of the

Gabilan Drive extension to U.S. Highway 101, the improvements described above would not be necessary. The 2007 report instead recommended that the project contribute towards the construction of the extension of Gabilan Drive to U.S. Highway 101 to reduce the impacts to less than significant.

With implementation of the following mitigation measure, the project's impacts would be reduced to less than significant.

Mitigation Measure

4.13-3 Widen northbound Front Street to two lanes, northbound San Vicente Road to three lanes, add two eastbound left-turn lanes and a southbound free-right-turn lane. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact - fee in effect at the time of building permit issuance in order to mitigate the impact at this location. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad. Alternatively the project can contribute its fair share towards the construction of the extension of Gabilan Drive to U.S. Highway 101. If this alternative is chosen local roadways shall be monitored annually to ensure that are maintained in accordance with the City of Soledad's adopted standards until the extension is complete. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works.

San Vicente Road and Gabilan Drive: Traffic generated by development associated with the Miravale III Specific Plan project would cause signal warrants to be met and cause operations to degrade from acceptable LOS B to unacceptable LOS F during at least one peak hour at the intersection of San Vicente Road and Gabilan Drive. The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection and addition of a second westbound left turn lane, exclusive northbound right-turn lane, and southbound left-turn lane. The improvement will require the widening of southbound San Vicente Road to accommodate the dual left-turn lanes from Gabilan Drive. With the construction of the Gabilan Drive extension to U.S. Highway 101, the improvements described above would not be necessary. Instead, improvements associated with the Gabilan Drive extension would be made at the intersection to serve the new movements. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to U.S. Highway 101. With implementation of the following mitigation measure, the project impacts to this intersection would be less than significant.

Mitigation Measure

4.13-4 Signalize this intersection and add a second westbound left turn lane, exclusive northbound right-turn lane, and southbound left-turn lane. SB San Vicente Road will need to be widened to accommodate the dual left-turn lanes from Gabilan. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance in order to mitigate the impact at this location. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad. Alternatively the project can contribute its fair share towards the construction of the extension of Gabilan Drive to U.S. Highway 101. If this alternative is chosen local roadways shall be monitored annually to ensure that are maintained in accordance with the City of Soledad's adopted standards until the extension is complete. If this alternative is selected the project applicant shall submit payment of the projects fair share towards the construction of this improvement in accordance with the traffic impact fee in effect at the time of building permit issuance for each phase of the project. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works.

West Street and Gabilan Drive: Traffic generated by development associated with the Miravale III Specific Plan project would cause signal warrants to be met and cause operations to degrade from acceptable LOS B to unacceptable LOS F during at least one peak hour at the intersection of West Street and Gabilan Drive. The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection and addition of exclusive left-turn lanes with protected phasing on all approaches. With implementation of the following mitigation measure, the project impacts would be less than significant.

Mitigation Measure

4.13-5 Signalize the intersection and add exclusive left-turn lanes with protected phasing on all approaches. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance in order to mitigate the impact at this location. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works.

Main Street and Gabilan Drive: Traffic generated by development associated with the Miravale III Specific Plan project would cause signal warrants to be met during at least one peak hour at the intersection of Main Street and Gabilan Drive. The necessary improvements consist of the signalization of the intersection with protected left-turn phasing along Gabilan Drive. With the construction of the Gabilan Drive extension to U.S. Highway 101, the signalization of this intersection would not be necessary. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to U.S. Highway 101. With implementation of the following mitigation measure the project's impacts to this intersection would be less than significant.

Mitigation Measure

4.13-6 Signalize the intersection with protected left-turn phasing along Gabilan Drive. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance in order to mitigate the impact at this location No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad. Alternatively the project can contribute its fair share towards the construction of the extension of Gabilan Drive to U.S. Highway 101. If this alternative is chosen local roadways shall be monitored annually to ensure that are maintained in accordance with the City of Soledad's adopted standards until the extension is complete. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works.

Andalucia Drive and Gabilan Drive: Traffic generated by development associated with the Miravale III Specific Plan project would cause signal warrants to be met during at least one peak hour at the intersection of Andalucia Drive and Gabilan Drive. The necessary improvements consist of the signalization of the intersection with protected left-turn phasing along Gabilan Drive. With implementation of the following mitigation measure the project's impacts to intersection operations would be reduced to a less-than-significant level.

Mitigation Measure

4.13-7 Signalize this intersection with protected left-turn phasing along Gabilan Drive. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance in order to mitigate the impact at this location. All fees shall be paid prior to the issuance of any building permit for

each phase of development and shall be subject to the approval of the Director of Public Works. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad.

Orchard Land and Metz Road: Traffic generated by development associated with the Miravale III Specific Plan project would cause signal warrants to be met and cause operations to degrade from acceptable LOS C to unacceptable LOS E or worse during at least one peak hour at the intersection of Orchard Street and Metz Road. The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection with protected left-turn phasing on Metz Road and split phasing on Orchard Lane. With implementation of the following mitigation measure the project's impacts to intersection operations would be reduced to a less-than-significant level.

Mitigation Measure

4.13-8 Signalize this intersection with protected left-turn phasing on Metz Road and split phasing on Orchard Lane. The project applicant shall submit payment of the City of Soledad traffic impact fee in effect that the time of building permit issuance in order to mitigate the impact at this location. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad.

Oak Street and Front Street and Front Street and Nestles Road. Traffic generated by development associated with the Miravale III Specific Plan would cause intersection operations to decline from acceptable LOS C to unacceptable LOS E at the intersection of Oak Street and Front Street. Signal warrants are met at this intersection with or without the project. Widening Front Street to four lanes between Nestles Road and Oak Street and adding a second eastbound left-turn lane at the intersection of Nestles Road and Front Street would improve operations to LOS B in this location. With implementation of the following mitigation measure the project's impacts to intersection operations would be reduced to a less-than-significant level.

Mitigation Measure

4.13-9 Widen Front Street to four lanes between Nestles Road and Oak Street and add a second EB left-turn lane at the intersection of Nestles Road and Oak Street. Alternatively, the construction of the U.S. Highway 101/SR 146 bypass would

alleviate impacts at this intersection. The project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance. All fees shall be paid prior to the issuance of any building permits for each phase of development and shall be subject to the approval of the Director of Public Works. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad.

Regional Transportation Impacts

The Miravale III EIR determined that traffic generated by the project would affect operations on two U.S. Highway 101 ramps and four freeway segments.

Moranda Road and U.S. Highway 101 Northbound Ramps: Traffic generated by development of the project would cause unacceptable LOS D operations on the U.S. Highway 101 northbound on-ramp from Moranda Road at the Moranda Road Interchange during the AM peak hour. The necessary improvement to mitigate the project impact at this intersection will consist of the signalization of the intersection and the addition of a second northbound left-turn lane, Moranda Road to northbound U.S. Highway 101. The implementation of these improvements will require that the northbound U.S. Highway 101 on-ramp be widened to receive the two lanes. With the construction of the Gabilan Drive extension to U.S. Highway 101, the improvements described above would not be necessary. Instead, improvements associated with the Gabilan Drive extension would be made at the intersection to serve the new movements created by the extension. Therefore, the 2007 report recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to U.S. Highway 101. The volume of vehicles bound for northbound U.S. Highway 101 indicate the need for the reconfiguration and/or reconstruction of the U.S. Highway 101 interchange at Moranda Road/Front Street to provide more efficient access to the project site and north Soledad in general. With implementation of the following mitigation measure the significant impacts would be reduced to a less-than-significant level.

Mitigation Measure

4.13-10 Signalize the intersection and widen the NB U.S. Highway 101 on ramp to add a second NB left-turn lane. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance, including the TAMC Regional Development Impact Fees pursuant to Chapter 3.56 of the Soledad Municipal Code, in order to mitigate the impact at this location. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and

approval of the City of Soledad. If the aforementioned improvements are not implemented by the time required, the project could instead contribute its fair share towards the construction of the extension of Gabilan Drive to U.S. 101. Under this approach to mitigation, local roadways shall be monitored to ensure that are maintained in accordance with the City of Soledad's adopted standards until the extension is complete. In addition the U.S. Highway 101 interchange at Moranda Road/Front Street will require reconfiguration/reconstruction to provide more efficient access to the project site and north Soledad in general. However, should the widening of the freeway and improvement of interchanges be deemed infeasible or not part of the fee program, the impact should be considered significant and unavoidable. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works.

The Miravale III EIR concluded that should the proposed improvements be deemed infeasible or not part of the TAMC fee program, the impacts would be considered significant and unavoidable.

Front Street and U.S. Highway 101 Southbound Ramps: Traffic generated by development of the project would cause unacceptable LOS D operations on the U.S. Highway 101 southbound off-ramp to Moranda Road at the Moranda Road Interchange during the PM peak hour. The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection and addition of a second lane on the off ramp. The improvement will require the widening of southbound Front Street to two lanes. The volume of vehicles exiting southbound U.S. Highway 101 at Front Street indicate the need for widening of Front Street, between U.S. Highway 101 and Moranda Road, to two lanes southbound and/or reconfiguration/reconstruction of the U.S. Highway 101 interchange at Moranda Road/Front Street to provide more efficient access to the project site and north Soledad in general. With implementation of the following mitigation measure the significant impacts would be reduced to a less-than-significant level.

Mitigation Measure

4.13-11 Signalize this intersection, widen southbound Front Street to two lanes and add a second lane on the off-ramp. In addition, the volume of vehicles exiting southbound U.S. Highway 101 at Front Street indicate the need for widening of Front Street, between U.S. Highway 101 and Moranda Road, to two lanes southbound and/or reconfiguration/reconstruction of the U.S. Highway 101 interchange at Moranda Road/Front Street to provide more efficient access to the project site and north Soledad in general. As this is a regional improvement, the project applicant shall contribute funding towards its implementation by

submitting payment of the TAMC Regional Development Impact Fees, pursuant to Chapter 3.56 of the Soledad Municipal Code. However, should the widening of the freeway and improvement of interchanges be deemed infeasible or not part of the TAMC fee program, the impact should be considered significant and unavoidable. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the traffic impact fee in effect at the time of building permit issuance, including the Regional Development Transportation Impact Fees, in order to mitigate the impact at this location. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works.

The Miravale III EIR concluded that should the proposed improvements be deemed infeasible or not part of the TAMC fee program, the impacts would be considered significant and unavoidable.

U.S. Highway 101 Freeway Segments. Traffic generated by development of the project would cause unacceptable LOS D operations on the following U.S. Highway 101 freeway segments:

- Northbound U.S. Highway 101 north of Gonzales-5th Street (AM peak hour).
- Northbound U.S. Highway 101 between Gonzales-5th Street to Gloria Road (AM peak hour).
- Northbound U.S. Highway 101 between Camphora Road and North Soledad (AM Peak Hour).
- Southbound U.S. Highway 101between North Soledad and Camphora Road (PM Peak Hour).

With implementation of the following mitigation measure the significant impacts would be reduced to a less-than-significant level.

Mitigation Measure

4.13-12 The project applicant shall be required to pay towards the city's TIF program, which includes regional improvements, and shall also pay the city's adopted Regional Development Impact Fees established in Chapter 3.56 of the Municipal Code. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the Regional Development Impact Fee and City of Soledad traffic impact fees in effect at the time of building permit issuance in order to mitigate the impacts at identified locations. The payment of fees is considered mitigation for project impacts to highway and regional facilities. All fees shall be subject to the approval of the Director of Public Works.

> Should the widening of the freeway and improvement of interchanges be deemed infeasible or not part of the fee program, the impact should be considered significant and unavoidable.

The Miravale III EIR concluded that should the proposed improvements be deemed infeasible or not part of the TAMC fee program, the impacts would be considered significant and unavoidable.

Traffic Mitigation Triggers

The Miravale III EIR also determined that due to the size of the project the two major roadway improvements, Gabilan Drive Extension and reconstruction of the U.S. Highway 101/Moranda Road interchange, which would serve to mitigate many of the project's traffic impacts, would require substantial funding that cannot be provided at the initial stages of the development or by the proposed development alone. Therefore, the 2007 report and Miravale III EIR identify development triggers that determine the level of development that could occur before implementation of the two major roadway improvement projects would be necessary to maintain acceptable traffic level of service. Traffic monitoring is included in the mitigation to assure that improvements are phased with development. The traffic monitoring shall be established and maintained by the city and funded by the developer.

Gabilan Extension Development Level Trigger

Analysis was conducted at intersections and roadway segments along San Vicente Road to determine at what development level the extension of Gabilan Drive would need to be implemented to support project traffic. The 2007 report indicated that the most critical point of constraint is the intersection of San Vicente Road and Front Street. San Vicente Road would operate at LOS D until 75 percent (approximately 26,142 daily trips) of the project traffic is added to the roadway system. However, the intersection of San Vicente Road and Front Street would be unable to serve this level of development and traffic would spill over onto adjacent streets, such as West Street, that provide an alternate access to San Vicente Road.

The capacity of the eastbound left-turn movement, Front Street to San Vicente, during the PM peak hour is the critical movement at the intersection. Under background conditions the intersection was shown to meet traffic signal warrants. With installation of a signal the intersection would operate at LOS D. The Miravale III EIR notes that although LOS D intersection operations may be acceptable at this location, the number of left-turning vehicles under background conditions indicated the need for a second left-turn lane and subsequent widening of San Vicente Road to receive the two left-turn lanes. Until this improvement is made, the intersection would maintain LOS D operations until 50 percent (17,428 daily trips) would be maintained at the intersection with up to 50 percent of the project development traffic.

U.S. Highway 101 and Moranda Road Interchange Improvement Development Level Trigger

The Miravale III EIR analysis states that existing freeway ramps at Moranda Road and U.S. Highway 101 are not designed to accommodate existing traffic volumes and the addition of project traffic, as well as background traffic, would compound the need for improvement of the ramps. The U.S. Highway 101 southbound off-ramp to Moranda Road will be the constraint on any further development. The 2007 analysis of ramp capacities indicated that LOS D ramp operations would be maintained with up to 25 percent (approximately 8,714 daily trips) of the project traffic added to the roadway system. The intersection level of service analysis indicated that with signalization of the ramp termini intersections, up to 50 percent (17, 428 daily trips) of the project development traffic could be accommodated; however, even with the signalization of the intersections, the ramps would continue to operate an unacceptable level of service.

Proposed Project

The 2017 report evaluated peak-hour signal warrants and roadway and freeway level of service analysis based on PM peak-hour levels of service. The AM peak hour is not analyzed because the previous study documented that the PM peak hour was the higher volume, controlling condition. In other words, no future impacts would be experienced during the AM peak hour that are not already experienced during the PM peak hour. The levels of service in the current study were prorated where appropriate based on current volumes and forecasts. The 2018 supplemental report adjusts the 2017 report conclusions to account for a slight increase in overall project trips that would result from development of sub-area 13 with low- to medium-density residential uses instead of a "Farmers Community". According to the 2017 report and the 2018 supplemental report, traffic from the proposed project would affect the same intersections and traffic facilities identified and addressed in the certified Miravale III EIR, although to a somewhat lesser extent.

Existing Setting

The 2017 report found that the background traffic volumes resulting from currently approved development traffic added to 2017 volumes are about 8.5 percent higher than those predicted in the 2007 report. This means that much of the background traffic assumed in the 2007 report is now on area roadways as part of the existing conditions scenario in the 2017 report. Since the Miravale III EIR was certified, the city adopted the City of Soledad Downtown Specific Plan that includes block and street standards calling for small town scale, walkable blocks and pedestrian-oriented streetscapes along Front Street (City of Soledad 2012). As shown in the Downtown Specific Plan Table 5.8b, street standards for Front Street consist of two travel lanes separated by a center landscaped median with diagonal parking, sidewalks and street trees.

Off-site Regional Improvements

In the vicinity of Soledad, three regional improvement projects are identified since the Miravale III EIR was certified. The State Route 146 Bypass (Pinnacles Parkway) project and improvements to the U.S. Highway 101 North and South interchanges are included in the 2014 Monterey County Regional Transportation Plan (TAMC 2014). The north interchange project will modify the north Soledad interchange and construct related northbound and southbound ramp improvements, which could accommodate future widening of U.S. Highway 101 to six lanes. It is assumed that planned improvements to the north interchange will also include design considerations for connection to the future extension of Gabilan Drive, which is identified in the Soledad general plan.

The south interchange project will modify the south Soledad interchange and construct related ramp improvements to accommodate possible future widening of U.S. Highway 101 to six lanes. The Pinnacles Parkway project would extend Los Coches Road from U.S. Highway 101 to Metz Road. The latter project is identified as a priority street improvement for the City of Soledad in the TAMC Measure X investment program. Measure X is a three-eighths cent Monterey County sales tax measure that voters approved in November 2016. The City of Soledad is projected to receive approximately $12,000,000 over the next 30 years, which will be supplemented by city and regional development fees. Measure X funds should be able to attract additional state and federal funds for local and regional facility improvements.

Similar to the formerly proposed project, access to the site will be provided via extensions of San Vicente Road, West Street, and Orchard Lane (refer to Figure 2-5). West Street and Orchard Lane currently terminate at the northern city limit adjoining the project site. The former project included modifications to San Vicente Road by the developer, and the roadway would have been realigned west of its current location and widened to meet city standards for collector streets. The proposed project also includes widening San Vicente Road along the western boundary of the site and city limit from the site to Gabilan Drive as part of a city-desired circulation improvement that would provide access from the site to U.S. Highway 101 via the Gabilan Drive extension once the extension is constructed. The extension of San Vicente Road as a collector route would ultimately provide access to the future Gabilan Drive extension to U.S. Highway 101. A potential roadway alignment is shown on Figure 2-5, Miramonte Specific Plan Land Use Diagram. Other long term future access also will be provided via planned roadways to Camphora/Gloria Road when other development associated with the general plan buildout is completed several decades from now.

San Vicente Road

The existing 40 foot right of way for San Vicente Road extends south following the existing City limit line from the southwest corner of the project. This includes two right angle turns. To approximate the capacity of this alignment each right angle can be considered an intersection. According to the 2017 report, level of service calculations indicate that each right angle turn would operate at acceptable LOS A, with about 9.3 seconds of average delay. The total delay would be approximately 18 seconds. Although the overall level of service would be acceptable, traversing this segment will be circuitous and slow, which could be a disincentive to use this access route and cause additional volumes on West Street and Orchard Lane.

The proposed alignment and modification includes an "S" curve (refer to Figure 2-5) that would reduce travel time along San Vicente Road and is recommended as its preferred alignment. Assuming that this feature has 300-foot radius curves it can be designed to accommodate a speed of about 30 miles per hour. This curve would operate satisfactorily with proper curve warning and advisory speed signing. The city's proposed modifications to San Vicente Road occur within the boundary of the former project studied in the Miravale III EIR.

This section provides clarification of previously-identified impacts and mitigation measures in the certified EIR including those that address the facilities along San Vicente Road for which the construction of improvements and/or collection of traffic impact fees was previously proposed by the applicant and that would now be the responsibility of the project developer.

Existing and Background Traffic Scenarios

All study intersections analyzed in the Miravale III EIR currently operate at an acceptable LOS D or better. Five of the unsignalized study intersections evaluated in the 2007 report have since been signalized:

- San Vicente Road and Front Street;
- Front Street and Nestles Road;
- Front Street and U.S. Highway 101 northbound Ramps;
- West Street and Gabilan Drive; and
- Oak Street and Front Street.

Similar to the previously proposed project, signal warrants are met during at least the PM peak hour at several intersections under 2017 report background conditions without the project. Intersection operations under background conditions and the improvements necessary to correct the deficiencies are as follows:

- Moranda Road and Front Street. The intersection is projected to operate at unacceptable LOS F during the PM peak hour and meet signal warrants under background conditions. The necessary improvements consist of the signalization of the intersection with protected left-turn phasing on Front Street and the addition of a second eastbound right-turn lane. Intersection operation levels would improve to LOS C with implementation of these improvements.
- East Street and Front Street. The intersection is projected to operate at unacceptable LOS F during the PM peak hour and meet signal warrants under background conditions. The necessary improvements consist of the signalization of the intersection with protected left-turn phasing on Front Street and the addition of a second southbound left-turn lane and exclusive westbound right-turn lane. Intersection operation levels would improve to acceptable LOS C with implementation of these improvements.
- East Street and North Street/Metz Road. The intersection is projected to meet signal warrants under background conditions. The necessary improvements consist of the signalization of the intersection with protected left-turn phasing on Metz Road.

All three intersections also met peak hour signal warrants in 2007 under existing or background conditions without traffic from the formerly proposed project.

The following projects have been built and occupied since 2007:

- Gabilan Square – 9,960 square feet of commercial space and 183 Townhomes/Apartments, located south of Gabilan Drive at Orchard Lane.
- Monterey Street Public Housing Facility – 52 multi-family units, located along the north side of Monterey Street between First and Second streets.
- Benito Street Public Housing – 143 units, located between West and Benito streets, and Gabilan Drive and North Street.

Several other projects, including AutoZone, ARCO Gas Station and Los Coches Mini Storage were approved but not complete at the time of traffic counts for the current study. These projects will impact the vicinity of the U.S. Highway 101/South Front Street interchange. The traffic generated by these projects was added to the existing conditions to estimate background conditions in that part of the study area.

The 2017 report found that all study roadway segments, including San Vicente Road north of Gabilan Drive, and study freeway segments operate at an acceptable LOS C or better under existing and background conditions without the project. Traffic volumes under existing conditions were obtained from 2017 traffic counts at each of the interchange intersections and were found to be greater than historical Caltrans ramp counts, but all freeway ramps

continue to operate at LOS B or better, although the report confirms that the ramp design deficiencies identified in the 2007 report are outdated and as aligned are insufficient to adequately feed large ramp volumes into the greater traffic volumes on the freeway.

Trip Generation and Distribution

For the purposes of this report proposed project trip generation includes trips generated by the eventual development of Sub-area 13 (Residential Study Area) with low-density residential uses, which generate more trips per day. A higher density use could result in fewer daily trips; the specific plan identifies 314 low- to medium-density residential units in the Residential Study Area, and the plan includes policies and standards that allow the number to change if traded to other Sub-areas. For example, if a greater number of mixed use or multi-family dwelling units are developed within the plan area core, the increase in units for core areas would not affect the total number of residential units within the plan area because the number of dwelling units allowed in Sub-area 13 would be decreased by that amount. To be conservative, the following discussion addresses traffic volumes that include development of Sub-area 13 with single-family uses.

The proposed project would generate a total of 20,888 daily net vehicle trips (Higgins 2018, page 2) with approximately 14,142 trips generated by the proposed residential uses and 6,747 trips generated by proposed commercial uses. The commercial component is expected to primarily serve the residents within and immediately adjacent to the specific plan area and residential trips are adjusted to accommodate internal trips.

The overall trip generation of the proposed project represents 13,968 (approximately 40 percent) fewer daily trips than the 34,856 trips that would have been generated by the Miravale III Specific Plan project. The proposed project trip distribution patterns and percentages are identical (Higgins 2017a, Figure 8) to those identified in the 2007 report. All reports show that 10 percent of project-generated trips would utilize the local street network while 70 percent of project traffic would use northbound U.S. Highway 101 and 20 percent would use southbound U.S. Highway 101. Residential uses would be expected to generate the largest amount of traffic on area roadways.

Traffic Mitigation Triggers

The 2017 report and 2018 supplemental report update the development level trigger points identified in the general plan and the 2007 report for two future major roadway improvements that would provide mitigation for many traffic facility impacts caused by any growth into the general plan expansion areas or, by or contributed to by the proposed project: Gabilan Drive Extension, and reconstruction of the U.S. Highway 101/Moranda Road interchange. An estimate of timing for San Vicente Road realignment/widening improvements is included in this discussion as it relates to the trigger points for the two major off-site facility improvements. However, implementation of the three improvements

would require substantial funding that cannot be provided at the initial stages of the development or by the proposed development alone. The trigger points identified in the reports identify the levels of development within the plan area that can occur before implementation of the three major transportation facility improvement projects would be necessary to maintain acceptable traffic levels of service at study intersections. The number of building permits and certificates of occupancy issued for proposed residential uses would be limited by the amount of project traffic that can be accommodated by acceptable levels of service. The anticipated costs of these improvements and the project's proportionate share of costs of construction will be identified in the comprehensive financing plan prepared as part of the required development conditions on the tentative map, the results of which will be implemented through a development agreement subject to the review and recommendations of city staff and approval of the City Council.

Similar to the conclusions of the Miravale III EIR, the 2017 report finds that the effectiveness of the planned Gabilan Drive extension and proposed widening of San Vicente Road to a collector roadway are predicated on the volume and operational capacity of the U.S. Highway 101/Moranda Northbound interchange, which currently operates at LOS C and is expected to operate at LOS F under background plus project conditions without the Gabilan Drive extension.

Both reports note that widening Front Street to four lanes or construction of the Gabilan Drive extension would sufficiently alleviate impacted intersections. As noted previously, the city in 2012 adopted a downtown specific plan with standards that would not allow widening Front Street to the extent necessary to reduce the project impacts. Widening Front Street within the downtown specific plan boundary would require amendment to the block and street standards of the downtown specific plan. Instead, City staff recommend that the Gabilan Drive Extension mitigate the project impacts (Brent Slama, personal communication, August 29, 2017). With implementation of the Gabilan Drive Extension called for in the general plan, roadway widening along the city's visually quaint and pedestrian-oriented core would not be necessary. The 2017 report also found that implementation of the planned Pinnacles Parkway would provide an additional access connecting U.S. Highway 101 south of the Front Street interchange and Los Coches business park with the northern and western portions of Soledad. According to the 2017 traffic report, about half of the Miramonte traffic using this section of Front Street via East Street will likely be diverted to Pinnacles Parkway under the cumulative plus project scenario. Construction of the Pinnacles Parkway would eliminate the need to widen Front Street to four lanes between East Street and Nestles Road.

The 2017 report confirms the Miravale III EIR determination that existing freeway ramps at Moranda Road and U.S. Highway 101 are not designed to accommodate existing traffic volumes and the addition of project traffic, as well as background traffic, would compound the need for improvement of the interchange and reconfiguration of the ramps..

Consequently, the U.S. Highway 101 southbound off-ramp to Moranda Road will be the constraint on any further development in the City of Soledad. The 2018 analysis of ramp capacities indicates that LOS D ramp operations would be maintained until 38 percent of the project traffic, or approximately 7,937 vehicle trips generated by the project are added to the system.

Necessary improvements to the U.S. Highway 101/Moranda Road interchange improvements cannot be completely funded by a single development. In lieu of one single project absorbing the total cost of freeway interchange reconstruction, the TAMC regional development impact fee program has been established for state highways and regional roads within Monterey County. The payment of fees is considered mitigation for project impacts to freeway facilities.

Clarifying language has been added to mitigation measures to reflect the steps necessary for their implementation based on the reduction in anticipated traffic volumes generated by the project and anticipated trigger points that would require construction of improvements to maintain acceptable facility operations.

Gabilan Extension Development Level Trigger

The Gabilan Drive extension will provide a four-lane arterial for a more direct route to the northern portion of the city and to the specific plan site. The extension would alleviate project impacts at several intersections within the current city limits, and would serve as an incentive to divert traffic from the more circuitous routes through existing surface streets that lead to the freeway via Front Street. Figure 12 of the 2017 report shows the change in travel patterns of the project that would result with the extension of Gabilan Drive to U.S. Highway 101. The diagram illustrates that the extension would minimize or even avoid impacts to the intersection of San Vicente Road and Front Street, funnel northbound traffic more directly to U.S. Highway 101 and points north, which would reduce the traffic volumes along Front Street as well. Therefore, similar to the conclusions of the Miravale III EIR the 2017 report recommends that rather than implement undesirable roadway widening along Front Street within the downtown specific plan area, that the project impacts are instead mitigated by either constructing or contributing fair-share of costs towards the construction costs of the extension of Gabilan Drive.

According to the 2017 roadway segment analysis, the segment of San Vicente Road from the project site to Front Street would operate at LOS D and accommodate all project traffic that would use this route if the Gabilan Drive extension is not completed. If modified, the segment would operate at an acceptable LOS A without the Gabilan Drive extension. However, the 2017 report confirms that the most critical point of constraint will be the

intersection of San Vicente Road and Front Street, which would operate at LOS D until about 75 percent of project traffic (approximately 15,581 daily trips) is added to the roadway system. However, the intersection of San Vicente Road and Front Street would be unable to serve this level of development and traffic would spill over onto adjacent streets within the current city limits, such as West Street and Front Street, that provide an alternate access to the site. The report notes that although LOS D roadway segment and intersection operations may be acceptable, a second left-turn lane on Front Street and subsequent widening of San Vicente Road between Front Street and Gabilan drive would be necessary to receive the two left-turn lanes.

However, as noted above, this traffic volume would also impact the operations and capacity of the southbound exit ramp at the US Highway 101/Moranda Road interchange, which, as noted previously is projected to accommodate only 38 percent of project traffic before reconfiguration and improvement would be needed. Construction of the Gabilan Drive extension would eliminate the need for additional lanes, but would also require interchange improvements to connect to the U.S. Highway 101/Moranda Road interchange. Construction of a new US Highway 101/Moranda Road interchange in addition to the Gabilan Drive extension would minimize impacts to all intersections along Front Street, and avoid the need for undesirable widening of this thoroughfare within the Downtown Specific Plan area.

Construction of the Gabilan Drive extension or participation in the city's traffic impact fee program toward its construction would mitigate many of the project impacts to local intersections (discussed in greater detail later in this section) within the city limit and would eliminate the need for undesirable widening of Front Street. Clarifying language is added to the applicable mitigation measures identified in the Miravale III EIR to reflect the interrelated traffic patterns between the Gabilan Drive extension and the U.S. Highway 101/Moranda Road interchange, the reduced traffic volumes of the project, development triggers that would require construction of improvements, and the level of monitoring required to ensure that development is phased with necessary improvements.

San Vicente Road Development Level Trigger

The San Vicente Road realignment along the westerly boundary of the project site to Gabilan Drive would operate at an acceptable LOS A once modified, and at LOS D prior to modification. Both traffic reports estimate that San Vicente Road would carry 22 percent of the proposed project traffic at buildout of the specific plan.

According to the proposed specific plan (Chapter 6) the first phases of development are expected to occur south of the linear park in Sub-areas 1 – 4, and north of the park in Sub-area 10 (refer to Figure 2-5). Development of the specific plan uses in these Sub-areas would consist primarily of low and medium density single family residential uses and would accommodate about 617 dwelling units excluding secondary units. Access to these areas

would be provided by West Street and Orchard Lane. According to the specific plan, Section 6.4, Phasing, subsequent development of single-family uses in the northern portion of the plan area (Sub-areas 11 - 14, or 15) requires three connections to San Vicente Road by the time three of these Sub-areas are developed. The specific plan further calls for completion of the San Vicente Road re-alignment during the initial phases of development at the time the second connection to San Vicente Road is made. The roadway alignment improvement would be expected to occur upon the city's acquisition of sufficient right of way, at minimum with construction of the fifth Sub-area, which could consist of as few as approximately 168 additional dwelling units. Combined with the first four Sub-areas, this represents approximately 785 units or about 33 percent of the proposed residential development. However, even if the roadway realignment improvement is not made at this point in time, the operations along San Vicente Road would continue to operate at LOS D, which is a less than significant impact.

It is assumed that the project will be developed over many years with access initially provided by extensions of West Street and Orchard Lane into the site, and the near-term improvements to San Vicente Road identified above. About 70 percent of the project uses (1,865 dwelling units, or approximately 14,468 overall trips) can be developed on the site before San Vicente Road begins carrying higher volumes of project traffic and "offloading" West Street and Orchard Lane to the extent that operations along these roadways and related intersections would degrade to unacceptable levels. However, as noted previously, operations at the intersection of San Vicente Road and Front Street and at the U.S. Highway 101/Moranda Road interchange would reach an unacceptable and likely unsustainable level F at 38 percent (7,938 vehicle trips) of project development (Higgins 2018). Realignment of San Vicente Road, construction of the Gabilan Drive extension to U.S. Highway 101 and reconfiguration to the U.S. Highway 101/Moranda Road interchange and ramps would mitigate these impacts and many of the project's impacts to other local intersections (identified and discussed later in this section). Therefore, the 2017 report recommends that the project coordinate its proposed improvements to San Vicente Road with construction of the Gabilan Drive extension and related U.S. Highway 101/Moranda Road interchange improvements.

In the interim, the specific plan calls for the developer to construct several improvements to San Vicente Road, including all of the east-side improvements adjacent to the specific plan boundary, as well as southbound turn lanes and adjacent median where needed to serve the plan area, the eastern half of the median including curb and landscaping (except in locations where a northbound turn lane will be needed, and a temporary asphalt curb should be provided), and the southbound travel lane in its ultimate position. Between the north end of the storm water basin parcel and the point about 300 feet north of Vista del Soledad, the specific plan developer will upgrade San Vicente Road in its existing alignment to include two 13-foot lanes with two-foot shoulders for temporary use until the city's desired roadway modifications can be implemented.

Development Trigger Summary

A conceptual example of development levels across residential product types based on the development trigger evaluations of the 2017 report and 2018 supplemental report are summarized in Table 3-8, Summary of Residential Development Triggers.

Table 3-8 Summary of Residential Development Triggers[1,2]

Development Levels by Type	Size	38 Percent	70 Percent	75 Percent
		Units	Units	Units
Single-family Detached Housing[3]	1,318 units	501	923	989
Multifamily[3]	626 units	238	439	470
Senior Housing Detached	134 units	51	94	101
Residential Study Area[3,4]	314 units	120	220	236
Total [4]	2,392 units	910	1,676	1796

SOURCE: Higgins (2017a; 2108); EMC Planning Group 2018

NOTE:

1. Numbers may vary due to rounding.
2. Conceptual only.
3. Affordable units are dispersed in Sub-areas.
4. Assumes single-family units. Duplex, triplex, or fourplex development and/or trading units between higher density areas such as the mixed uses in the plan area core result in fewer trips.

Regional Transportation Impacts

The 2017 report determined that although traffic volumes would be reduced by about 40 percent from the volumes studied in the Miravale III EIR, the traffic generated by the proposed project would also affect operations on the two U.S. Highway 101 ramps at U.S. Highway 101/Moranda Road, and four freeway segments.

Moranda Road and U.S. Highway 101 NB Ramps: Traffic generated by the proposed project would cause LOS F operations on the U.S. Highway 101 northbound on-ramp from Moranda Road at the Moranda Road Interchange. This is a significant impact. The necessary improvement to mitigate to return operations to acceptable levels would consist of signalization of the intersection and the addition of a second northbound left-turn lane, Moranda Road to northbound U.S. Highway 101. Implementation of these improvements will require that the northbound U.S. Highway 101 on-ramp be widened to receive the two lanes. With the construction of the Gabilan Drive extension to U.S. Highway 101 and related roadway widening improvements to San Vicente Road, the improvements described above would not be necessary. Instead, improvements associated with the Gabilan Drive extension would be made at the intersection to serve the new movements created by the extension. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to U.S. Highway 101.

This impact was identified in the Miravale III EIR as a potentially significant and unavoidable impact despite implementation of Mitigation Measure 4.13-10, which identifies the above-described improvements. Changes or alterations to this intersection that would address service level deficiencies are within the responsibility of Caltrans and already are included in planned interchange improvements identified in the regional traffic impact fee program. The proposed project would be required to pay for its proportionate fair share toward the costs of the improvement. Participation in the regional traffic impact fee program would reduce the proposed project's impact to existing operations at this intersection to less-than-significant. Implementation of the following mitigation measure ensures that the significant impacts would be reduced to a less-than-significant level. Clarification is provided in the mitigation measure to reflect the updated regional transportation plan list of projects covered under the regional transportation impact fee program.

Mitigation Measure

4.13-10 ~~Signalize the intersection and widen the NB U.S. Highway 101 on ramp to add a second NB left-turn lane.~~ The project developer shall contribute its fair share of costs towards the construction improvements to the U.S. Highway 101 interchange at Moranda Road. Prior to the issuance of any building permit for each phase of development, the project ~~applicant~~ developer shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance, including ~~the~~ TAMC Regional Development Impact Fees for the project's proportionate share of costs to construct improvements to the intersection and northbound ramps of U.S. Highway 101 interchange at Moranda Road. The improvements may include signalization of the intersection and widening the northbound U.S. Highway 101 on ramp to add a second northbound left turn lane. Implementation of these improvements would require widening the northbound ramp to accommodate two lanes. ~~to mitigate the impact at this location. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad.~~ If the aforementioned improvements are not implemented by the time required, the project could ~~instead~~ either construct or contribute its fair share towards the construction of the extension of Gabilan Drive to U.S. Highway 101. Under this approach to mitigation, local roadways shall be monitored by the city at the developer's expense to ensure that ~~LOS~~ levels of service are maintained in accordance with the City of Soledad's adopted standards until the extension is complete. In addition the U.S. Highway 101 interchange at Moranda Road/Front Street will require reconfiguration/reconstruction to provide more efficient access to the project site and north Soledad in general. However, improvements to this interchange are

within the jurisdiction of Caltrans and not under the control of the city. ~~should the widening of the freeway and improvement of interchanges be deemed infeasible or not part of the fee program, the impact should would be considered significant and unavoidable.~~ All required traffic impact fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works.

Front Street and U.S. Highway 101 SB Ramps: Traffic generated by the proposed project would cause LOS F operations on the U.S. Highway 101 southbound off-ramp to Moranda Road at the Moranda Road Interchange during at least one peak hour. The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection and addition of a second lane on the off ramp. The improvement will require the widening of southbound Front Street to two lanes. The volume of vehicles exiting southbound U.S. Highway 101 at Front Street indicate the need for widening of Front Street, between U.S. Highway 101 and Moranda Road, to two lanes southbound and/or reconfiguration/reconstruction of the U.S. Highway 101 interchange at Moranda Road/Front Street to provide more efficient access to the project site and north Soledad in general. According to the development trigger analysis the improvements would be required to accommodate greater than 38 percent of trips generated by development of the specific plan area, without exceeding operational levels of service at this interchange. As noted earlier, improvements to this interchange are included in the regional transportation plan and the payment of regional transportation fees would mitigate the project's impact to this regional facility.

However, with the construction of the Gabilan Drive extension to U.S. Highway 101 and related roadway widening improvements to San Vicente Road, the improvements described above would not be necessary. Instead, improvements associated with the Gabilan Drive extension would be made at the intersection to serve the new movements created by the extension. Therefore, the 2017 report recommends that the project contribute instead towards the construction of the extension of Gabilan Drive to U.S. Highway 101. However, since the necessary improvements are under the jurisdiction of Caltrans and not under the control of the city, should the interchange improvements not be undertaken in time to address the project's impact, this impact would be significant and unavoidable.

This impact to the regional facility was identified in the Miravale III EIR as a potentially significant and unavoidable impact despite implementation of Mitigation Measure 4.13-11, which includes the above-described improvements. Clarification is provided in the mitigation measure to reflect the updated regional transportation plan list of projects covered under the regional transportation impact fee program. With implementation of the following revised mitigation measure the significant impacts would be reduced, but not to a less-than-significant level.

Mitigation Measure

4.13-11 ~~Signalize this intersection, widen southbound Front Street to two lanes and add a second lane on the off-ramp. In addition, the volume of vehicles exiting southbound U.S. Highway 101 at Front Street indicate the need for widening of Front Street, between U.S. Highway 101 and Moranda Road, to two lanes southbound and/or reconfiguration/reconstruction of the U.S. Highway 101 interchange at Moranda Road/Front Street to provide more efficient access to the project site and north Soledad in general. As this is a regional improvement, t~~The project ~~applicant~~ developer shall pay the project's fair share of TAMC regional development Impact fees ~~te funding towards its implementation~~ for the construction of interchange improvements that may include signalization of the intersection the addition of a second lane on the off- ramp and/or reconfiguration/reconstruction of the US 101 interchange at Moranda Road/Front Street. Widening Front Street (a city traffic facility) to two lanes southbound, between US 101 and Moranda Road is also necessary, to provide more efficient access to the project site and north Soledad in general. ~~by submitting payment of the TAMC Regional Development Impact Fees, pursuant to Chapter 3.56 of the Soledad Municipal Code. However, should the widening of the freeway and improvement of interchanges be deemed infeasible or not part of the TAMC fee program, the impact should be considered significant and unavoidable.~~

However, improvements to the interchange are within the jurisdiction of Caltrans and not under the control of the city. Should the improvement of the interchange be deemed infeasible by the Caltrans, or the widening of Front Street be deemed infeasible by the city, the impact would be considered significant and unavoidable. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the traffic impact fee in effect at the time of building permit issuance, including the Regional Development Transportation Impact Fees, in order to mitigate the impact at this location. All required traffic impact fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works.

U.S. Highway 101 Freeway Segments. Traffic generated by development of the project would cause unacceptable LOS D operations on the following U.S. Highway 101 freeway segments:

- Northbound U.S. Highway 101 north of Gonzales-5th Street (AM peak hour).
- Northbound U.S. Highway 101 between Gonzales-5th Street to Gloria Road (AM peak hour).

- Northbound U.S. Highway 101 between Camphora Road and North Soledad (AM Peak Hour).
- Southbound U.S. Highway 101between North Soledad and Camphora Road (PM Peak Hour).

The Miravale III EIR identified this impact as less than significant with implementation of Mitigation Measure 4.13-12; however, with implementation of Mitigation Measure 4.13-10 and Mitigation Measure 4.13-11, the significant impacts to the interchanges and affected roadway segments would be reduced to a less-than-significant level. As noted previously, the two projects would widen portions of U.S. Highway 101 to six lanes in the vicinity of the northbound and southbound interchanges, which would alleviate traffic congestion on these freeway segments. Payment of the project's proportionate share of regional traffic impact fees would reduce the project's impact to the regional system to less than significant. Implementation of Mitigation Measure 4.13-12, as revised, ensures that the proposed project pays the appropriate regional traffic impact fee to cover the costs of its proportionate share of the impact to the freeway segments.

Mitigation Measure

4.13-12 ~~The project applicant shall be required to pay towards the city's TIF program, which includes regional improvements, and shall also pay the city's adopted Regional Development Impact Fees established in Chapter 3.56 of the Municipal Code.~~ Prior to the issuance of any building permit for each phase of development, the project ~~applicant~~ developer shall submit payment of the Regional Development Impact Fee in effect at the time of building permit issuance in order to mitigate the project's impacts ~~at identified locations~~ to the identified freeway segments. The payment of fees is considered mitigation for project impacts to highway and regional facilities. All fees shall be subject to the approval of the Director of Public Works. ~~Should the widening of the freeway and improvement of interchanges be deemed infeasible or not part of the fee program, the impact should be considered significant and unavoidable.~~

Internal Circulation Hazards

The proposed project does not include a golf course; therefore no internal circulation conflicts between vehicles and golf carts would occur. There would be no impact and mitigation measure 4.13-1 is no longer necessary.

Local Intersection Operations

The 2017 report and 2018 supplemental report determined that although background plus project scenario traffic volumes will generally be lower than the same scenario analyzed in the 2007 report, the results show that no new impacts or impacts of greater magnitude would result from the proposed project that were not already identified and addressed by the 2007

report and Miravale III EIR. Similar to the conclusions of the Miravale III EIR, the 2017 report identified significant impacts that can be mitigated to a less than significant level through compliance with standard conditions of approval at the following local intersections:

- **West Street and Gabilan Drive**: According to the 2017 report, traffic volumes would be reduced by 18 percent at this intersection, but the impact would still be significant. Also, since the Miravale III EIR was prepared, the intersection has since been signalized. The 2018 supplemental report confirms that with the addition of project traffic, including traffic generated bydevelopment of 314 single-family residential units instead of farmworker housing, the intersection would operate at an acceptable LOS B; therefore proposed project's impact to this intersection would be less than significant and no mitigation is required. Implementation of Mitigation Measure 4.13-5 identified in the Miravale III EIR is not required for the proposed project. Participation in the city's traffic impact fee program is required for new development and would further reduce the project's impacts to this intersection. Compliance with the city's traffic impact fee program is required for the proposed project as a condition of project approval with fees to be paid prior to issuance of building permits.
- **West Street and Front Street.** According to the 2017 report, traffic volumes would be reduced by about 2.9 percent at this intersection, but the impact would still be significant. The Miravale III EIR determined that participation in the city's traffic impact fee program would reduce the impacts to this intersection to less than significant. The 2018 supplemental report confirms that traffic generated by the proposed project, including traffic generated by development of 314 single-family residential units instead of farmworker housing,would not result in a new or greater impact to this intersection that was not already identified and addressed in the certified Miravale III EIR. Compliance with the city's traffic impact fee program is required for the proposed project as a condition of project approval with fees to be paid prior to issuance of building permits.
- **Main Street and Front Street**. According to the 2017 report, traffic volumes would be reduced by about 9.7 percent at this intersection, but the impact would still be significant. The Miravale III EIR determined that participation in the city's traffic impact fee program would reduce the impacts to this intersection to less than significant. The 2018 supplemental report confirms that traffic generated by the proposed project, including traffic generated by development of 314 single-family residential units instead of farmworker housing, would not result in a new or greater impact to this intersection that was not already identified and addressed in the certified Miravale III EIR. Compliance with the city's traffic impact fee program is required for the proposed project as a condition of project approval with fees to be paid prior to issuance of building permits.

- **East Street and Front Street.** According to the 2017 report, traffic volumes would be reduced by about 10.6 percent at this intersection, but the impact would still be significant. The Miravale III EIR determined that participation in the city's traffic impact fee program would reduce the impacts to this intersection to less than significant. The 2018 supplemental report confirms that with the addition of project traffic, including traffic generated by development of 314 single-family residential units instead of farmworker housing, the proposed project would not result in a new or greater impact to this intersection that was not already identified and addressed in the certified Miravale III EIR. Compliance with the city's traffic impact fee program is required for the proposed project as a condition of project approval with fees to be paid prior to issuance of building permits.
- **San Vicente Road and Market Street**. According to the 2017 report, traffic volumes would be reduced by about 22.1 percent at this intersection, but the impact would still be significant. The Miravale III EIR determined that participation in the city's traffic impact fee program would reduce the impacts to this intersection to less than significant. The 2018 supplemental report confirms that traffic generated by the proposed project, including traffic generated by development of 314 single-family residential units instead of farmworker housing, would not result in a new or greater impact to this intersection that was not already identified and addressed in the certified Miravale III EIR. Compliance with the city's traffic impact fee program is required for the proposed project as a condition of project approval with fees to be paid prior to issuance of building permits.
- **West Street and Market Street**. According to the 2017 report, traffic volumes at this intersection would be reduced by about 20.2 percent, but the impact would still be significant. The Miravale III EIR determined that participation in the city's traffic impact fee program would reduce the impacts to this intersection to less than significant. The 2018 supplemental report confirms that traffic generated by the proposed project, including traffic generated by development of 314 single-family residential units instead of farmworker housing, would not result in a new or greater impact to this intersection that was not already identified and addressed in the certified Miravale III EIR. Compliance with the city's traffic impact fee program is required for the proposed project as a condition of project approval with fees to be paid prior to issuance of building permits.
- **East Street and Market Street**. According to the 2017 report, traffic volumes at this intersection would be reduced by about 12.2 percent, but the impact would still be significant. The Miravale Specific Plan EIR determined that participation in the city's traffic impact fee program would reduce the impacts to this intersection to less than significant. The 2018 supplemental report confirms that traffic generated by the

proposed project, including traffic generated by development of 314 single-family residential units instead of farmworker housing, would not result in a new or greater impact to this intersection that was not already identified and addressed in the certified Miravale III EIR. Compliance with the city's traffic impact fee program is required for the proposed project as a condition of project approval with fees to be paid prior to issuance of building permits.

The proposed project would result in significant operational impacts requiring mitigation at the following local intersections:

Moranda Road and Front Street: Although traffic volumes would be reduced by approximately 17 percent at this intersection, traffic generated by the proposed project would cause operations to degrade from acceptable LOS C to unacceptable LOS F (Higgins 2018a; 2018). This is a significant impact. This intersection meets signal warrants with or without the proposed project, and the additional improvement necessary beyond those identified under background conditions to mitigate the project impact at this intersection would consist of adding a second northbound through lane and eastbound free-right-turn lane. The implementation of this improvement would require that northbound Front Street be widened to two lanes. The roadway segment analysis also indicates the need for widening of Front Street between Moranda Road and San Vicente Road or constructing the Gabilan Drive extension to improve intersection levels of service to LOS B or better.

Construction of the Gabilan Drive extension would eliminate the need to add lanes to Front Street and the improvements to the intersection of Moranda Road and Front Street described above would not be necessary. Instead, improvements associated with the Gabilan Drive extension would be made at the intersection. Therefore, the 2017 report recommends that the project impacts would be mitigated by construction of or payment of the project's fair share of traffic impact fees towards the construction of the extension of Gabilan Drive to U.S. Highway 101. As reported in the discussion of development triggers, improvements to the U.S. Highway 101/Moranda Road interchange would also be necessary to accommodate the Gabilan Drive extension; however, the interchange is a Caltrans facility and not under the jurisdictional authority of the city.

This impact was identified in the Miravale III EIR as less than significant with mitigation. The necessary improvements to mitigate project impacts are identified in mitigation measure 4.13-2 of the Miravale III EIR. No additional mitigation is required; however, the language of mitigation measure 4.13-2 has been revised for clarification based on the roadway improvements called for in the proposed specific plan, the reduced project size, the configuration of allowable uses under the specific plan, and the analysis of traffic "triggers" discussed earlier in this section. Clarification of a monitoring regime is necessary because a number of roadway improvements, including the Pinnacles Parkway, may be operational

before the implementation phase of the proposed project has been completed. These improvements could affect traffic patterns and distribution of project traffic over the 35-year timeframe for project implementation.

Implementation of the following revised Mitigation Measure 4.13-2 in addition to implementation of revised Mitigation Measure 4.13-10 and revised Mitigation Measures 4.13-11, would reduce the project's impact to this intersection to less than significant.

Mitigation Measure

4.13-2 Widen northbound Front Street to two lanes, add a second northbound through lane, eastbound free-right-turn lane and widen Front Street between Moranda Road and San Vicente Road orconstruct the Gabilan Drive Extension. This improvement is necessary with or without the project. The Moranda Road/Front Street intersection would operate at LOS B with construction of the Gabilan Drive Extension.

The project developer is responsible for the project's fair share contribution of costs to mitigate the project's impact to this intersection. The developer shall mitigate the project impacts to this intersection in one of the following ways:

Prior to the issuance of any building permit for each phase of development, the project ~~applicant~~ developer shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance for the construction of the Gabilan Drive Extension in order to mitigate the project's share of impacts at this location or construct the Gabilan Drive Extension.

~~No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad~~

~~Alternatively, the project can contribute its fair share towards the construction of extension of Gabilan Drive to U.S. Highway 101, If this alternative is chosen l~~ The project developer shall also be responsible for monitoring the intersection of Moranda Road/Front Street to determine when the improvement identified above is necessary. Local roadways shall be monitored ~~annually~~ by the city at the developer's expense to ensure that ~~LOS~~ acceptable levels of service are maintained in accordance with the City of Soledad's adopted standards until the extension is complete. ~~All fees shall be paid prior to the issuance of any building permit for each phase of development.~~ Monitoring shall commence upon issuance of the first building permit and shall be conducted in at least three stages or until the

intersection improvements or Gabilan Drive Extension are complete: prior to issuance of the 700th, 1,000th, and 1,865th residential building permit (excluding secondary units). Monitoring shall include the following:

a. Conduct analyses of all applicable traffic operations based on field-measured data;

b. Study prevailing traffic and roadway conditions;

c. Report the results to the City of Soledad Director of Public Works, who shall determine if and when the improvement is necessary to maintain acceptable levels of service at this intersection.

The project developer shall install the required improvements at the intersection if directed in writing to do so by the City of Soledad Director of Public Works and so long as the city issues any required permits. The developer's costs associated with the required improvements may be subject to partial reimbursement; however, the developer's obligation to install the improvements shall not be dependent on receipt of any reimbursement. The developer shall be obligated to install the identified improvements promptly upon notification from the city of the need to do so.

All required traffic impact fees shall be paid prior to the issuance of any building permit for each phase of development. No certificates of occupancy shall be issued for any development warranting the improvement until the Gabilan Drive extension or necessary intersection improvements are installed, subject to the review and approval of the City of Soledad Director of Public Works.

In the alternative, if the City of Soledad Director of Public Works determines that the improvements to the intersection of Moranda Road and Front Street the Gabilan Drive extension is not needed at the time of issuance of the building permit for the project's 1,800th residential unit, or if the City of Soledad does not approve the installation of the traffic signal, the project developer shall comply with the following.

If the Gabilan Drive Extension is expressly covered in the city's then-current traffic impact program, then the developer's payment of the applicable traffic impact fee shall constitute a fair share contribution toward the improvement of Gabilan Drive. If the Gabilan Drive Extension is not expressly covered in the then-current traffic impact fee program, the developer shall pay its fair share contribution (based on its pro rata contribution of trips) of costs to the City of Soledad for the construction of the Gabilan Drive extension. The developer may choose to construct the improvement and may be subject to partial reimbursement at the discretion of the City of Soledad.

Traffic facility improvement plans or traffic impact fees ~~and~~ shall be subject to ~~the~~ review and approval ~~of~~ by the Director of Public Works.

San Vicente Road and Front Street. Although traffic volume would be reduced, traffic generated by the proposed project would cause operations to degrade from acceptable LOS B to unacceptable LOS F at the intersection of San Vicente Road and Front Street during at least one of the peak hours analyzed (Higgins 2017a; 2018). This is a significant impact. As noted previously, this intersection is expected to operate at acceptable levels of service until about 75 percent of project traffic is added to the system. The 2017 report found that the improvement necessary to mitigate the project impact at this intersection would consist of the addition of two eastbound left-turn lanes and southbound free-right turn lane. Construction of this improvement would require widening northbound Front Street to two lanes and northbound San Vicente Road widened to three lanes, which would require a significant amount of right-of-way acquisition. With the construction of the Gabilan Drive extension to U.S. Highway 101, the improvements described above would not be necessary. The 2017 report instead recommends that the project either construct, or contribute towards the construction of, the extension of Gabilan Drive to U.S. Highway 101 to reduce the impact to less than significant.

This impact was identified in the Miravale III EIR as less than significant with mitigation. The intersection has since been signalized. The necessary improvements to mitigate the project's share of impacts are identified in mitigation measure 4.13-3 of the Miravale III EIR. No additional mitigation is required; however, the language of mitigation measure 4.13-3 has been revised for clarification based on the roadway improvements called for in the proposed specific plan, the reduced project size, the configuration of allowable uses under the specific plan, and the analysis of traffic "triggers" for the timing of improvements to San Vicente Road and the extension of Gabilan Drive discussed earlier in this section. Clarification of a monitoring regime is necessary because a number of roadway improvements, including the Pinnacles Parkway, may be operational before the implementation phase of the proposed project has been completed. These improvements could affect traffic patterns and distribution of project traffic over the 35-year timeframe for project implementation. With implementation of the following revised Mitigation Measure 4.13-3, the proposed project's impacts to the intersection of San Vicente Road and Front Street would be reduced to less than significant.

Mitigation Measure

4.13-3 The intersection of San Vicente Road and Front Street would operate at LOS B with the construction of the Gabilan Drive extension or by widening. ~~Widen~~ northbound Front Street to two lanes, northbound San Vicente Road to three lanes, add two eastbound left-turn lanes and a southbound free-right-turn lane.

The project developer is responsible for the project's fair share contribution of costs to mitigate the project's impact to this intersection. The developer shall mitigate the project impacts to this intersection in one of the following ways:

Prior to the issuance of any building permit for each phase of development, the project ~~applicant~~ developer shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance for the construction of the intersection improvements or the Gabilan Drive Extension in order to mitigate the project's share of impacts at this location. Alternatively, the developer may construct the Gabilan Drive Extension.

The project developer shall be responsible for monitoring the intersection of San Vicente Road and Front Street to determine when the improvement identified above is necessary. Local roadways shall be monitored ~~annually~~ by the city at the developer's expense to ensure that ~~LOS~~ acceptable levels of service are maintained in accordance with the City of Soledad's adopted standards until the extension is complete. ~~All fees shall be paid prior to the issuance of any building permit for each phase of development.~~ Monitoring shall commence at issuance of the first building permit and shall be conducted in at least three stages, prior to issuance of the 600th, 900th, and 1,800th residential building permit (excluding secondary units) or until the intersection improvements are complete. Monitoring shall include the following:

a. Conduct analyses of all applicable traffic operations based on field-measured data;

b. Study prevailing traffic and roadway conditions;

c. Report the results to the City of Soledad Director of Public Works, who shall determine if and when the improvement is necessary to maintain acceptable levels of service at this intersection.

The project developer shall commence to construct the Gabilan Drive Extension if directed in writing to do so by the City of Soledad Director of Public Works and so long as the city issues any required permits. The developer's costs associated with the required improvements may be subject to partial reimbursement; however, the developer's obligation to install the improvements shall not be dependent on receipt of any reimbursement. The developer shall be obligated to install the identified improvements promptly upon notification from the city of the need to do so.

All required traffic impact fees shall be paid prior to the issuance of any building permit for each phase of development. No certificates of occupancy shall be issued for any development warranting the improvement until the Gabilan Drive extension or necessary intersection improvements are installed, subject to the review and approval of the City of Soledad Director of Public Works.

In the alternative, if the City of Soledad Director of Public Works determines that the Gabilan Drive extension is not needed at the time of issuance of the building permit for the project's 1,800th residential unit, the project developer shall comply with the following.

If the Gabilan Drive Extension is expressly covered in the city's then-current traffic impact program, then the developer's payment of the applicable traffic impact fee shall constitute a fair share contribution toward the improvement of Gabilan Drive. The developer may choose to construct the improvement and may be subject to partial reimbursement at the discretion of the City of Soledad. If the Gabilan Drive Extension is not expressly covered in the then-current traffic impact fee program, the developer shall pay its fair share contribution (based on its pro rata contribution of trips) of costs to the City of Soledad for the construction of the Gabilan Drive extension.

Traffic facility improvement plans or traffic impact fees ~~and~~ shall be subject to ~~the~~ review and approval ~~of~~ by the Director of Public Works.

San Vicente Road and Gabilan Drive: Although traffic volumes would be reduced, traffic generated by the proposed project would cause signal warrants to be met and cause operations to degrade from acceptable LOS B to unacceptable LOS F during at least one peak hour at the intersection of San Vicente Road and Gabilan Drive. This is a significant impact. The necessary improvements to mitigate project impacts at this intersection consist of signalizing the intersection and adding a second westbound left turn lane, exclusive northbound right-turn lane, and southbound left-turn lane. The improvements will require the widening of southbound San Vicente Road to accommodate the dual left-turn lanes from Gabilan. The proposed 80-foot width of San Vicente Road right-of-way would be sufficient to accommodate the improvements to Gabilan Drive. However, with the construction of the Gabilan Drive extension to U.S. Highway 101, the improvements described above would not be necessary. Instead, improvements associated with the Gabilan Drive extension would be made at the intersection to serve the new movements. Therefore, the 2017 report recommends that the project contribute instead towards the construction of the extension of Gabilan Drive to U.S. Highway 101.

The Miravale III EIR identified this impact as less than significant with mitigation. The necessary improvements to mitigate project impacts are identified in mitigation measure

4.13-4 of the Miravale III EIR. No additional mitigation is required; however, the language of mitigation measure 4.13-4 has been revised for clarification. With implementation of the following mitigation measure, the project impacts to this intersection would be less than significant.

Mitigation Measure

4.13-4 Signalize this intersection and add a second westbound left turn lane, exclusive northbound right-turn lane, and southbound left-turn lane. SB San Vicente Road will need to be widened to accommodate the dual left-turn lanes from Gabilan. Alternatively, the developer could construct the Gabilan Drive Extension.

The intersection of San Vicente Road and Gabilan Drive would operate at LOS A with the construction of the Gabilan Drive extension.

The project developer is responsible for the project's fair share contribution of costs to mitigate the project's impact to this intersection. The developer shall mitigate the project impacts to this intersection in one of the following ways:

Prior to the issuance of any building permit for each phase of development, the project ~~applicant~~ developer shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance for the construction of the Gabilan Drive Extension in order to mitigate the project's share of impacts at this location, construct the improvement, or construct the Gabilan Drive Extension.

The project developer shall be responsible for monitoring the intersection of San Vicente Road and Gabilan Drive to determine when the improvement identified above is necessary. Local roadways shall be monitored ~~annually~~ by the city at the developer's expense to ensure that ~~LOS~~ acceptable levels of service are maintained in accordance with the City of Soledad's adopted standards until the extension is complete. ~~All fees shall be paid prior to the issuance of any building permit for each phase of development.~~ Monitoring shall commence at issuance of the first building permit and shall be conducted in at least three stages, prior to issuance of the 600^{th,} 900th, and 1,800th residential building permit (excluding secondary units) or until the intersection improvements are complete. Monitoring shall include the following:

a. Conduct analyses of all applicable traffic operations based on field-measured data;

b. Study prevailing traffic and roadway conditions;

c. Report the results to the City of Soledad Director of Public Works, who shall determine if and when the improvement is necessary to maintain acceptable levels of service at this intersection.

The project developer shall commence to construct the Gabilan Drive Extension if directed in writing to do so by the City of Soledad Director of Public Works and so long as the city issues any required permits. The developer's costs associated with the required improvements may be subject to partial reimbursement; however, the developer's obligation to install the improvements shall not be dependent on receipt of any reimbursement. The developer shall be obligated to install the identified improvements promptly upon notification from the city of the need to do so.

All required traffic impact fees shall be paid prior to the issuance of any building permit for each phase of development. No certificates of occupancy shall be issued for any development warranting the improvement until the Gabilan Drive extension or necessary intersection improvements are installed, subject to the review and approval of the City of Soledad Director of Public Works.

In the alternative, if the City of Soledad Director of Public Works determines that the Gabilan Drive extension is not needed at the time of issuance of the building permit for the project's 1,800th residential unit, the project developer shall comply with the following.

If the Gabilan Drive Extension is expressly covered in the city's then-current traffic impact program, then the developer's payment of the applicable traffic impact fee shall constitute a fair share contribution toward the improvement of Gabilan Drive. The developer may choose to construct the improvement and may be subject to partial reimbursement at the discretion of the City of Soledad. If the Gabilan Drive Extension is not expressly covered in the then-current traffic impact fee program, the developer shall pay its fair share contribution (based on its pro rata contribution of trips) of costs to the City of Soledad for the construction of the Gabilan Drive extension.

Traffic facility improvement plans or traffic impact fees ~~and~~ shall be subject to ~~the~~ review and approval ~~of~~ by the Director of Public Works.

Main Street and Gabilan Drive: Although traffic volumes would be reduced, traffic generated by development associated with the proposed project would cause signal warrants to be met during at least one peak hour at the intersection of Main Street and Gabilan Drive (Higgins 2017a, 2018). This is a significant impact. The necessary improvements consist of signalizing the intersection with protected left-turn phasing along Gabilan Drive. However,

with the construction of the Gabilan Drive extension to U.S. Highway 101, signalization of this intersection would not be necessary. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to U.S. Highway 101.

The Miravale III EIR determined that impact to this intersection would be less than significant with mitigation. The necessary improvements or actions to mitigate project impacts are identified in mitigation measure 4.13-6 of the Miravale III EIR. No additional mitigation is required; however, the language of mitigation measure 4.13-6 has been revised for clarification. With implementation of the following mitigation measure, as revised, the project's impacts to this intersection would be less than significant.

Mitigation Measure

4.13-6 ~~Signalize the~~ The intersection of Main Street and Gabilan Drive will operate at LOS A with signalization and protected left-turn phasing along Gabilan Drive. With the construction of the Gabilan Drive extension to U.S. Highway 101, signalization of this intersection would not be necessary.

The project developer is responsible for the project's fair share contribution of costs to mitigate the project's impact to this intersection. The developer shall mitigate the project impacts to this intersection in one of the following ways:

Prior to the issuance of any building permit for each phase of development, the project ~~applicant~~ developer shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance for the construction of the Gabilan Drive Extension in order to mitigate the project's share of impacts at this location or construct the Gabilan Drive Extension.

The project developer shall be responsible for monitoring the intersection of Main Street and Gabilan Drive to determine when either improvement identified above is necessary. Local roadways shall be monitored ~~annually~~ by the city at the developer's expense to ensure that ~~LOS~~ acceptable levels of service are maintained in accordance with the City of Soledad's adopted standards until the extension is complete. ~~All fees shall be paid prior to the issuance of any building permit for each phase of development.~~ Monitoring shall commence at issuance of the first building permit and shall be conducted in at least three stages, prior to issuance of the 600^{th,} 900th, and 1,800th residential building permit (excluding secondary units) or until the improvements are complete. Monitoring shall include the following:

a. Conduct analyses of all applicable traffic operations based on field-measured data;

b. Study prevailing traffic and roadway conditions;

c. Report the results to the City of Soledad Director of Public Works, who shall determine if and when the improvement is necessary to maintain acceptable levels of service at this intersection.

The project developer shall commence to construct the Gabilan Drive Extension if directed in writing to do so by the City of Soledad Director of Public Works and so long as the city issues any required permits. The developer's costs associated with the required improvements may be subject to partial reimbursement; however, the developer's obligation to install the improvements shall not be dependent on receipt of any reimbursement. The developer shall be obligated to install the identified improvements promptly upon notification from the city of the need to do so.

All required traffic impact fees shall be paid prior to the issuance of any building permit for each phase of development. No certificates of occupancy shall be issued for any development warranting the improvement until the Gabilan Drive extension or necessary intersection improvements are installed, subject to the review and approval of the City of Soledad Director of Public Works.

In the alternative, if the City of Soledad Director of Public Works determines that the Gabilan Drive extension is not needed at the time of issuance of the building permit for the project's 1,800th residential unit, the project developer shall comply with the following.

If the Gabilan Drive Extension is expressly covered in the city's then-current traffic impact program, then the developer's payment of the applicable traffic impact fee shall constitute a fair share contribution toward the improvement of Gabilan Drive. The developer may choose to construct the improvement and may be subject to partial reimbursement at the discretion of the City of Soledad. If the Gabilan Drive Extension is not expressly covered in the then-current traffic impact fee program, the developer shall pay its fair share contribution (based on its pro rata contribution of trips) of costs to the City of Soledad for the construction of the Gabilan Drive extension.

Traffic facility improvement plans or traffic impact fees ~~and~~ shall be subject to ~~the~~ review and approval ~~of~~ by the Director of Public Works.

Andalucia Drive and Gabilan Drive: Traffic generated by the proposed project would cause signal warrants to be met during at least one peak hour at the intersection of Andalucia Drive and Gabilan Drive (Higgins 2017a, 2018). This is a significant impact, which was also identified in the Miravale III EIR as less than significant with mitigation. The necessary

improvements consist of the signalization of the intersection with protected left-turn phasing along Gabilan Drive. These improvements are identified in mitigation measure 4.13-7 of the Miravale III EIR. No additional mitigation is required; however, the language of mitigation measure 4.13-7 has been revised for clarification. With implementation of the following mitigation measure, as revised, the project's impacts to intersection operations would be reduced to a less-than-significant level.

Mitigation Measure

4.13-7 ~~Signalize this~~ The intersection of Andalucia Drive and Gabilan Drive will operate at unacceptable level of service with protected left-turn phasing along Gabilan Drive. The project developer is responsible for the construction of this improvement. ~~Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance in order to mitigate the impact at this location. All intersection fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works.~~ No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the ~~City of Soledad~~ Director of Public Works.

Orchard Lane and Metz Road: Although traffic volumes would be reduced at this intersection, traffic generated by the proposed project would cause signal warrants to be met and cause operations to degrade from acceptable LOS C to unacceptable LOS E or worse during at least one peak hour at the intersection of Orchard Street and Metz Road (Higgins 2017a; 2018). The necessary improvements to mitigate project impacts are identified in mitigation measure 4.13-8 of the Miravale III EIR. No additional mitigation is required; however, the language of mitigation measure 4.13-8 has been revised for clarification. With implementation of the following mitigation measure, as revised, the project's impacts to intersection operations would be reduced to a less-than-significant level.

Mitigation Measure

4.13-8 ~~Signalize this~~ The intersection of Orchard Lane and Metz Road will operate at an acceptable LOS with signalization and protected left-turn phasing on Metz Road and split phasing on Orchard Lane. The project ~~applicant~~ developer is responsible for the construction of ~~shall~~ the improvement. ~~submit payment of the City of Soledad traffic impact fee in effect that the time of building permit issuance in order to mitigate the impact at this location. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be~~

~~subject to the approval of the Director of Public Works.~~ No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the ~~City of Soledad~~ Director of Public Works.

Oak Street and Front Street and Front Street and Nestles Road. Although traffic volumes would be reduced at this intersection, traffic generated by proposed project would cause intersection operations to decline from acceptable LOS C to unacceptable LOS E (Higgins 2017a; 2018). This is a significant impact. Widening Front Street to four lanes between Nestles Road and Oak Street and adding a second eastbound left-turn lane at the intersection of Nestles Road and Front Street would improve operations to LOS B in this location.

This impact was identified in the Miravale III EIR as less than significant with mitigation. At that time signal warrants were met at this intersection with or without the project. A signal has since been installed. Also, at the time the Miravale III EIR was prepared, the city was in early discussions of a bypass route to provide an alternative connection between U.S. Highway 101 and State Route 146 (Los Coches Road extension), but regional traffic facility improvements associated with Measure X had not yet been identified. Clarification is provided in the mitigation below; which, if implemented would reduce the project impacts to a less-than-significant level.

Mitigation Measure

4.13-9 Construction of the Pinnacles Parkway project would improve intersection operations to acceptable levels of service: ~~Widen Front Street to four lanes between Nestles Road and Oak Street and add a second EB~~ eastbound ~~left-turn lane at the intersection of Nestles Road and Oak Street~~. The project developer is responsible for the project's fair share contribution of costs to mitigate the impact to this intersection. The project ~~applicant~~ developer shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance. ~~Alternatively, the construction of the U.S. Highway 101/SR 146 bypass would alleviate the impacts at this intersection. The project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance.~~ All fees shall be paid prior to the issuance of any building permits for each phase of development and shall be subject to the approval of the Director of Public Works. ~~No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad~~.

~~Alternatively the project can contribute its fair share towards the construction of the extension of Gabilan Drive to U.S. Highway 101, If this alternative is chosen local roadways shall be monitored annually to ensure that LOS levels are maintained in accordance with the City of Soledad's adopted standards until the extension is complete.~~

Transit and Pedestrian Analysis

The 2017 report assumes up to a three percent transit mode share, which is probably the highest that could be expected, yields an estimate of 57 PM transit trips during each of the peak hours. This demand along with existing and other future demand for transit service will justify the need for establishing a plan and expansion of the transit system serving the City of Soledad.

Pedestrian facilities in the project area will consist primarily of sidewalks along the streets. Sidewalks will be provided along virtually all streets and at intersections within the project area. There are no existing bicycle facilities that can be extended into the project area. The residential uses of the project along with existing and future Sub-areas will justify the need for a continuous bicycle facility system throughout the City of Soledad. All pedestrian and bicycle lanes of the project should provide for future connection to existing sidewalks and streets.

Traffic and Circulation Conclusion

The proposed project would result in fewer traffic impacts than the previously proposed Miravale III Specific Plan project. Mitigation Measure 4.13-1 is not relevant to the proposed project, and Mitigation Measure 4.13-5, which required signalization of the intersection of West Street and Gabilan Drive is no longer necessary, as the intersection has since been signalized and as a result the proposed project's impact to this intersection is less than significant. No additional mitigation measures are required for any development scenario. The proposed project would not result in new significant traffic impacts or substantially increase the severity of previously identified significant impacts. No changes in transportation-related circumstances have occurred and no new information has been identified that indicate the proposed project would have new or more significant traffic impacts than were identified for the original project.

3.15 Utilities and Service Systems

Miravale III Specific Plan EIR Analysis

Water Supply

A Water Supply Assessment (WSA) and Verification of Supply was prepared for the Miravale III project by the City of Soledad and Byron Buck & Associates (August 2007).

The WSA determined that project development would result in an annual water demand of approximately 2,521.21 acre feet per year (AFY). Net consumptive demand after considering the use of recycled water was estimated at approximately 1,566.3 AFY. Taking into account historical agricultural uses on the project site, development of the proposed project would result in an overall net reduction in groundwater extraction of 501.2 AFY. Actual water demands, however, would vary depending on the ultimate mix of specific uses, water use behavior, and landscape development/maintenance practices. In any given year, consumption is expected to vary depending on weather and precipitation. However, as identified in the WSA, the City of Soledad has sufficient water available to accommodate project generated demand during normal, single dry and multiple dry years.

The EIR concluded that payment of water impact fees as required by the City would further ensure that project-related impacts are less-than-significant.

Water System

According to the city's 2005 Water Master Plan prepared by Schaaf & Wheeler (City of Soledad 2005c), the City-operated water distribution system requires a number of improvements to address system deficiencies. In addition to requiring improvements, the EIR determined that the existing system would need to be extended to provide water services to the project area. As such, additional on-site infrastructure improvements would be warranted. Moreover, development of the proposed project would result in the introduction of new residences and commercial uses outside of the two existing pressure zones previously described above. In order to accommodate the Miravale III project a new pressure zone, Zone C, would be necessary to accommodate development outside of the existing pressure zones. The Miravale III project would allow the development of 4,200 units, in addition to commercial and public uses. Based on the assumed buildout of 3,000 units, the Soledad Water Master Plan determined that the water distribution system would be insufficient to meet maximum day demand and at least two additional wells would need to be drilled, permitted, and connected to the existing system.

Additionally, new and/or upgraded booster pump stations would also be warranted in Zone B and the new pressure zone, "Zone C." Additional storage tanks would also be necessary to accommodate project development. Preliminary estimates identified in the Soledad Water Master Plan determined that a 1.2 million gallon tank in Zone B would be necessary.

Project development would also require the construction of additional distribution and storage systems, transmission mains and improvements. According to the EIR, potential significant environmental effects could result from construction of the facilities if not planned and constructed consistent with City-wide infrastructure improvement plans. The EIR concluded that this was a potentially significant impact that could be reduced to a less-than-significant level with implementation of the following mitigation measures.

Mitigation Measures

4.14-1 Design and construct the water supply and distribution system for the project that is integrated with the City's water distribution system and consistent with the Urban Water Management Plan and the City's 2005 Water Master Plan. Prior to the issuance of any building permit, the project applicant shall submit detailed design-level infrastructure plans in accordance with this measure, subject to the review and approval of the City of Soledad Director of Public Works.

4.14-2 All water and recycled water facilities and infrastructure shall be designed with sufficient capacity to accommodate the project and be required to adhere to all applicable City standards in terms of infrastructure sizing, design and construction. Prior to the issuance of any building permit, the project applicant shall submit detailed design-level infrastructure plans in accordance with this measure, subject to the approval of the Director of Public Works. 4.14-3 All water and recycled water pipelines shall be placed underground and in the utilities right-of-way and constructed to comply with all applicable state and local standards. Prior to the issuance of any building permit, the project applicant shall submit detailed design-level infrastructure plans in accordance with this measure, subject to the review and approval of the City of Soledad Director of Public Works.

4.14-4 The project shall be required to construct new infrastructure that is of adequate capacity to serve the project's projected water and fire flow demand in addition to the provider's existing commitments. Prior to the issuance of any building permit, the project applicant shall submit detailed design-level infrastructure plans in accordance with this measure, subject to the approval of the Director of Public Works.

Wastewater

The City of Soledad would be responsible for providing sanitary sewer services within the project area and the collection system would be extended to provide services to the project site. New wastewater infrastructure (i.e. distribution lines, treatment facility, etc.) would need to be constructed in order to provide services to the project area. According to the City's Long-Term Wastewater Management Plan, the City's total permitted wastewater treatment and disposal capacity was 4.1 mgd and infrastructure would need to be expanded in order to support projected growth. At the time of the Miravale III EIR, the City was in the process of expanding its existing treatment capacity to 5.5. mgd with a 4.3 mgd disposal capacity increasing the treatment capacity to 6,160 AFY with approximately 4,816 AFY of disposal capacity. The Miravale III EIR determined that development of the project would potentially exceed existing and planned wastewater treatment capacity which would be a potentially significant impact. However, the EIR determined that the following mitigation measures would reduce the impact to a less-than-significant level.

Mitigation Measures

4.14-5 In order to ensure that the proposed wastewater treatment system is consistent with the applicable requirements of the Soledad Urban Water Management Plan, Long-Term Wastewater Management Plan, and Chapter 13.11 Recycled Water Service, the project applicant shall submit detailed design-level plans in accordance with these requirements, prior to approval of the first Final Map, subject to the review and approval of the City of Soledad Public Works Director.

4.14-6 Prior to the approval of the first final map within the Specific Plan area, all required permits for the on-site recycled water facility, including, but not limited to, a Waste Discharge Permit from the Regional Water Quality Control Board and approval of the system design, shall be obtained. The project applicant shall submit written evidence to the City of Soledad documenting compliance with this measure.

4.14-7 In order to ensure that adequate wastewater treatment is available to accommodate each phase of project development, the treatment capacity for the on-site recycled water facility shall be increased to accommodate each phase of the project prior to the final approval of the first building permit or occupancy permit for each of the respective project phases as appropriate. Subject to the review and approval of the Director of Public Works, excess treatment capacity and related infrastructure shall be added to the plant and disposal facilities, as needed, for each phase of the project, to accommodate future increases in wastewater flow rates, based on estimates of future development. In addition, flows shall be metered and records of the flows shall be provided to the City for review and approval. No building permits shall be issued unless sufficient capacity exists to accommodate additional phases of development.

4.14-8 Prior to the issuance of any building permit, the applicant/developer shall submit payment of the current City Development Impact Fee for each type of development in accordance with the adjusted impact fee in effect at the time of building permit issuance. Additionally, the applicant/developer shall submit payment of all fees necessary to fund the construction of the expansion of the treatment plant located within the project site, as required by the City of Soledad. All fees shall be subject to the review and approval of the Director of Public Works.

Development of the proposed project would require or result in the construction of new water or wastewater treatment facilities and expansion of existing facilities, including the construction of water and wastewater facilities, transmission mains and improvements

which could cause significant environmental effects through construction of the facilities if not planned and constructed consistent with Citywide infrastructure improvement plans. This would represent a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation measures.

Mitigation Measures

4.14-9 All water and wastewater infrastructure shall be designed with sufficient capacity to accommodate the project and be required to adhere to all applicable City standards in terms of infrastructure sizing, design and construction. Prior to the issuance of any building and/or grading plan, the project applicant shall submit detailed evidence, including but not limited to design level infrastructure plans, consistent with the requirements of this mitigation, subject to the approval of the Director of Public Works.

4.14-10 All wastewater pipelines shall be placed underground and in the utilities right-of-way. Prior to the issuance of any building permit, the project applicant shall submit detailed design-level infrastructure plans in accordance with this measure, subject to the review and approval of the City of Soledad Director of Public Works.

4.14-11 The project would be required to construct new infrastructure that is of adequate capacity to serve the project's projected demand. Prior to the issuance of any building permit, the project applicant shall submit detailed design level documentation, in addition to written documentation from the City of Soledad, documenting that design-level plans are in accordance with City standards and requirements, as well as documenting that the City has sufficient capacity to accommodate project demands in addition to existing commitments, subject to the approval of the Director of Public Works.

Solid Waste

According to the Miravale III EIR, the Salinas Valley Solid Waste Authority identified solid waste generation averages for its service area as approximately 5.0 pounds per capita per resident per day. Based on a solid waste generation rate of 5.0 pounds per person per day, upon buildout, the project would generate about 76,005 pounds of solid waste per day, or 13,870 tons per year. According to Salinas Valley Solid Waste Authority, project generated solid waste would be disposed of primarily at the Johnson Canyon Landfill, which is permitted to receive 300 tons of solid waste per day. In 2000, the facility received an average of 132 tons of solid waste per day from six jurisdictions. Development of the proposed project would contribute an additional 38 tons of solid waste per day.

The EIR determined that the Johnson Canyon Landfill had adequate capacity to serve its service area, including the development of the proposed project site, however, found that project construction would result in significant construction-generated waste. The following mitigation was identified by the Salinas Valley Solid Waste Authority to ensure that all construction-generated waste is recycled to the greatest extent feasible to minimize impacts to existing facilities within their jurisdiction. The EIR concluded that this was a potentially significant impact that could be reduced to a less-than-significant level with mitigation.

Mitigation Measure

4.14-12 Prior to the commencement of construction related activities, the applicant/developer shall prepare and submit a Construction and Demolition Diversion Plan consistent with the requirements of the City's adopted Diversion Plan Ordinance, subject to the review and approval of the Salinas Valley Solid Waste Authority and the City of Soledad. This plan shall identify ongoing implementation measures for the diversion and separation of construction waste to ensure that all construction-generated solid waste is recycled to the greatest extent possible.

Energy

The Miravale III EIR determined that development of the proposed project would increase demands on electricity (30.2M kWh).and natural gas (0.000094 T Btu per year). To ensure that project impacts related to increased energy consumption were minimized to the extent feasible, the Miravale III Specific Plan included policies to reduce energy consumption, minimize the wasteful use of energy, and ensure that planning and building efforts are coordinated to maximize energy conservation. In addition, the City of Soledad implements Title 24 requirements as part of their building code to ensure that energy conservation measures are incorporated into project design. The Miravale III EIR found that while adherence to existing Title 24 requirements generally reduce project-induced impacts, the increased energy consumption, albeit relatively insignificant from a regional perspective, would still result in the permanent commitment of a non-renewable resource which is a significant impact. The implementation of additional project-specific mitigation would ensure that energy use is minimized to the greatest extent feasible and thereby ensure that project-impacts would be considered less-than-significant.

Mitigation Measure

4.14-13 In order to prevent the wasteful use of energy, all new residential, commercial, and hospitality oriented structures shall incorporate the principles of passive solar design to the maximum extent feasible. Typical passive solar design principles may include the following; 1) large south-facing windows; 2) tile, brick, or other thermal mass material used in flooring or walls to absorb natural heat; 3)

improved insulation; 4) building orientation that takes advantage of the sun, shade, and wind; and 5) energy efficient building materials. For new structures that are unable to incorporate these principles, the project applicant shall submit detailed evidence, such as site plans, landscape plans, and similar, to the City of Soledad Public Works Director demonstrating that there are no viable design alternatives to accommodate these principles. Prior to the issuance of each individual building permit for new structures, the project applicant shall submit evidence, including but not limited to, site plans, proposed building materials, and landscape plans, to the City of Soledad Public Works Director for review and approval.

Proposed Project

Water Supply

According to the updated water supply assessment (AKEL Engineering Group 2017, page 3) the water demand for the specific plan is 980 afy. This amount is 99 afy greater than the water demand of 881 afy identified in the city's 2005 water master plan for a similarly-sized use using 2005 water demand coefficients. However, the water supply assessment also notes that the existing agricultural water demand on the site is approximately 1,568 afy. When compared with the existing water demand on the site, the net water demand from the proposed project would be 587 afy less than the approximately 1,568 afy water demand for the existing agricultural use of the site (AKEL Engineering Group 2017, page 4). The Miravale III EIR identified that buildout of the Miravale project would have a water demand of 2,521.21 afy, which would be reduced to 1,566.3 afy, through the use of recycled water. Therefore, the proposed project, with a projected water demand of 980 afy would demand 587 fewer afy than the existing agricultural use on the site, and 586.3 fewer afy than the Miravale III project.

As noted in the urban water management plan (page 6-15) the City's groundwater supply has been adequate to meet the City's historical demands. In order to meet growing demand for new development not annexed into the City's sphere of influence, the urban water management plan concludes that new groundwater wells will have to be constructed and paid for by future development applicants. The City intends to continue to use groundwater as the sole source of supply. However, domestic water supplies would be augmented by the city's recycled water distribution system, which is expected to come online in 2020 (AKEl Engineering 2016). The proposed project would connect to the municipal water distribution system. The reliable supply will serve a projected 2035 demand of 143,250 afy (AKEL Engineering 2018). The development of the plan area will contribute to this demand but would be accommodated by the city's supply once project and planned infrastructure improvements are made to connect to the current municipal distribution system.

Water System

Future development of the plan area will connect to the municipal water system and be served by Zone C, D, or greater. Two existing on-site agricultural wells, with a combined capacity of 3,600-3,900 gpm, are located on the east side of the plan area and may be retained to provide non-potable irrigation water for use on public parks and open space areas (Nader Agha, telephone conversation, June 7, 2017). To serve the plan area, new domestic wells will need to be constructed, including a back-up well. An additional one million gallon storage tank will also need to be placed on the site above the 400-foot elevation, possibly adjacent to the two existing city-owned storage tanks to meet the future water demands. Furthermore, supplemental pumps are required to provide service to the development on the northeastern side of the plan area that is above the 340-foot contour line. The new water system would be gravity fed with the water tank(s) located within the plan area and distributed throughout the area by a system of underground water mains. The underground water main distribution system will involve pipes with a 12-inch diameter extending throughout the commercial and multi-family areas. The residential areas will be provided with 8-inch diameter pipes, the city's required minimum, as well as fire hydrants distributed throughout the plan area. In the southeast corner of the plan area two existing water pipes that currently serve Miravale II and La Cuesta Views, one of these pipes is 12 inches in diameter and one is 16 inches in diameter and shall remain in place.

As a standard condition of approval and prior to recordation of the first final map for development of the uses consistent with the specific plan, a project-specific water master plan is required to be prepared consistent with city specifications to identify infrastructure improvements and performance standards for the necessary water supply and distribution infrastructure. The plan is subject to review and approval by the Director of Public Works.

The mitigation measures identified in the Miravale III EIR remain applicable to the current project and guide the preparation of the required water master plan. Mitigation measures 4.14-1, 4.14-2 and 4.14-3 shall be modified as follows as the project no longer includes a recycled water facility.

Mitigation Measures

4.14-1 Design and construct the water supply and distribution system for the project that is integrated with the City's water distribution system and consistent with the Urban Water Management Plan and the City's ~~2005~~ Water Master Plan. Prior to the issuance of any building permit, the project applicant shall submit detailed design-level infrastructure plans in accordance with this measure, subject to the review and approval of the City of Soledad Director of Public Works.

4.14-2 All water ~~and recycled water~~ facilities and infrastructure shall be designed with sufficient capacity to accommodate the project and be required to adhere to all applicable City standards in terms of infrastructure sizing, design and construction. Prior to the issuance of any building permit, the project applicant shall submit detailed design-level infrastructure plans in accordance with this measure, subject to the approval of the Director of Public Works.

4.14-3 All water ~~and recycled water~~ pipelines shall be placed underground and in the utilities right-of-way and constructed to comply with all applicable state and local standards. Prior to the issuance of any building permit, the project applicant shall submit detailed design-level infrastructure plans in accordance with this measure, subject to the review and approval of the City of Soledad Director of Public Works.

Wastewater

Once the permitting process is complete, the water reclamation facility will have sufficient capacity to accommodate the addition of this plan area's wastewater, because the water reclamation facility upgrade was originally designed to accommodate developments outside of the city limits. Since the water reclamation facility upgrade, little or no development has occurred outside of the city limits creating an abundance of available capacity for the plan area (AKEL Engineering Group 2016). Existing flows consist of 1.2 mgd from within the City of Soledad and approximately 1.2 mgd for the California Department of Corrections facilities for a capacity total of approximately 2.4 mgd through the city's water reclamation facility (Donald Wilcox, email message, June 8, 2017). Bestor Engineers calculated the sewage generation for the project site based on a previous version of the project that had a larger projected population. Therefore, the following analysis based on these calculations may be conservative and could over estimates the potential sewage generation., The sewage projected to be generated by the plan area at buildout is approximately 1.5 mgd (Patrick Ward, email submission to consultant, May 5, 2017). The current flow of 2.4 mgd with the addition of the projected flow from the plan area of 1.5 mgd would result in a total wastewater flow to the plant of 3.9 mgd which is well under the total facility treatment capacity of 5.7 mgd.

The City of Soledad Public Works Department, along with the city's Water Quality Control Division, is in control of the management and preservation of the city's sanitary sewer system and the water reclamation facility (Regional Water Management Group 2012). Known line capacity of sanitary sewer collection facilities in the city are based on operational observations made by city staff. The city is currently developing a wastewater collection system master plan that will identify existing and necessary line sizes and capacity upgrades for future development including the project site. Design and construction of the new sewer system within the plan area will be designed, funded, and constructed by the developer,

with plans subject to the review and approval of the City Engineer. All development impact fees applicable at the time of issuance of a building permit are required, but may be offset by developer designed, funded, and constructed wastewater system improvements.

The proposed project no longer includes a recycled water facility and thus mitigation measures 4.14-5, 4.14-6, and 4.14-7 identified in the Miravale III EIR are not applicable to the proposed project. Mitigation measure 4.14-8 has been revised to eliminate reference to an on-site treatment plant. The remainder of the mitigation measures are still applicable and would ensure that impacts related to construction of the sewer system within the plan area would be less than significant.

Mitigation Measure

4.14-8 Prior to the issuance of any building permit, the applicant/developer shall submit payment of the current City Development Impact Fee for each type of ~~development~~ land use in accordance with the adjusted impact fee in effect at the time of building permit issuance~~. Additionally, the applicant/developer shall submit payment of all fees necessary to fund the construction of the expansion of the treatment plant located within the project site, as required by the City of Soledad. All fees shall be~~, subject to the review and approval of the Director of Public Works.

Solid Waste

According to CalRecycle, Soledad produces an average of 1.9 pounds of solid waste per person per day (CalRecycle 2017). Future development of the plan area will consist of 2,392 residential units in total, with an approximate population of 9,712 people. This increase in population would generate about 18,452.8 pounds per day, or approximately 3,367.6 tons per year of solid waste from the plan area. Considering the maximum amount of 185,000 tons of solid waste received annually at the Johnson Canyon Landfill and the 3,367.6 tons of solid waste projected to be generated annually by the plan area at buildout, the total solid waste the landfill will receive annually at buildout is approximately 188,367.6 tons. With the current capacity of 13,871,250 tons, the landfill will have the availability to serve the disposal needs of the plan area at buildout. However, mitigation measure 4.14-12 identified in the Miravale III remains applicable to the project to ensure a reduction in construction-generated solid waste so as not result in significant environmental impacts.

Energy

The proposed project is smaller than the previously proposed project and would thus require less energy and natural gas. However, it would still result in a significant increase in energy and natural gas demand which is a potentially significant impact. Implementation of Mitigation Measure 4.3-3, which requires the preparation of an Emissions Reduction Plan will require the identification of energy-efficiency measures to reduce emissions from on site

and down-stream energy consumption for on-site water, heating and electricity. The required Emissions Reduction Plan includes a Transportation Demand Management program that will identify the measures to be incorporated into the project that will reduce emissions from vehicle miles travelled, which will also reduce energy consumption of vehicle fuels. Like Miravale III, the specific plan includes policies to promote energy conservation and discourage waste. Specific plan policy LU – F states that prevailing winds, shade trees, window and door orientation, and the positioning of buildings on the site should all be coordinated to maximize energy conservation. Passive solar heating and cooling shall be demonstrated in construction drawings and the Title 24 energy calculations, and shall achieve at least 50 percent of the heating load within each Sub-area will be reduced. Compliance with this policy and with many of the reduction measures that will be implemented as part of Mitigation Measure 4.3-3 address a portion of Mitigation Measure 4.13-1. The following revised Mitigation Measure 4.13-1 remains applicable to the project to ensure energy consumption impacts would be reduced to a less-than-significant level.

Mitigation Measure

4.14-13 In order to prevent the wasteful use of energy, all new residential, commercial, and hospitality oriented structures shall incorporate the principles of passive solar design to the maximum extent feasible. Typical passive solar design principles may include the following; 1) large south-facing windows; 2) tile, brick, or other thermal mass material used in flooring or walls to absorb natural heat; 3) improved insulation; 4) building orientation that takes advantage of the sun, shade, and wind; and 5) energy efficient building materials. ~~For new structures that are unable to incorporate these principles, the project applicant shall submit detailed evidence, such as site plans, landscape plans, and similar, to the City of Soledad Public Works Director demonstrating that there are no viable design alternatives to accommodate these principles.~~ Prior to the issuance of each individual building permit for new structures, the project applicant shall submit evidence, including but not limited to, site plans, proposed building materials, and landscape plans, to the City of Soledad Public Works Director for review and approval.

Utilities and Service Systems Conclusion

The specific plan would not result in new significant effects related to utilities and service systems or substantially increase the severity of previously identified significant effects, no significant changes in utilities related circumstances have occurred, and no new information has been identified that indicates the proposed project would have new or more significant impacts than were identified in the Miravale III EIR.

4.0
Cumulative Impacts

Section 15130 of the State CEQA Guidelines requires an EIR to generate impacts that may be individually limited, but could be significant when taken together with other similar projects in the area (cumulative impacts). As defined by Section 15355 of the State CEQA Guidelines, a cumulative impact is an impact that is created as a result of the combination of the proposed project and related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

4.1 Miravale III Specific Plan EIR Analysis

The Miravale III EIR determined that development of the Miravale II Specific Plan project would contribute to a number of potentially significant cumulative impacts. Mitigation for impacts included implementation of mitigation measures identified in the EIR and adherence to applicable general plan policies. The level of significance after mitigation was determined to be reduced to a less-than-significant level for cumulative impacts to geology and soils, utilities and service systems. However, significant unavoidable cumulative impacts would remain for aesthetics, agricultural resources, air quality, biological resources, and transportation and traffic.

4.2 Proposed Project

The proposed project would not result in new significant impacts or substantially increase the severity of previously identified significant cumulative impacts previously identified in the Miravale III EIR and would be mitigated to the maximum extent practicable by the incorporation of all feasible and applicable mitigation measures.

Traffic reports have been prepared for the proposed specific plan: *The Miramonte Specific Plan Traffic Impact Analysis* (Higgins 2017a) and supplemental letter *Miramonte Specific Plan Traffic Study Supplemental Analysis, Soledad, CA* (Higgins 2017b) (collectively "2017 report"), and *Miramonte Specific Plan Replace Proposed Farmer's Community Use to Single-family or Apartment Residential – Traffic Impact Evaluation*, Soledad CA (Higgins 2018) provide an update to the 2007 report based on the proposed project and current conditions. The 2007 report is

included as an appendix to the Miravale III EIR. The 2017 documents are included in Appendix D and are referred to collectively as "2017 report". The 2018 supplemental letter is referred to as "2018 supplemental report). The 2017 report provides and update of existing and estimated background and cumulative local and regional traffic conditions without the project in and near the City of Soledad and includes a comparison between the traffic impacts resulting from the Miravale III Specific Plan project with the traffic impacts of the proposed project, to determine if new or greater impacts and related mitigation measures would be required for the proposed project. The 2018 supplemental report evaluates the environmental effects of development of 314 single-family or multifamily residences, which is slightly different than the Farmer's Community use evaluated by the earlier 2017 reports, for the proposed Sub-area 13, Residential Study Area. As the cumulative scenario included updated project conditions, the cumulative traffic impacts are discussed in specific detail below.

The 2017 and 2018 reports assume that the roadway network and intersection configurations under cumulative no project conditions would be the same as described under background conditions with improvements, with the exception of conditions at the following two intersections:

- Moranda Road and Front Street. Under the cumulative scenario an additional east leg would be necessary at this intersection to provide access to the proposed Soledad Plaza Shopping Center project site. The 2017 report notes that, although the application for the Soledad Plaza Shopping Center project is inactive, it is included as a cumulative project because it is reasonable to assume that a future project similar to the Soledad Plaza Shopping Center has a high probability of occurring in this location, and therefore, is reasonably foreseeable.
- San Vicente Road and Gabilan Drive. The cumulative scenario assumes that a west leg will be needed at this intersection to serve development of the Soledad Plaza Shopping Center project site.

The 2017 and 2018 reports analyzed the respective project contributions to cumulative conditions with and without the Gabilan Drive extension to U.S. Highway 101 identified in the general plan.

The cumulative traffic volumes in the 2017 and 2018 reports include trips associated with the three projects described below. City staff provided the list of cumulative developments.

- The Village at Soledad. 140,000 square foot shopping center and a 68-room hotel, located along the east side of Nestles Road south of Los Coches Drive.
- Soledad Plaza Shopping Center. 536,224 square foot shopping center, located along the west side of San Vicente Road between Moranda Road and Gabilan Drive.

- 263 Front Street. 12,200 square foot retail center and 102 apartments/condominiums, located along the north side of Front Street between West Street and Benito Street.

Traffic volumes for cumulative conditions were estimated by adding traffic associated with pending developments to background traffic volumes for the cumulative without project scenario and the proposed project for the cumulative with project scenario. The magnitude of traffic added to the roadway system by each of the pending developments is estimated by multiplying the applicable trip generation rates to the size of the development.

The 2017 report estimates that these cumulative projects would generate a combined total of 30,731 daily trips. The type of land use, size, and trip estimates of each development is presented in Table 22 of the 2017 report. Cumulative growth traffic volumes with the project are shown on Figure 13 of the 2017 report. Comparison of cumulative plus project traffic estimates in 2017 report with the 2007 forecasts reveals that the 2017 network forecasts are about 13.2 percent less than the network forecasts reported in the 2007 cumulative plus project scenario. As noted in Section 3.14, Traffic and Circulation, the Pinnacles Parkway project that will extend Los Coches Road and Palm Ave to Metz Road will provide additional access connecting the southern U.S. Highway 101 / Front Street interchange and Los Coches business park with the northern and western portions of Soledad. According to the 2017 traffic report, about half of the Miramonte traffic using this section of Front Street via East Street may be diverted to the Pinnacles Parkway under the cumulative plus project scenario. Construction of the Pinnacles Parkway would preclude the need to widen Front Street to four lanes between East Street and Nestles Road. The 2018 supplemental report confirms the findings of the 2017 report with the addition of 2,338 project trips if Sub-Area 13 is developed with single-family residences instead of the Farmers Community described in the 2017 report.

Cumulative Intersection Impacts

Miravale III EIR

The Miravale III EIR found that under cumulative conditions, all study intersections would operate at an acceptable LOS C and D with and without the project. Signal warrants are met at the intersection of Moranda Road and U.S. Highway 101 Northbound Ramps and the intersection of San Vicente Road and Market Street under cumulative conditions. However, the necessary improvements to correct LOS deficiencies that would occur under background plus project conditions (refer to Section 3.14) included signalization of these intersections or the payment of city and regional development impact fees (refer to related discussion in Section 3.14), which would also address the warrants for these intersections under cumulative conditions with and without the project. Therefore, implementation of Mitigation Measure 4.13-10 (presented in Section 3.14of this EIR addendum) would reduce the project

impacts to the intersection of Moranda Road and U.S. Highway 101 Northbound Ramps to less than significant. Compliance with municipal code requirements for the payment of traffic impact fees as conditions of project approval would also reduce the project's contribution to San Vicente Road and Market Street to less than significant. Therefore, no additional mitigation is required.

The Miravale III EIR determined that the project would contribute to cumulative impacts from operational deficiencies at the intersection of Moranda Road and Front Street and the intersection of San Vicente Road and Gabilan Drive that would occur with or without the project. The project's contribution was found to be cumulatively considerable, but the Miravale III EIR determined that implementation of Mitigation Measure 4.13-13 and Mitigation Measure 4.13-14 would reduce the project's contribution to the cumulative impact to less than cumulatively considerable.

Mitigation Measures

4.13-13 Moranda Road and Front Street: Addition of an east leg to the intersection to serve the Soledad Plaza project site. In order to mitigate potential impacts at this intersection, the project applicant shall submit payment of the City's adopted traffic impact fee in effect at the time of building permit issuance for each phase of development, subject to the review and approval of the City of Soledad Director of Public Works. All fees shall be paid prior to the issuance of any building permit for each phase of development.

4.13-14 San Vicente Road and Gabilan Drive: Addition of a west leg to the intersection to serve the Soledad Plaza project site. In order to mitigate potential impacts at this intersection, the project applicant shall submit payment of the City's adopted traffic impact fee in effect at the time of building permit issuance for each phase of development, subject to the review and approval of the City of Soledad Director of Public Works. All fees shall be paid prior to the issuance of any building permit for each phase of development.

Proposed Project

The proposed project would cause signal warrants to be met at the intersection of Moranda Road and U.S. Highway 101 Northbound Ramps and the intersection of San Vicente Road and Market Street under cumulative conditions (Higgins 2017a, Table 24).The 2017 report also determined that the reduced traffic volumes would cause the intersection of Moranda Road and U.S. Highway 101 to operate at LOS A with the Gabilan Drive extension (Higgins 2017a, Table 23). The 2018 supplemental report confirmed that no new impacts or impacts greater than those identified and addressed in the Miravale III Specific Plan would occur if the Farmers Community analyzed in the 2017 report was replaced with single-family uses (314 units). As noted in Section 3.14, improvement of the intersection of Moranda Road and

U.S. Highway 101 Northbound Ramps is identified in the Monterey County Regional Transportation Plan and is included in the regional traffic impact fee program. With implementation of revised Mitigation Measure 4.13-10 (refer to Section 3.14) the cumulative impact to this intersection resulting from the proposed project would be less than cumulatively considerable. No additional mitigation is required.

With the proposed project, the intersection of San Vicente Road and Market Street would operate at LOS A with and without the Gabilan Drive extension. Compliance with general plan policies and with implementation of Mitigation Measures 4.13-10, 4.13-11, and with the payment of required local and regional traffic impact fees prior to building permit issuance, the project's cumulative impact to this intersection is less than cumulatively considerable.

The 2017 report confirms that the proposed project despite having lower traffic volumes also would contribute to cumulative impacts from operational deficiencies at the intersection of Moranda Road and Front Street and the intersection of San Vicente Road and Gabilan Drive. The 2017 report notes that implementation of Mitigation Measure 4.13-13 and Mitigation Measure 4.13-14 identified in the Miravale III EIR would reduce proposed project's contribution to the cumulative impact to less than cumulatively considerable. The 2018 supplemental report confirmed that no new impacts or impacts greater than those identified and addressed in the Miravale III Specific Plan would occur if the Farmers Community analyzed in the 2017 report was replaced with single-family uses (314 units).

The proposed project would not result in new or greater impacts to intersection operations that were not already identified and addressed in the Miravale III EIR.

Cumulative Roadway Segment Impacts

Miravale III EIR

According to the 2007 roadway segment analysis all of the studied roadway segments were projected to operate at LOS D or better during both peak hours under cumulative no project conditions, with the exception of Front Street, between East Street and Nestles Road (westbound). This roadway segment would operate at LOS E with or without the project. The 2007 roadway segment analysis for cumulative conditions indicated that the addition of project traffic would cause three roadway segment operations to deteriorate to LOS E or worse during at least one peak hour under the cumulative plus project conditions at the following four roadway segments:

- Front Street - between Moranda Road and San Vicente Road (eastbound).
- Front Street - between East Street and Nestles Road (eastbound).
- San Vicente Road-between Market Street and Gabilan Drive (northbound & southbound).

The 2007 report notes that degradation of the Front Street roadway segment levels of service indicates the need for roadway widening or construction of the Gabilan Drive extension identified in Mitigation Measures 4.13-2 - 4.13-4, and/or the U.S. Highway 101/State Route 146 Bypass (Los Coches Road extension) identified in Mitigation Measure 4.13-9 to reduce the impacts to less than significant. At the time, the Los Coches Road extension was not an identified roadway improvement project included in either the city or regional traffic impact fee program. As a consequence, the Miravale III EIR determined that if the improvements were not constructed and the payment of traffic impact fees only would be required, the impact would be reduced, but not to a less-than-significant level and the project's contribution to the cumulative impact would be cumulatively considerable and significant and unavoidable.

Proposed Project

According to the 2017 report, the reduced traffic volumes generated by the proposed project would result in LOS E or worse operations on only two roadway segments: the segment of Front Street between East Street and Nestles Road would degrade from an acceptable LOS D to unacceptable LOS F, and the segment of San Vicente Road between Gabilan Drive and Market Street would degrade from acceptable LOS A to unacceptable LOS E. All other study roadway segments would operate at acceptable LOS D or better.

Construction of the Gabilan Drive extension identified in the Miravale III EIR Mitigation Measures 4.13-2 - 4.13-4, and/or the U.S. Highway 101/State Route 146 Bypass (Los Coches Road extension) identified in Mitigation Measure 4.13-9 would reduce the project's contribution to cumulative impacts to less than cumulatively considerable. Construction of the Gabilan Drive extension, and/or the U.S. Highway 101/State Route 146 Bypass (Los Coches Road extension) would reduce the need for roadway widening on each segment.

Since the Miravale III EIR was certified, the Pinnacles Parkway improvement project has been added to the Monterey County Regional Transportation Plan and is identified as a priority project for partial funding through revenues generated by Measure X. As discussed in Section 3.14, payment of the project's proportionate share of city and regional traffic impact fees would mitigate the project's impact to the roadway segments and intersections along Front Street segment to a less-than-significant level and roadway widening would not be required. Mitigation Measures 4.13-2 – 4.13-4 and 4.9 have been revised to reflect the change in regional improvement projects and funding availability (refer to Section 3.14) and with implementation of these mitigation measures, the project's contribution to cumulative impacts at on the Front Street segment between East Street and Nestles Road is less than cumulatively considerable and less than significant.

With the proposed project, operations along the affected segment of San Vicente Road would improve from the LOS F operations identified in the Miravale III EIR; however, without the project this roadway would operate at LOS B or better under the cumulative conditions. Therefore, the project's traffic volumes on this segment would still be cumulatively considerable. However, with construction of the Gabilan Drive extension (identified in Mitigation Measures Mitigation Measures 4.13-2 – 4.13-4, 4.13-6, and 4.13-9) volumes would be reduced. Payment of the project's proportionate share of city traffic impact fees would mitigate the project's impact to the San Vicente Road segment. With implementation of Mitigation Measures 4.13-2 – 4.13-4, 4.13-6, and 4.13-9 the project's cumulative impact to this segment is less than cumulatively considerable. No additional mitigation is required.

Cumulative Freeway Segment Impacts

Miravale III EIR

The 2007 freeway segment analysis indicates that all but one of the studied roadway segments are projected to operate at acceptable LOS C or better during both peak hours under cumulative no project conditions. The freeway segment analysis indicates that under cumulative plus project conditions the following U.S. Highway 101 freeway segment operations would deteriorate to unacceptable LOS D during at least one peak hour:

1. North Gonzales and Gonzales-5th Street (AM Peak Hour).
2. Gonzales-5th Street and Gloria Road (AM Peak Hour).
3. Camphora and North Soledad (AM and PM Peak Hours).

The Miravale III EIR concluded that implementation of Mitigation Measure 4.13-12 (payment of regional traffic impact fees) would mitigate the project's contribution to cumulative freeway segment impacts to a less than significant level.

Proposed Project

The Miravale III EIR identified this impact as less than significant with implementation of Mitigation Measure 4.13-12. With implementation of Mitigation Measure 4.13-10 and Mitigation Measure 4.13-11, the significant impacts to the interchanges and affected roadway segments would be reduced to a less-than-significant level. As noted previously, the two planned regional interchange improvement projects would accommodate widened portions of U.S. Highway 101 to six lanes in the vicinity of the northbound and southbound interchanges, which would alleviate traffic congestion on these freeway segments. Mitigation Measure 4.13-12 has been revised for clarification to reflect the changes to regional improvement projects and funding availability (refer to Section 3.14). Payment of the project's proportionate share of regional traffic impact fees would reduce the project's contribution to cumulative impacts to the regional system to less than cumulatively

considerable. Implementation of Mitigation Measure 4.13-12, as revised, ensures that the proposed project pays the appropriate regional traffic impact fee to cover the costs of its proportionate share of the impact to the freeway segments. With implementation of this mitigation measure, the project's contribution to cumulative impacts to the affected freeway segments would be less than cumulatively considerable.

Year 2035 Long-Term Analysis

Both the 2007 and 2017 reports found that long-term traffic analysis of the proposed development levels for the originally-proposed project and the current proposed project in addition to growth identified in the general plan and in the region would contribute to significant cumulative traffic impacts identified in the City of Soledad General Plan EIR for to regional and local facilities serving the city. Although lesser in magnitude than the previously proposed project studied in the Miravale III EIR, The proposed project's contributions to the cumulative traffic impacts is cumulatively considerable. Implementation of the Miravale III EIR mitigation measures as revised in this EIR addendum would reduce the project's contribution to traffic impacts on regional and local traffic facilities serving the city, but not to a less than significant level. Therefore, similar to the conclusion of the Miravale III EIR, the project's contribution to these impacts is cumulatively considerable and significant and unavoidable. Nonetheless, the proposed project as well as other development projects within the City of Soledad will be required to contribute to the regional development impact fee program as described under near-term project conditions.

Conclusion

The proposed project would not result in new or greater cumulatively considerable contributions to cumulative traffic impacts that were not already identified and addressed in the Miravale III EIR. According to the 2017 report, the cumulative impacts and project contributions will either be less than cumulatively considerable or reduced to a less-than-cumulatively-considerable level with implementation of standard conditions of project approval and implementation of the mitigation measures identified in this section.

Cumulative Impact Conclusion

The proposed project would not result in new significant impacts or substantially increase the severity of previously identified significant cumulative impacts previously identified in the Miravale III EIR and would be mitigated to the maximum extent practicable by the incorporation of all feasible and applicable mitigation measures.

5.0
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APPENDIX A

FINAL ENVIRONMENTAL IMPACT REPORT FOR THE
MIRAVALE SPECIFIC PLAN

FINAL
ENVIRONMENTAL IMPACT REPORT
FOR THE
THE MIRAVALE SPECIFIC PLAN

State Clearinghouse #2006081129

CITY OF SOLEDAD

August 2010

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1.0 INTRODUCTION

1.1 BACKGROUND

In November 2008, the City of Soledad, as Lead Agency, circulated a Draft Environmental Impact Report (Draft EIR or DEIR) prepared under the California Environmental Quality Act (CEQA), Public resources Code §§21000 et seq. The Draft EIR was prepared to analyze the potential environmental impacts associated with implementation of the proposed Miravale III Specific Plan and Vesting Tentative Map (the "proposed project"). The Draft EIR was circulated for a 45-day public review period, between November 4, 2008, and December 18, 2008, and public comments were received.

The purpose of the public review process under CEQA includes sharing expertise, disclosing agency analysis, checking for accuracy, detecting omissions, discovering public concerns, and soliciting counter proposals (CEQA Guidelines §15200). This Final EIR contains a list of the comments submitted on the Draft EIR, copies of the comment letters received on the Draft EIR during the 45-day public review period, responses to the points raised in those comments, and various revisions to the Draft EIR made as a result of the public review process. In accordance with CEQA Guidelines Section 15132, this document has been prepared to address the comments received during the public review periods and, together with the Draft EIR, constitutes the Final Environmental Impact Report for the Miravale III Specific Plan .

The Miravale III EIR addresses the potential environmental effects of implementation of the Miravale III Specific Plan at a program level of review, and Vesting Tentative Map at a project level. The Miravale III Specific Plan provides a guide for the physical development of the approximately 920-acre site. The Draft EIR was prepared to inform the public of the significant environmental effects of the proposed project, identify possible ways to minimize the significant effects, and describe a reasonable range of project alternatives. The following subsections provide a general overview of the proposed project, methods that public input was solicited during the CEQA process, and report organization.

1.2 PROJECT OVERVIEW

The proposed project consists of the development and implementation of the Miravale III Specific Plan and preliminary Vesting Tentative Map. Approval of the proposed Miravale III Specific Plan and Vesting Tentative Map would result in the construction of 1,470 single-family residential units, 116 duplex/small lot single-family residential units, 2,614 multi-family residential units (includes affordable housing, workforce housing, and senior housing units), 120 hotel rooms, 275,000 square feet of retail commercial space and an 18-hole golf course. The project would also include three school sites (two elementary schools and one middle school), a fire and police substation, a recycled water plant, and approximately 75 acres of open space and recreation areas, including parks, playgrounds, and a trail system.

The project is located within unincorporated lands of Monterey County on the northern edge of the City of Soledad, approximately 35 miles southeast of the Monterey Peninsula and 85 miles southeast of the San Francisco Bay Area (refer to Figure 3-2). The 920-acre project site is generally between San Vicente Road and Orchard Lane and is surrounded by agricultural land to the north and west, an existing residential subdivision to the south, and undeveloped foothills of the Gabilan Mountain Range to the east.

The project site consists primarily of undeveloped land. The site's topography is comprised of a natural slope from the southwest corner of the site to the northeast with steeper slopes located at the eastern boundary. The majority of the site ranges in elevation between approximately 180 and 600 feet above mean sea level. The site generally drains to the southwest toward Miravale Road and a large detention basin is proposed at the golf practice range just south. Several small drainages occur in the eastern and western portions of the site. Site vegetation can be characterized primarily with areas of open annual

grassland and minimal trees. Existing trees are located near two single family homes, and a row of eucalyptus trees line one side of San Vicente Road.

1.3 Public Participation

In accordance with CEQA Guidelines §15088.5(d) and 15088.5(f)(3), the City of Soledad notified all responsible and trustee agencies, interested groups, and individuals that the Draft EIR had been completed and was available for public review and comment. The City used the following methods to solicit input during the preparation of the Draft EIR and RDEIR. The following is a list of the actions taken during the preparation, distribution, and review of the Draft EIR.

- The Notice of Preparation (NOP) was filed with the State Clearinghouse on August 24, 2006. The California State Clearinghouse assigned the Clearinghouse Number 2007011069 to the Draft EIR. The NOP was distributed by the City to responsible and trustee agencies, and interested groups, organizations and individuals. The NOP 30-day comment period closed on September 22, 2006. A total of 12 NOP comments were received from agencies and the public; several of which were received after the close of the pubic comment period. Although some comments were received outside of the 30-day comment period, these comments were still considered during the preparation of the Draft EIR.

- A scoping meeting was held on September 7, 2006 to receive input on the Draft EIR.

- The Draft EIR was distributed for a 45-day public review period to responsible and trustee agencies, interested groups, and individuals on November 4, 2008. The public review period for the Draft EIR ended on December 18, 2008. A total of fourteen comment letters were received on the Draft EIR, of which five were received outside of the public review period.

- On December 11, 2008 a public meeting was held before the Planning Commission to receive public comments on the Draft EIR. Notice of this scheduled meeting was included in the Notice of Completion sent to public agencies, organizations and individuals following completion of the Draft EIR.

1.4 Report Organization

This Final EIR is organized into the following four sections:

- **Section 1.0, "Introduction,"** contains this introduction to the FEIR, including a discussion of the background of the environmental review, a description of the contents of the Final EIR, and a summary of the project decision-making process.

- **Section 2.0, "List of Comments on the Draft EIR,"** contains a list of all written comments received on the RDEIR.

- **Section 3.0, "Comments and Responses on the Draft EIR"** contains copies of all comment letters received on the DEIR, and appropriate responses to each comment.

- **Section 4.0, "Revisions to the Draft EIR,"** contains revisions to the text of the DEIR in response to the public comments.

- This volume, together with the Draft EIR, constitutes the Final Environmental Impact Report for The Miravale III Specific Plan. This volume consists of an introduction, comment letters received during the 45-day public review period, responses to comments, and revisions to the Draft EIR.

2.0 LIST OF COMMENTS ON THE DRAFT EIR

2.1 Introduction

This section provides responses to comments on the Draft EIR in accordance with Section 15088 of the CEQA Guidelines.

2.2 List of Comment Letters

Following is a list of comment letters received on the Draft EIR and the dates these letters or facsimiles were received:

State Agencies	**Date**
A. California Governor's Office of Planning & Research	December 31, 2008*
B. California Regional Water Quality Control Board	January 26, 2009*
C. California Department of Transportation	December 22, 2008*
D. California Department of Fish & Game	December 18, 2008
E. California Native Heritage Commission	December 8, 2008

Local Agencies	**Date**
F. Local Agency Formation Commission (LAFCO) of Monterey County	December 15, 2008
G. LAFCO of Monterey County	February 25, 2009*
H. Monterey Bay Unified Air Pollution Control District	December 18, 2008
I. Transportation Agency for Monterey County	December 18, 2008
J. Soledad Unified School District	December 16, 2008
K. Monterey County Resource Management Agency	December 18, 2008

Individuals/Organizations	**Date**
L. David Baker	December 19, 2008*
M. RRM Design Group	December 18, 2008
N. Bestor Engineers, Inc.	December 17, 2009

*Received after close of the public review period.

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3.0 COMMENTS AND RESPONSES ON THE DRAFT EIR

3.1 INTRODUCTION

CEQA Guidelines §15132(b) requires that a Final EIR include the comments and recommendations received on the draft EIR either verbatim or in summary. In accordance with these requirements, this section contains all of the comments received on the Draft EIR. CEQA Guidelines §15132(d) further requires that the Final EIR contain responses from the Lead Agency to significant environmental issues raised in the public review process. This section provides detailed responses to each of the individual comments received on the Draft EIR. A list of the comment letters is presented in **Section 2.2**, and copies of each of the comment letters are included in this section, with responses to each comment provided following the letter.

3.2 COMMENT LETTERS AND RESPONSES TO COMMENTS

Each letter received on the Draft EIR, as identified in **Section 2.2**, is presented in this section. The individual comments within each letter are numbered, and numbered responses to each of the corresponding comments are provided immediately following each comment letter. In those instances in which a comment states an agency position or opinion and does not comment on issues relevant to the environmental analysis presented in the Draft EIR, a detailed response is not required under CEQA. In those instances, the sentence "The comment is acknowledged" is provided and, where necessary, the comment is referred to decision-makers. In some instances, comments may express an opinion that is directed at the City of Soledad regarding the decision on the project. In those cases, those comments are referred to decision-makers for further consideration and the sentence "The comment is referred to the decision-makers for their consideration" is provided; typically, these comments do not raise issues relevant to the environmental analysis. Where the response notes an addition or deletion to the text, tables, or figures in the Draft EIR, a brief description of the change is provided, and the reader is directed to **Section 4.0, Revisions to the Draft EIR**. The comments identified during the public review period have not raised any new significant information under CEQA; revisions have been incorporated to clarify and amplify the analysis contained in the Draft EIR.

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

STATE CLEARINGHOUSE AND PLANNING UNIT

ARNOLD SCHWARZENEGGER
GOVERNOR

CYNTHIA BRYANT
DIRECTOR

December 19, 2008

Susan Hilinski
City of Soledad
248 Main Street
P.O. Box 156
Soledad, CA 93960

RECEIVED
DEC 31 2008
PLANNING DEPARTMENT

Subject: Miravale Phase III Specific Plan
SCH#: 2006081129

Dear Susan Hilinski:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on December 18, 2008, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Terry Roberts

Terry Roberts
Director, State Clearinghouse

Enclosures
cc: Resources Agency

Document Details Report
State Clearinghouse Data Base

SCH# 2006081129
Project Title Miravale Phase III Specific Plan
Lead Agency Soledad, City of

Type EIR Draft EIR

Description The Specific Plan calls for a mixed-use development including 1,470 single-family residential units, 2,730 multi-family residential units (includes affordable housing, workforce housing, and senior housing units), 120 hotel rooms, 275,000 sf. of retail commercial space and an 18-hole golf course. Conceptual plans include a variety of residential types, including apartments, townhouses, and attached homes on small and large lots. The project also proposes three school sites (2 elementary schools and 1 middle school), a fire and police substation, a recycled water facility, and approx. 75 acres of open space and recreation areas, including parks, playgrounds and a trail system.

Lead Agency Contact

Name Susan Hilinski
Agency City of Soledad
Phone (831) 223-5045 **Fax**
email
Address 248 Main Street
P.O. Box 156
City Soledad **State** CA **Zip** 93960

Project Location

County Monterey
City Soledad
Region
Lat / Long 36° 27' 10.657" N / 121° 19' 32.008" W
Cross Streets San Vicente Road, Orchard Lane
Parcel No. 417-151-082, 083, 084, 085; 257-081-005, 026, 027, 032
Township **Range** **Section** **Base**

Proximity to:

Highways 101
Airports
Railways SPRR
Waterways Salinas River
Schools Soledad Unif. Sch. Dist.
Land Use Farmland and Permanent Grazing (Monterey Co. GP), identified as Northwest, San Vicente West, and Mirassou Expansion Areas (Soledad GP)

Project Issues Agricultural Land; Air Quality; Archaeologic-Historic; Cumulative Effects; Drainage/Absorption; Flood Plain/Flooding; Geologic/Seismic; Growth Inducing; Landuse; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wildlife; Aesthetic/Visual; Biological Resources; Forest Land/Fire Hazard

Reviewing Agencies Resources Agency; Department of Conservation; Department of Fish and Game, Region 4; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Office of Emergency Services; California Highway Patrol; Caltrans, District 5; Department of Housing and Community Development; State Water Resources Control Board, Clean Water Program; Regional Water Quality Control Board, Region 3; Department of Toxic Substances Control; Native American Heritage Commission; Public Utilities Commission

Date Received 11/04/2008 **Start of Review** 11/04/2008 **End of Review** 12/18/2008

Note: Blanks in data fields result from insufficient

LETTER A: GOVERNOR'S OFFICE of PLANNING & RESEARCH (OPR)

A1: No response required.

Linda Adams
Secretary for Environmental Protection

California Regional Water Quality Control Board
Central Coast Region

Internet Address: http://www.swrcb.ca.gov/rwqcb3
895 Aerovista Place, Suite 101, San Luis Obispo, California 93401
Phone (805) 549-3147 • FAX (805) 543-0397

Arnold Schwarzenegger
Governor

RECEIVED
JAN 26 2009
COMMUNITY DEVELOPMENT DEPT

January 23, 2008

Susan Hilinski
City of Soledad Community Development Department
248 Main Street, P.O. Box 156
Soledad, CA 93960

Dear Ms. Hilinski:

DRAFT ENVIRONMENTAL IMPACT REPORT, MIRAVALE III DRAFT SPECIFIC PLAN, SOLEDAD, MONTEREY COUNTY, SCH# 2006081129

Thank you for the opportunity to review the above-referenced document. The Central Coast Regional Water Quality Control Board (Water Board) is a responsible agency under the California Environmental Quality Act (CEQA). Water Board staff understands that the project includes development of approximately 2,600 single-family residential units, 1,600 multi-family residential units, 300 senior housing units, 120 hotel rooms, 18-hole golf course and 250,000 square feet of retail commercial space. As discussed in our August 29, 2008 letter for the project's Notice of Preparation, we again recommend you require the development to incorporate Low Impact Development principles.

Low Impact Development strives to maintain natural infiltration of rainfall by minimizing impervious cover and distributing stormwater controls throughout a development. Maintaining natural infiltration rates is essential in Soledad and the rest of the Salinas Valley, in order to maintain groundwater resources and stream base flow. As currently proposed, this development will greatly increase impervious land cover, and the proposed percolation/retention ponds will not likely maintain natural infiltration rates or patterns.

The proposed development site condition contains several small drainages that would be eliminated under the proposed development. The proposed development must preserve these existing drainages, even if they are only ephemeral in nature, by requiring development to be setback from these features.

The proposed stormwater system consists of an underground piping system to collect stormwater and convey it to two conventional retention basins. Soledad should provide an incentive for decentralized infiltration and treatment in lieu of centralized basins. For example, some jurisdictions have reduced stormwater fees for developments that include decentralized infiltration and treatment, because this kind of stormwater

management generally reduces need for additional capacity or repair to downstream storm drain systems and watercourses.

We'd appreciate your response to these comments in the EIR for this project. If you have questions, please contact **Jennifer Epp at (805) 594-6181**, or Matt Thompson at (805) 549-3159.

Sincerely,

MThompson

for Roger W. Briggs
Executive Officer

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LETTER B: CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD (CRWQCB)

B1: This comment recommends that the City of Soledad require that the proposed project incorporate the principles of Low Impact Development (LID) to minimize the extent project induced impacts as a result of increased impervious surface coverage. The City of Soledad is committed to implementing LID principles in connection with this project. In order to ensure that LID principles will be implemented as part of the proposed project, revisions have been incorporated into this EIR. Please refer to **Section 4.0 Revisions to the Draft EIR** for more information.

B2: This comment identifies that there are several small drainages that would be eliminated in connection with the proposed project. This comment suggests that all development should be set back from these drainage features. As identified in the Draft EIR and supporting technical analyses (see Nolan, 1995), existing on-site drainage occurs by overland sheet flow towards shallow ephemeral drainages. These drainages do not typically carry surface water except during peak rainfall events. The project has proposed a series of drainage improvements, including the enlargement of two existing agricultural ponds, to accommodate stormwater runoff associated with the proposed project. While the project, as currently proposed, would eliminate several small drainages on the project site as noted in this comment, post-project drainage would be accommodated through a storm drain system that would reduce project runoff to pre-project conditions. Mitigation measures contained in this EIR, as modified, have been developed to ensure that LID principles are implemented in connection with the proposed project in order to minimize potential impacts associated project drainage. The Draft EIR found that development of the project site as proposed would include storm drain facilities not currently sized to be consistent with Storm Drain Master Plan requirements. However, with mitigation, the project's storm drain facilities will be in accordance with all local and state regulations, and would not result in significant impacts to hydrology or flooding conditions. In addition, the Draft EIR specifically evaluated several project alternatives, including the General Plan Consistent Alternative and Reduced Project Alternative, that would avoid the elimination of several small drainages. These alternatives would substantially lessen the extent of project impacts related to existing on-site drainage by avoiding and/or minimizing the extent of development on the hillside portions of the site. Please refer to **Section 4.0 Revisions to the Draft EIR, Section 6.0 Alternatives,** for more information regarding project alternatives. While the proposed project would still nonetheless eliminate these drainages and mitigation measures have been identified to reduce the extent of this impact, this comment is forwarded to City decision-makers for further consideration during the project review process. If determined appropriate, the City of Soledad could require that a policy be added to the Specific Plan that requires all development to be setback a sufficient distance from all existing drainages to more specifically comply with the request of the comment

B3: This comment identifies that the proposed project's stormwater system consists of an underground piping system to collect and convey stormwater to two conventional retention basins. This comment suggests that the City of Soledad should consider providing incentives to encourage a decentralized infiltration and treatment system versus a conventional centralized system. As identified in the Draft EIR, the proposed project will be required to comply with the applicable provisions of the 2007 Storm Drain Mater Plan (SDMP) in order to ensure that post-project run-off is at or below pre-project conditions. Future development of the project site as proposed by the Miravale III Specific Plan would include storm drain facilities not currently sized to be consistent with Storm Drain Master Plan requirements. However, with mitigation, the project's storm drain facilities will be in accordance with all local and state regulations, and would not result in significant impacts to hydrology or flooding conditions. This comment to encourage a decentralized infiltration and treatment system versus a conventional centralized system is forwarded to the City of Soledad for further consideration as part of the review process.

DEPARTMENT OF TRANSPORTATION
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December 17, 2008

MON-146-.24
SCH# 2006081129

Susan Hilinski
Soledad Community Development Department
248 Main Street
Soledad, CA 93960

Dear Ms. Hilinski:

COMMENTS TO MIRAVALLE III DRAFT EIR

The California Department of Transportation (Caltrans), District 5, Development Review, has reviewed the Miravalle III Specific Plan and summary of impacts on transportation facilities.

First, the traffic study (an engineering report) prepared by Hexagon Consultants lacks the required signature and stamps of a licensed professional engineer per the Business and Professions Code sections 6735, 6735.3, 6735.4, and Board Rule 411. In general, these laws require documents (both interim and final) containing such things as signal warrant analysis or sychro-files bear the name and license number of the professional engineer involved. In addition to being legally required, this also serves to protect both Caltrans and the City of Soledad from any potential litigation resulting from inaccurate information or assurances outlined in the document. The signature and stamp indicates that a competent engineer in "responsible charge" of the work stands behind the report and its' conclusions. Without the stamp, the conclusions cannot be considered valid.

Notwithstanding the above, the following comments are based on our review of information provided.

Trip Generation

- Trip generation for the golf course, schools, and the park were not included in counts. (4.13-22) It should not be assumed that all of these trips are internal and from the project.

- Fifty percent of the trips for Retail B are expected to be from the project. (4.13-22). However, Retail B is described as "commercial and/or **hotel**." (3.01-1, 5). If 'hotel' is the option, then 50% is exceedingly high from internal circulation. Related to this, Retail A anticipates 90% internal trips, yet an even minimal detail of Retail A is not provided. (4.13-22)

- Commercial land designation totals 1.74 million square feet, yet only 275,000 square feet is accounted for in trip generation numbers. (4.1-13)

Ramps

- For existing conditions (4.13-11) all of the Highway 101 ramps are shown to be operating at Level of Service (LOS) B or above. This is not correct. For example, ramp merge existing conditions for northbound Highway 101 and Moranda Road are currently at LOS D. Further, an unrelated (yet pertinent) letter dated October 3, 2008 from the City of Soledad to the Transportation Agency for Monterey County (TAMC) seeking program support states that "there is traffic congestion and backups at the intersection of Highway 101 and 146" (not LOS B).

- It is indicated that alignments on all of the ramps are deficient; however, there is no explanation of those deficiencies. (4.13-11)

- Ramp LOS methodologies are incorrect, and Highway Capacity Manual (HCM) is significantly misapplied. One example is by indicating that 1,500 vehicles per hour per lane (VPHPL) capacity is the standard to which ramp LOS is identified. (Figure 4.13-6). This is not correct. Ramp LOS is characterized by mainline and ramp density, not a specific capacity. (HCM 25-5). Capacity of a ramp is a function of the nodes, and not the ramp alone (i.e., merge points or intersections).

Freeway Segments

- There is a misrepresentation of the HCM by indicating that 2,400 VPHPL is the standard to which freeway segments are compared to determine LOS. (Figure 4.13-5). Freeway capacity is based on many factors, including geometry, driver behavior, etc., and not simply passenger vehicles. Because of such things as physical roadway constraints, Caltrans is aware and has documented that freeway capacity for District 5 is no more than 2,000 VPHPL.

Mitigation

- Caltrans is concerned that discussions of cumulative and regional mitigation mostly contain vague language with regard to the projects' financial obligations. For example, there is a statement that "the City of Soledad has not committed to collecting the TAMC fees" for regional improvements (4.13-14). There is also the statement that the reconfiguration of Highway 101/Moranda interchange is a "regional" improvement to "provide efficient access to...Soledad in general." Rather, the need to reconfigure the Moranda interchange is to provide 'efficient access' to this development and the proposed retail super center, not the public in general.

- By indicating that the Moranda interchange project should "be the responsibility of TAMC" (4.13-36) and paying the City's adopted TIF fee is acceptable in-lieu of, this project has avoided its' obligations to mitigate regional impacts outside of the boundaries of the City of Soledad. Miravalle III is a large-scale project of regional significance that will have impacts to the north as commuters travel to workplace centers. By participating in the TAMC Regional Fee Program (as adopted by the City of Soledad) those impacts are mitigated.

Summary/Requests

- Definitive language that the project will mitigate cumulative impacts through payment of TAMC Regional Fee Program. Discounts may be given when there is project overlap with the City's traffic fee ordinance.

- A merge and diverge analysis conducted at Highway 101 ramp locations within the City. This analysis should be performed in accordance with HCM Chapter 25 methodology.

- Freeway segments should be reanalyzed using HCM Chapter 23 methodology.

- Elaborated information where ramp deficiencies are observed.

- The revised traffic study will include the signature and stamp of a licensed professional engineer.

If you have any questions, or need further clarification on items discussed above, please don't hesitate to call me at (805) 542-4751.

Sincerely,

JOHN J. OLEJNIK
Associate Transportation Planner
District 5 Development Review Coordinator

cc: Frank Boyle (D5)
Mark McCumsey (D5)
Mike Zeller (TAMC)
Chad Alinio (Mon Co DPW)

LETTER C: CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS)

C1: This comment states that the traffic impact analysis prepared by Hexagon Transportation Consultants, Inc. must bear the signature and stamps of the licensed professional engineer that was responsible for preparing the analysis. In the opinion of the commenter, absence of this information the conclusions contained in the traffic analysis cannot be considered valid. A copy of the final signed and stamp traffic analysis is available at City Hall.

C2: This comment asserts that the trip generation for the golf course, schools, and parks were not included in the traffic counts. As part of the process for development of the traffic impact analysis prepared by Hexagon, the City Public Works Department and their consulting engineer independently reviewed the trip generation estimates and conclusions in the analysis. Hexagon traffic engineer Robert Del Rio, who prepared the analysis, reviewed the Caltrans comment and indicated that the trip rates and resulting trip generation estimates utilized for the proposed residential units include trips to employment and other complimentary land uses such as schools, parks, and retail. Additionally, the size of the proposed development in relation to the existing number of units within the City of Soledad creates a demand on schools, parks, and retail within the City that cannot be met by existing facilities. Thus, the residents of the proposed development are expected to be served nearly exclusively by internal ancillary land uses of the project. Also see **Response to Comment C3**, below.

C3: This comment states that the trip internalization rate of 50 percent for traffic associated with the retail uses and hotel on the "Retail B" site is considered high, and that the high (90%) trip internalization rate for the area identified as "Retail A" is not supported by detail concerning the types of uses associated with this site. Because of the "Retail A" site's central location in the project area and the fact that the proposed retail uses are intended to be neighborhood serving under the Specific Plan, the majority of trips generated by the retail uses of the project will be those already accounted for within the trip estimates for the proposed residential uses of the project. The high internalization rate is, therefore, considered reasonable in this case. With the exception of hotel visitor-related traffic, the "Retail B" parcel located along the project boundary will likely attract patrons from existing surrounding residential areas in Soledad. Those trips that are generated externally, outside the project boundaries, would likely originate from with the City of Soledad, since the retail is not intended to be regional serving. As with the proposed residential units, existing residential land uses have already accounted for trips to retail. Thus, the majority of any external trips generated by the proposed retail will be a redistribution of existing retail trips within Soledad, hence the higher than typical internalization reduction rate However, even assuming a lower internalization rate of 40 or 30 percent for the Retail "B" site, the increased number of trips external to the project would not be significant i.e., 440 to 886 additional external daily trips, and would not affect the significance level of related impacts or mitigations. Also see **Response to Comment C2**, above.

C4: This comment identifies that approximately 1.74 million square feet of commercial use is proposed as part of the project, but only 275,000 square feet is accounted for in the trip generation numbers. As correctly described in the Draft EIR, implementation of the proposed project would result in the construction of a maximum 275,000 square feet of commercial uses. Based on the information contained in the Specific Plan, commercial use is limited to a maximum 275,000 square feet. Development of additional commercial uses beyond the maximum 275,000 square feet would be subject to additional environmental review as required pursuant to CEQA.

C5: This comment asserts that existing ramp operations for northbound Highway 101 and Moranda Road are operating at a Level of Service (LOS) D not B as stated in the Draft EIR. However, a separate analysis of existing ramp operations, completed as part of the Project Study Report (PSR) supporting technical analysis for the planned North Front Street Interchange improvements, indicates that the existing peak hour ramp operations for the Northbound Off-ramp to Moranda Road/Front Street are currently at LOS

"B," while the Northbound On-ramp from Moranda Road/Front Street functions at LOS "B" (p.m. peak hour) and "C" (a.m. peak hour). This analysis was completed by Omni-Means Engineers for the City of Soledad in October 2008 and largely substantiates the conclusions of the Draft EIR regarding existing LOS of the North Front Street/Highway 101 ramps. However, the Omni-Means analysis does conclude that the northbound 101 onramp from Moranda Road currently operates at LOS "C," rather than "B," during the morning peak hour. In response to this comment, the Final EIR has corrected the LOS for ramp operations for the northbound on-ramp from Moranda Road/Front Street; please refer to **Section 4.0 Revisions to the Draft EIR, Traffic and Circulation, Section 4.13.**

C6: This comment identifies that the Draft EIR determined that the existing ramp alignments are considered deficient, yet no explanation of those deficiencies is provided in the Draft EIR. A brief explanation of the ramp configurations can be found on page 4.13-11 of the Draft EIR; no further response is required.

C7: This comment contends that the LOS volume-to-capacity ramp methodology used in the traffic analysis is incorrect and the Highway Capacity Manual (HCM) has been significantly misapplied in certain instances. Specifically, this comment identifies that the Ramp LOS is characterized by mainline and ramp density, not a specific capacity as used in the traffic analysis. Capacity, according to the comment, is a function of the nodes and not the ramp alone. Although the described methodologies can be applied to the analysis of the completed traffic study, the analysis will result in the same mitigation measures as those already presented in the traffic study (i.e., payment of TAMC regional impact fees).

C8: This comment states that the Draft EIR and thereby the traffic analysis misrepresented the HCM by indicating that 2,400 vehicles per hour per lane (VPHPL) is the standard to which freeway segments are compared to determine LOS. Due to physical roadway constraints, this comment notes that the documented freeway capacity for Caltrans District 5 is no more than 2,000 VPHPL. The capacity is based on number factors and not simply passenger vehicles.

C9: This comment expresses specific concerns related to the cumulative and regional mitigation language contained in the Draft EIR concerning the project's financial obligation. The comment specifically identifies that the mitigation language related to the City of Soledad's commitment to collecting TAMC fees is vague. In addition, this comment also identifies that the reconfiguration of the Highway 101/Moranda interchange is intended to improve access to the proposed project and the unrelated regional commercial project on San Vicente Road and Moranda Road. At the time the Draft EIR was prepared it was unknown whether the City of Soledad was going to collect the TAMC fees for regional improvements. The City has since adopted the Regional Transportation Impact Fees and the EIR has been revised to reflect this situation. In addition, the EIR has also been revised to add information on the reconfiguration of the Highway 101/Moranda interchange and the proposed project. Please refer to **Section 4.0 Revisions to the Draft EIR, Traffic and Circulation, Section 4.13,** for more information.

C10: This comment asserts that the payment of City of Soledad adopted Transportation Impact Fee does not avoid the project's obligation to mitigate regional impacts outside of the boundaries of the City of Soledad. This comment notes that the City's participation in the TAMC Regional Impact Fee Program mitigates the project's regional cumulative impacts. At the time the Draft EIR was prepared it was uncertain whether the City would participate in the TAMC Regional Fee Program. As noted in the prior comment, the City does participate in this program. The text of the Draft EIR has been revised to clarify that the City currently collects TAMC fees. Please refer to **Section 4.0 Revisions to the Draft EIR, Traffic and Circulation, Section 4.13,** for more information.

C11: This comment requests that definitive language be incorporated into the EIR to ensure that the project will mitigate cumulative impacts through the payment of TAMC Regional Fee Program. The EIR has been revised to clarify that the proposed project will be required to mitigate cumulative impacts to

regional facilities through the payment of applicable TAMC fees. Per CEQA Guidelines § 15130(a)(3), payment of fees is an equitable and typical method for collecting the necessary funds to implement transportation improvements. Please refer to **Section 4.0 Revisions to the Draft EIR, Traffic and Circulation, Section 4.13,** for more information; see also **Responses C9** and **C10**.

C12: This comment requests that a merge and diverge analysis be conducted at Highway 101 ramp locations within the City in accordance with HCM Chapter 25 methodology. Please refer to **Responses C5 and C7** for a response to this comment.

C13: This comment requests that the freeway segments be reanalyzed using HCM Chapter 23 methodology. Please refer to **Response C8** for a detailed response to this comment.

C14: This comment requests that additional information be provided in the EIR regarding ramp deficiencies. Please refer to **Response C6** for a detailed response to this comment.

C15: This comment requests that the revised traffic analysis include the signature and stamp of the licensed professional engineer that was responsible for preparing the analysis. Please refer to **Response C1** for a detailed response to this comment.

State of California - The Resources Agency
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Letter D

December 18, 2008

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Susan Hilinski
City of Soledad Community
Development Department
248 Main Street, Post Office Box 156
Soledad, California 93408

Subject: Draft Environmental Impact Report (DEIR) for the Miravale III Specific Plan (SCH No. 2006081129)

Dear Ms. Hilinski:

The Department of Fish and Game has reviewed the City of Soledad's (City) Miravale Phase III Specific Plan (Project) DEIR. The Project consists of developing and implementing the Miravale III Specific Plan. The specific plan calls for 1,470 single-family residential units, 2, 370 multi-family residential units, 120 hotel rooms, 275,000 square feet of commercial space, an 18-hole golf course, a fire and police substation, a recycled water plant, three school sites, and 75 acres of open space. The total Project site is 920 acres. D-1

Please be aware that the Federal threatened California tiger salamander may become a candidate for State listing imminently. The Department has yet to determine whether the California Endangered Species Act (CESA) would regulate "take" of the hybridized salamanders present on this Project site if the species becomes State-listed. D-2

The Department has substantial concerns about the proposed Project's unmitigated special status species impacts and "take" of the Federal endangered and State threatened San Joaquin kit fox (*Vulpes macrotis mutica*). This DEIR would not support our issuance of the required Incidental Take Permit for San Joaquin kit fox. The DEIR defers the formulation of mitigation measures for kit fox, seven other special status species, and three general biological resource impacts until after Project approval. Deferred surveys for several species creates a lack of baseline data for informed decision making. Because of the deferred resource inventories and mitigation, it is unclear how the significance determinations were made for this Project. D-3

In addition, the DEIR should recognize that filling the reservoir on-site may warrant mitigation and require a Lake or Streambed Alteration Agreement (LSAA) with the Department. As described below, we believe that the Final Environmental Impact Report (FEIR) prepared for this Project would be significantly strengthened by addressing these issues in a substantive manner. D-4

California Environmental Quality Act (CEQA) and CESA Authority: The Department is a Trustee Agency with the responsibility under CEQA for commenting on projects that could impact fish and wildlife resources, including plants. Pursuant to Fish and Game Code Section 1802, the Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable D-5

populations of those species. As a Trustee Agency for fish and wildlife resources, the Department is responsible for providing, as available, biological expertise to review and comment on environmental documents and impacts arising from project activities, as those terms are used under CEQA. D-5 cont.

The Department is a Responsible Agency when a subsequent permit or other type of discretionary approval is required from the Department, such as an Incidental Take Permit, pursuant to CESA, or an LSAA issued under Fish and Game Code Section1600 et seq. It appears that this Project is likely to require both an Incidental Take Permit and an LSAA. D-6

The Department's issuance of an Incidental Take Permit or LSAA is also considered a "project" subject to CEQA (CEQA Guidelines Section15378). The Department typically relies on the Lead Agency's CEQA compliance to make findings, pursuant to CEQA Guidelines Section 15091. A Statement of Overriding Considerations for significant State-listed species impacts will not legally support State Incidental Take Permit issuance. For the Lead Agency's CEQA document to suffice for permit issuance, it must fully describe the potential project-related impacts to State-listed species and commit to measures to avoid, minimize, and fully mitigate impacts to these resources. If the CEQA document for this Project does not contain these commitments, the Department may need to act as a Lead CEQA Agency and complete a subsequent CEQA document to support permit issuance. This could significantly delay permit issuance and, subsequently, Project implementation. D-7

San Joaquin Kit Fox: The DEIR states that the presence of the Federal endangered and State threatened San Joaquin kit fox (*Vulpes macrotis mutica*) is assumed based on suitable habitat and location within historic range. The DEIR also documents an active natal den on-site (page 4.4-12 of Volume I, and page 23 of Appendix T-3) and that the Project would result in direct mortality, loss of habitat, and loss of dens. A likely Federal Incidental Take Permit requirement is identified. The DEIR does not discuss State Incidental Take Permit requirements. Based on the information present in the DEIR, the Department has concluded that this Project is likely to result in "take" of San Joaquin kit fox and that a State Incidental Take Permit is required to comply with CESA, which is described in Fish and Game Code Section 2081 et seq. D-8

The DEIR describes the Project's kit fox impacts as significant and unavoidable. As discussed above, a Statement of Overriding Considerations for significant State-listed species impacts does not support State Incidental Take Permit issuance. The Department would not be able to provide an Incidental Take Permit for this Project, based on the mitigation measures included in this DEIR. In order for the Department to issue an ITP, impacts to the species must be fully mitigated. While Incidental Take Permits generally include additional mitigation measures beyond those described in the CEQA document, at a minimum, the CEQA document should fully describe the potential project-related impacts to San Joaquin kit fox and commit to measures which avoid, minimize, and mitigate those impacts. D-9

Full mitigation would consider direct "take" of individual kit fox during construction, mortality caused by the loss of 920 acres of habitat, increased mortality resulting from increased traffic, reduced habitat connectivity, and potentially other factors not considered in the DEIR. The D-10

Project would further isolate suitable habitat north and south of the Project site. We would like to work with the City and its applicant to develop a full mitigation strategy for San Joaquin kit that can be included in the FEIR, or preferably, to select an alternative that would avoid or substantially reduce the habitat impacts and avoid "take." D-10 cont.

The selection of an alternative in the FEIR must consider the fact that feasible alternatives are presented which may substantially lessen kit fox impacts. However, the DEIR does not establish whether any of the alternatives would avoid "take" of San Joaquin kit fox. This should be determined in the FEIR. The Project and all alternatives which displace kit fox habitat should include feasible compensatory measures to reduce the habitat impacts to less than significant levels regardless of take permit requirements D-11

Botanical Inventories: Appendix T-3 of the DEIR states that "The plants present within the project site were surveyed on more than one occasion." Neither Appendix T-3 nor any other part of the DEIR provides botanical survey dates, times, or other information required to determine whether the surveys would have detected rare plant species. D-12

The DEIR does disclose that the surveys would not have detected Lemmons' jewelflower. Considering that this species blooms March through May, it appears that insufficient surveys were performed during the season when most rare grassland species on the Central Coast are detectable and identifiable. Without floristic surveys during the spring blooming season, it is not possible to determine or disclose this Project's potential impacts to special status plant species. D-13

Botanical surveys should follow guidelines developed by the Department (http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/guideplt.pdf) and the United States Fish and Wildlife Service (http://www.fws.gov/ventura/speciesinfo/protocols_guidelines/docs/botanicalinventories.pdf). Botanical surveys should cover the entire property and should be timed appropriately to detect all species which may occur on the property before CEQA analysis occurs to establish a baseline for impact analysis. Use of reference sites is recommended for species which are known to occur in the vicinity or which otherwise have a high potential of occurring on-site. D-14

Lack of Baseline Data for Special Status Species: The courts have repeatedly not supported conclusions that impacts are mitigable when essential studies, and therefore impact assessments, are incomplete (*Sundstrom v. County of Mendocino* (1988) 202 Cal. App. 3d. 296; *Gentry v. City of Murrietta* (1995) 36 Cal. App. 4th 1359; *Endangered Habitat League, Inc. v. County of Orange* (2005) 131 Cal. App. 4th 777). The DEIR discloses a lack of studies for species which are likely to occur on-site, yet determines that the impacts to these species are mitigated to less than significant levels by means of pre-construction surveys and formulation of mitigation plans after the public review process. For the following species, it is unclear how significance determinations were made, given that no baseline data was collected: the California Native Plant Society List 1B.2 species Lemmon's jewelflower (*Caulanthus coulteri* var. *lemmonii*), and the California Species of Special Concern Townsend's big-eared bat (*Corynorhinus townsendii*), pallid bat (*Antrozous pallidus*), and western mastiff bat (*Eumops perotis*). Additional special status plant species for which significance findings were not made may also occur on-site but would not have been detected during surveys for this Project. D-15

The DEIR also documents that no surveys were performed, and therefore presence was undetermined, for additional species that may occur in suitable habitat documented on-site. Despite the lack of baseline data, the DEIR concludes that the Project would significantly and unavoidably impact the Federal threatened California red-legged frog (*Rana draytonii*) and the California Species of Special Concern Western spadefoot toad (*Spea hammondii*). Determining whether and to what extent these species occur on-site is essential to formulating mitigation and making significance findings in the FEIR. D-16

Deferred Mitigation: CEQA Guidelines (§15126.4 (a)(1)(B)) stipulates that mitigation measures should not be deferred to a future time. The Court of Appeal in *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645 struck down mitigation measures which required formulating management plans developed in consultation with State and Federal wildlife agencies after project approval.

For eleven of the significant biological impacts identified, the DEIR defers the formulation of mitigation measures to resource-agency consultation and/or permit application, after the public review process and Project approval. Table 1 lists these resources and impacts. It is unclear how the significance findings were made without the formulation of mitigation measures. We recommend completing surveys for these species prior to Project approval to facilitate informed decision making and to comply with CEQA. D-17

Table 1. Significant Biological Impacts for Which Mitigation is Deferred

Impact or Common Name	Scientific Name	Status*	DEIR Determination
San Joaquin kit fox	*Vulpes macrotis mutica*	ST, FE	Class I
pallid bat	*Antrozous pallidus*	SSC	Class II
Townsend's big-eared bat	*Corynorhinus townsendii*	SSC	Class II
Western mastiff bat	*Eumops perotis*	SSC	Class II
Lemmon's jewelflower	*Caulanthus coulteri* var. *lemmonii*)	CNPS 1B.2	Class II
California red-legged frog	*Rana draytonii*	FT, SSC	Class I
Western spadefoot toad	*Spea hammondii*	SSC	Class I
Salinas pocket mouse	*Perognathus inornatus psammophilus*	SSC	Class I
wildlife movement and nursery sites	N/A	N/A	Class I
habitat fragmentation	N/A	N/A	Class I
vegetation/oak tree removal	N/A	N/A	Class II

*ST: State Threatened; FE: Federal Endangered; SSC: California Species of Special Concern; FT: Federal Threatened; CNPS 1B.2: California Native Plant Society rare, threatened, or endangered in California and elsewhere.

California Tiger Salamander: The Federal Threatened California tiger salamander may become a candidate for State listing imminently. The Department has yet to determine whether the hybridized population present on this Project site would be regulated if the species becomes State-listed. D-18

Wetland Mitigation and LSAA Requirements: Pursuant to Fish and Game Code Section1600 et seq., the Project would require Notification to the Department prior to filling the reservoir and any streambeds identified on-site. The DEIR does not identify any LSAA requirements.

The DEIR states that 0.17 acres of wetland would be lost, but that this loss is less than significant based on the fact that undescribed golf course ponds and storm water features would offset the impacts. This approach would be expected to lead to a determination that impacts are less than significant with mitigation (although deferred) incorporated, yet the DEIR concludes that the impact is less than significant. The loss of 0.17 acres of wetland would require mitigation according to Fish and Game Commission policy. The FEIR should clarify whether wetlands are associated with the reservoir. We recommend that the applicant request a jurisdictional determination from the United States Army Corps of Engineers to determine whether the reservoir and associated wetlands are subject to Clean Water Act regulation. D-19

As discussed in the DEIR, this reservoir supports a hybridized California tiger salamander population and may support California red-legged frog and Western spadefoot toad. The presence of these species may warrant additional mitigation measures that would affect the conditions of an LSAA. The FEIR should determine the presence of these species and formulate appropriate mitigation. D-20

Regardless of species presence, the FEIR should include a plan to ensure no net loss of wetland and riparian habitat values and acreage if it is to support issuance of the potential LSAA. The FEIR should include a plan to replace the total *area* of wetland and riparian habitat lost, if those losses are unavoidable. Fish and Game Commission policy states that for every acre of wetland lost, no less than one acre of wetland must be created from non-wetland habitat. The policy further describes that the compensatory mitigation must at least duplicate the fish and wildlife habitat values that are lost to project implementation. Mitigation sites should include buffers of sufficient width to eliminate potential disturbance from noise, human activity, feral animal intrusion, and any other potential sources of disturbance. In-kind, on-site mitigation is generally the most acceptable. The Department strongly prefers mitigation which would both expand wetland acreage and enhance wetland habitat values, while avoiding impacts to other classes of sensitive resources. D-21

Avoidable Wildlife Impacts from Erosion Control Mesh Products: Due to this Project site's extensive wildlife habitat interface, the Department recommends that erosion control and landscaping specifications allow only natural-fiber, biodegradable meshes for use in erosion control mats, blankets, and straw or fiber wattles. "Photodegradable" and other plastic mesh products have been found to persist in the environment, ensnaring and killing terrestrial and aquatic wildlife. Herpetofauna kills are well-documented (Barton and Kinkead 2005, Walley et D-22

al. 2005, Washington State Department of Transportation 2005). Plastic mesh erosion control products would likely cause unanticipated, avoidable impacts including "take" of terrestrial and aquatic species. D-22 cont.

Thank you for the opportunity to comment on the Miravale Phase III DEIR. If you have any questions regarding these comments, please contact Dave Hacker, Environmental Scientist, at 3196 Higuera Street, Suite A, San Luis Obispo, California 93401, by telephone at (805) 594-6152, or by e-mail at dhacker@dfg.ca.gov.

Sincerely,

Jeffrey R. Single, Ph.D.
Regional Manager

cc: Chris Diel
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Literature Cited

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LETTER D: CALIFORNIA DEPARTMENT OF FISH & GAME (CDFG)

D1: Comment acknowledged. No response necessary.

D2: This comment identifies that the Federally threatened California tiger salamander may become a candidate for State listing imminently and that CDFG has yet to determine whether the California Endangered Species Act (CESA) would regulate "take" of the tiger salamanders present on the project site. The California Fish and Game Commission voted on March 3, 2010, to list the California tiger salamander (CTS) as "threatened" under the CESA. Similar to the Federal Endangered Species Act (ESA), the CESA generally prohibits anyone from "take" of a species listed as threatened or endangered without authorization. The CESA authorizes the Fish and Game Commission to list a species as threatened if it finds that absent the special protection of the CESA, the species is likely in the foreseeable future to be in serious danger of becoming extinct throughout all, or a significant portion, of its range due to loss or change of habitat, overexploitation, predation, competition, or disease. Much like the ESA authorizes federal wildlife agencies to authorize take of listed species in prescribed circumstances, the CESA authorizes the California Department of Fish and Game (CDFG) to do likewise under similar, though not identical, criteria. Additional text has been added to **Section 4.0 Revisions to the Draft EIR, Biological Resources, Section 4.4,** with this information.

As noted in the Draft EIR, the Shaffer Lab conducted genetic testing on 23 larval CTS tissue samples collected at the reservoir and reports that these animals range between highly hybridized to completely non-native (22 samples were successfully analyzed). The "nativeness" of these animals is summarized by the Shaffer Lab Report (**Appendix E** of the June 2008 Preliminary BA) which concludes that 89-100% are non-native and that no genotyped individual can be described as "pure native." After consultation with USFWS regarding ESA jurisdiction over the non-native tiger salamanders was initiated by DD&A on November 6, 2007, the USFWS Ventura Office determined that the tiger salamanders present at Miravale Pond 1 (on-site reservoir) are not subject to regulation under ESA and are, therefore, are not afforded protection under the ESA (USFWS concurrence letter issued February 26, 2008 and presented in Appendix I of the June 2008 Preliminary BA). As discussed in **Responses to Comments D2** and **D4**, on page 4.4-17 of the Draft EIR, and in the letter provided by the USFWS (Appendix I of Appendix T-3), the tiger salamanders found in the reservoir are non-native and a threat to other wildlife species, specifically native special-status amphibian species, including the California red-legged frog and Western spadefoot toad.

Revisions have been incorporated into the Draft EIR to update the status of the CTS listing in response to this comment; please refer to **Section 4.0 Revisions to the Draft EIR, Biological Resources, Section 4.4,** for more information. As noted in the revisions, the CDFG may determine that authorization under the CESA is required for "take" of onsite tiger salamanders if CDFG decides to exert jurisdiction over the tiger salamanders. The CDFG has concurred with the USFWS determination that a threat to California tiger salamander is hybridization with non-native salamanders as described in a DFG report, *A Status Review of the California Tiger Salamander* (January 11, 2010), which recommends the listing of the species under the CESA. The CDFG report recommends as a management measure that the DFG "in cooperation with the USFWS, determine what level of CTS x NNTS [California tiger salamander and non-native tiger salamander] hybridization warrants management actions such as eradication or control." Also, as discussed in the CDFG report, Fitzpatrick and Shaffer (2007) recommend that slightly introgressed populations should not lose their protected status. However, as summarized in the genetic study conducted for this project by the Shaffer Lab, the tiger salamander population on-site is highly introgressed, and the USFWS determined that this population is not afforded protection under the federal ESA. Coordination with the CDFG will occur to determine whether the CDFG will take jurisdiction over the on-site tiger salamander population. It should be noted that the CESA currently enables those who have already obtained "take" authorization under the Federal ESA to obtain a like authorization under the CESA; however, there is no known comparable process when the Federal Agency (USFWS) has

determined "no take." Additional text has been added to **Section 4.0 Revisions to the Draft EIR, Biological Resources, Section 4.4,** with this information.

D3: This comment reflects CDFG's concerns regarding unmitigated impacts to special status species and "take" of the Federal endangered and State threatened San Joaquin kit fox (*Vulpes macrotis mutica*). This comment is a summary of later comments (Comments D-8 through D-11). A master response to all these comments is included herein.

This comment (also stated in Comment D-8) identifies that a State Incidental Take Permit will likely be required for impacts to the San Joaquin kit fox and that the EIR should address actions necessary to comply with the CESA. The Draft EIR has been revised to indicate that the project will be required to comply with applicable CDFG requirements related to the CESA and to provide further background on permit requirements. Please refer to **Section 4.0 Revisions to the Draft EIR, Biological Resources, Section 4.4.**

Specifically, this comment (also stated in Comment D-9) states that the analysis in the Draft EIR would not support the CDFG's issuance of an Incidental Take Permit for San Joaquin kit fox.

CEQA Guidelines section 15065 lists certain conditions which are considered to be mandatory findings of significance whereby the lead agency must find that a project may have a significant effect on the environment and thereby require an EIR for the project. One such condition is if "[t]he project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare, or threatened species." (Guidelines, § 15065(a)[1].) Guidelines section 15380 defines the terms "species," "endangered," "threatened" and "rare."

Applying the facts of the project to these biological resource considerations under CEQA provides for the following:

Based on the analysis contained in the Preliminary Biological Assessment and supporting technical analysis, the proposed project site was identified as being located within the historic distribution of San Joaquin kit fox and the proposed project would, therefore, represent an encroachment into a known San Joaquin kit fox corridor. In addition, based on the analysis contained in the General Plan EIR, the project site was also identified as potential foraging habitat for special-status species, including San Joaquin kit fox. Although the proposed project site is not located within San Joaquin kit fox critical habitat, the Draft EIR, based on the City of Soledad's determination in the General Plan EIR, assumed that San Joaquin kit fox habitat was present on the project site since critical habitat is located within 2 km of the project site. Additionally, at the time of the Draft EIR preparation, information showed a natal den was observed on-site. Since the release of the Draft EIR, it has been determined that no natal den was found on site (Biosearch, personnel communication, 2010; identification of the natal den was incorrectly reported in Biosearch Report). A San Joaquin Kit Fox Early Evaluation Report was prepared by Biosearch biologists, although full protocol-level surveys were not completed for the proposed project based on the determination of the City of Soledad. Based on USFWS Ventura Office review of the early evaluation report prepared by Biosearch, San Joaquin kit fox northern-range protocol-level surveys were recommended (pers. comm. Roger Root, USFWS). The Draft EIR states that a finding of "no take" of the species can only be confirmed by completing the protocol-level survey for this species and having a negative finding in consultation with USFWS and the CDFG. Since protocol-level surveys for this species have not yet been conducted, the Draft EIR assumed kit fox presence. As a result, the Draft EIR, in order to be as conservative as possible, assumed impacts were considered significant because the proposed project would encroach into the grassland habitat area above the 400-foot elevation contour of the Gabilan Range, which is identified in the General Plan EIR as an important wildlife corridor, and

General Plan policies specifically prohibit development within that area to avoid impacts to biological resources.[1]

This comment (also stated in Comment D-9) contends that the Draft EIR defers the formulation of mitigation measures for kit fox as well as several other species. This comment also contends that there is a lack of baseline data and that therefore it is difficult to determine how significance determinations were made for this project.

In response to the comment regarding deferral of mitigation, CEQA requires that Environmental Impact Reports determine the level of significance of impacts to environmental resources and to identify appropriate mitigation approaches. Requiring the development of detailed mitigation plans at a later date, which would be subject to review and approval by other state and federal regulatory agencies, is standard and not inconsistent with CEQA Guidelines (Section 15126.4[a][1][b]). This is not considered deferral and does not render the present CEQA analysis inadequate or incomplete as mitigation measures commit the City to implementation and performance standards are identified. Final approval of the mitigation plan would be made by the USFWS and CDFG during the State and Federal permitting process. The USFWS and CDFG will likely place further restrictions on the project regarding impacts to upland biological resources. In *Defend the Bay v. City of Irvine* 2004 119 CA 4th 1261, 1275, 15 CR3d 176, the court found no improper deferral of mitigation even though future investigations and consultation with regulatory agencies were required because the City was committed to implement the measures and specific criteria were identified.

In response to this comment, the Draft EIR has been revised to clarify the extent of impacts to San Joaquin kit fox and provide additional mitigation and performance standards; please refer to **Section 4.0 Revisions to the Draft EIR, Biological Resources, Section 4.4,** for more information.

D4: This comment states that the Draft EIR should be revised to identify that the filling of the on-site reservoir may warrant mitigation and require a Lake or Streambed Alteration Agreement (LSAA) with CDFG. As described in the Draft EIR (see Draft EIR page 4.4-17), the proposed project would permanently impact 0.17 acres of wetland habitat that exist as a thin band of emergent vegetation on the fringe of four small man-made agricultural ponds and reservoirs. The impacts to the wetlands were determined to be less-than-significant for the reasons described below from page 4.4-17 of the DEIR:

> "The function and value of these mad-made wetland resources are marginal as a result of on-going disturbance from agricultural uses. In addition, the value of the existing reservoir located in the uplands portions of the site as wildlife habitat is limited as it supports a non-native predatory amphibian: the barred tiger salamander. This salamander is known to prey on native special status amphibian species such as the California tiger salamander and the California red-legged frog when present. In addition, hybridization between the non-native barred salamander and the native tiger salamander has been identified by the U.S. Fish and Wildlife Service as a significant threat to the native California tiger salamander.

[1] [1] The analysis contained in the Draft EIR is tiered from the City's 2005 General Plan EIR which identified a number of expansion areas to accommodate future growth. The proposed project site is located within portions of several of the identified expansion areas. The analysis in the General Plan EIR determined that General Plan buildout would result in a number of significant and unavoidable impacts to biological resources, specifically special-status species (i.e. San Joaquin kit fox). While the proposed project is located within several of the designated expansion areas, the level of intensity of development associated with the proposed project would exceed the estimates contained in the General Plan EIR. Specifically, the proposed project would result in the development of new urban features, including infrastructure, residences, and other features above the 400-foot elevation contour, which was identified as an area of particular biological sensitivity.

> Although development of the proposed project would impact approximately 0.17 acres of fringe wetlands of marginal habitat value, impacts are considered to be less-than-significant as development of the proposed project would entail the construction of a number of aquatic resources as a component of golf course development, and storm water drainage facilities. More specifically, as identified in Section 5.1.3 of the Specific Plan, two of the existing retention ponds would be converted to storm water facilities as part of project development. While formal plans have not been submitted at this time for development of the golf course, future on-site ponds and other resources would significantly exceed the size of the existing on-site aquatic resources."

It is acknowledged that a LSAA may be required for the project prior to filling of the on-site reservoir. As described above, the wetland resources are marginal and constitute a threat to native listed wildlife species and, therefore, impacts to these wetlands are considered less-than-significant under CEQA. However, in addition to the CEQA process, it is understood that the project is subject to the regulations pursuant to Fish and Game Code Section 1600 et seq. The project is required to comply with these regulations and will provide DFG Notification prior to filling the reservoir. Subsequently, if CDFG determines any additional mitigation is required, the project applicant would be required to implement those measures. Additional text has been added to **Section 4.0 Revisions to the Draft EIR, Biological Resources, Section 4.4,** to discuss the LSAA requirements and that the project may require a LSAA with CDFG.

D5: Comment acknowledged. No response necessary.

D6: Comment acknowledged. No response necessary.

D7: This comment contends that a Statement of Overriding Considerations for significant impacts to State-listed species is not considered adequate by the CDFG to support the issuance of a State Incidental Take permit or LSAA. The comment notes that in order for the City as the Lead Agency to complete a CEQA analysis that would satisfy CDFG permitting requirements, the EIR must fully describe potential project-related impacts, identify avoidance and/or mitigation measures, and fully mitigate impacts to these species.

The Draft EIR and supporting technical analyses clearly describe the extent of biological impacts associated with the proposed project. Moreover, mitigation measures have been identified, wherever feasible, to reduce the extent of those impacts. The Draft EIR found that some impacts associated with the proposed project cannot, however, be reduced to a less-than-significant level. As described throughout the Draft EIR, the project, as currently proposed, would result in the development of an area that has previously been identified in the General Plan and General Plan EIR as an important wildlife habitat corridor. Accordingly, the General Plan limits development within that area to avoid impacting sensitive biological resources. Specifically, the Draft EIR found that, absent the required survey work in accordance with the USFWS and CDFG protocols to prove "no take" of the San Joaquin kit fox and associated consultation based upon completion of the protocol-level surveys, the conservative finding of significant unavoidable impact occurs. The habitat for kit fox is found primarily in the grassland habitat, consistent with the 400-foot elevation contour identified by the City General Plan as wildlife habitat corridor. Therefore, since the proposed project includes development above the 400-foot elevation contour, an area identified as a wildlife corridor, and protocol-level surveys have not been conducted to provide evidence that the kit fox will not be harmed, the Draft EIR found the proposed project would significantly and unavoidably impact this species by introducing new urban elements within a previously undeveloped area resulting in direct mortality, loss of habitat, habitat fragmentation, and loss of dens. This impact cannot be avoided under the current design of the proposed Specific Plan without elimination of development within that area of the project site or, alternatively, a concurrence of "no take" and negative finding from both the USFWS and CDFG.

The CDFG states that they will not be able to issue an Incidental Take Permit relying on the CEQA findings of the Draft EIR, and that CDFG may need to act as Lead CEQA agency and complete a subsequent CEQA document to support permit issuance. The Draft EIR found that the impacts to the San Joaquin kit fox could not be mitigated to less than significant with the proposed plan and project description. This comment is acknowledged and as discussed in **Responses to Comments D10** and **D11**, the Draft EIR identifies two alternatives that reduce the significant and unavoidable impacts to wildlife species and habitat to a less-than-significant level. Further, the Final EIR amplifies this discussion and provides an analysis of a sub-alternative that would also would substantially lessen potential impacts to biological resources located within the project area by eliminating both development within the foothill portions of the project site as well as eliminating the golf course project. The Draft and Final EIR found that development of these alternatives would substantially lessen project impacts to kit fox to less than significant. While specific mitigation would still be warranted, biological resource impacts could potentially be reduced to a less-than-significant level. Please note that the Draft EIR did not find impacts to wetlands significant and unavoidable, thus there is no need for a Statement of Overriding Considerations for this impact and the CDFG could rely on the City's CEQA findings to support issuance of a LSAA.

D8: This comment identifies that a State Incidental Take Permit will likely be required for impacts to the San Joaquin kit fox and that the EIR should address actions necessary to comply with the CESA. The Draft EIR identifies that the project will be required to comply with applicable CDFG requirements related to CESA. A discussion of the CESA is included in the Draft EIR under *"State Laws and Regulations, California Endangered Species Act."* Additional information on the CESA and further background on permit requirements has been added to this Final EIR; please refer to **Section 4.0 Revisions to the Draft EIR, Biological Resources, Section 4.4,** and Appendix L of this **FEIR** for further information on the CESA. Also refer to **Response to Comment D3**.

D9: This comment contends that the analysis in the Draft EIR is inadequate to support the issuance of a State Incidental Take Permit for impacts to San Joaquin kit fox. Projects that would result in impacts to a State listed species must obtain an "incidental take" permit pursuant to §2081 of the Fish and Game Code. The letter indicates that CDFG issues incidental take permits only under certain conditions. Specifically, this comment states that impacts must be fully mitigated in order for CDFG to issue a State Incidental Take Permit. As described in **Responses to Comments D3** and **D7,** potential impacts to San Joaquin kit fox cannot be fully mitigated with the project as currently designed. The proposed project would result in the development of new residential structures and project infrastructure in an area that is identified in the General Plan and General Plan EIR as an important wildlife corridor. In order to ensure potential impacts to biological resources were minimized, the General Plan EIR identified mitigation and policy to restrict the extent of development within this area. As a result, the Draft EIR found that the impacts from the proposed project on the San Joaquin kit fox cannot be fully mitigated. As described in **Response D7**, a number of project alternatives would substantially lessen the extent of impacts by avoiding development within these areas. The Final EIR has clarified and amplified the residual impact of these alternatives on the kit fox. Please refer to **Section 4.0 Revisions to the Draft EIR, Biological Resources** in this Final EIR. Also refer to **Response to Comment D10 and D11**.

This comment also contends that the Draft EIR must fully describe potential project impacts to San Joaquin kit fox and identify mitigation measures to minimize the extent of those impacts. The Draft EIR and supporting technical analyses clearly describe the extent of impacts to San Joaquin kit fox. As described previously, the analysis contained in the Draft EIR is consistent with the General Plan EIR, which determined that buildout of the General Plan would result in significant impacts to special-status species, including the San Joaquin kit fox, due to the loss of foraging habitat.. The analysis contained in this EIR has been supplemented with addition specifics to the mitigation measures identified.

D10: Comment acknowledged. The Draft EIR identifies these potential impacts on page 4.4-16, Impacts and Mitigation, and in the impact discussions on pages 4.4-19 and 4.4-20 describing impacts to special-

status wildlife and the San Joaquin kit fox. The Draft EIR also identifies two alternatives that avoid any development in the upland area of the project site (above the 400 foot contour); these alternatives both reduce these impacts to a less-than-significant level. In addition, the Final EIR provides another variation of an alternative (eliminating the golf course and also the avoidance of the upland area) that also reduces these impacts to less than significant. Please refer to **Section 4.0 Revisions to the Draft EIR, Alternatives**, in this Final EIR. Please also see **Response to Comment D11** for more information regarding the alternative.

D11: The comment requests an alternative be identified that substantially lessens kit fox impacts. Please also refer to **Response to Comment D10**, above. The Draft EIR identified two alternatives that reduce the significant and unavoidable impacts to kit fox wildlife species and habitat to a less-than-significant level. In addition, the Final EIR provides another variation of an alternative that also reduces these impacts to less than significant. Specifically, the Draft EIR identifies the General Plan Consistency Alternative and the Reduced Density Alternative in **Section 6.3 and 6.4, under Biological Resources,** and finds that development of these proposed alternatives would substantially lessen potential impacts to biological resources located within the project area by eliminating development within the foothill portions of the project site. As stated in the Draft EIR, under the Reduced Density Alternative: "As identified in the biological resources section of this EIR, impacts associated with the loss of Open Space was identified as a potentially significant impact that would affect a number of federally listed species. This alternative would eliminate potential impacts to badgers, borrowing owl, Salinas pocket mouse, kit fox, and other species identified as special status. The grassland habitat located in the foothill portion of the Gabilan Range is considered a biologically sensitive area of the project site. Development of this alternative would substantially lessen project impacts. While specific mitigation would still be warranted, impacts could potentially be reduced to a less-than-significant level."

The Draft EIR also discussed and evaluated the General Plan Consistency Alternative, an alternative that is consistent with existing General Plan policy by avoiding development in the upland grassland (above 400 foot contour). The Draft EIR found that this alternative also reduces the extent of biological impacts, including impacts to kit fox. Please see **Section 6.0** of the Draft EIR for an analysis of those alternatives. In particular, this General Plan-consistent alternative, by limiting development to below the 400-foot elevation contour and significantly reducing the amount and extent of development, avoids development within upland habitat and significantly reduces habitat fragmentation. As a result, this alternative is found to effectively reduce impacts to San Joaquin kit fox to a less-than-significant level.

The mitigation measures identified in the Draft EIR, as modified, are also considered adequate to ensure the proposed project would mitigate project impacts to the extent feasible. These mitigation measures are considered adequate for the purposes of CEQA; please see **Response to Comment D3** regarding issues associated with deferral of mitigation under CEQA. Also **Refer to Response to Comment D17.** Also, additional information has been added to the Final EIR to clarify alternatives that would reduce impacts to the kit fox, per the letter request. Please refer to **Section 4.0 Revisions to the Draft EIR, Biological Resources and Alternatives Sections**, in this Final EIR.

D12: The comment requests more detail regarding the botanical survey conducted for the project. The botanical survey was conducted on July 28, 2006, by DD&A Senior Environmental Scientist, Josh Harwayne. The methodology for determining the potential presence of special-status species is described on page 3 of Appendix T-3 of the Draft EIR. In summary, California Natural Diversity Database (CNDDB) occurrence records for the Soledad quad and all surrounding quads (9 quads total) were reviewed in order to determine which special-status species are known or have the potential to occur at the proposed project site. In addition, the USFWS list of federally protected species known to occur in County was reviewed. DD&A also contacted other knowledgeable biologists familiar with the region for any additional occurrence information that may not appear in the CNDDB.

From these sources, combined with personal knowledge and experience, a list of special-status plant and wildlife species known, or with the potential to occur, in the vicinity of the project site was compiled. Appendix F of the DEIR lists these species along with their legal status, habitat requirements, and a brief statement of the likelihood to occur.

In addition to the above, page 6 of Appendix T-3 in the Draft EIR describes the methodology for conducting the botanical survey, including data sources for plant habitat and distribution, nomenclature, and habitat characterization. The entire project site was surveyed for botanical resources following the applicable guidelines outlined in *Guidelines for Conducting and Reporting Botanical Inventories for Federally listed, Proposed and Candidate Plants* prepared by the USFWS (January 2000), *Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities prepared by CDFG* (revised May 8, 2000), and *CNPS Botanical Survey Guidelines* prepared by the California Native Plant Society (revised June 2, 2001). The "Methods" discussion from the Biological Assessment has been inserted with clarifications in response to this comment. Please refer to **Section 4.0 Revisions to Draft EIR, Biological Resources, Section 4.4,** for more information.

D13: In Appendix F, Table of Special-status Species Potentially Present in the Project Vicinity, of the Draft EIR, the likelihood to occur statement for each special-status plant species states that the project site either lacked suitable habitat or the species was identifiable at the time of survey (e.g., a conspicuous species) with the exception of Lemmon's jewelflower. Therefore, the botanical survey was conducted at a time considered sufficient to identify potential impacts to special-status plant species. Page 4.4-11 of the DEIR states that the only special-status plant species with the potential to occur within the project site is Lemmon's jewelflower. Please also refer to **Response to Comment D12** above for additional information regarding survey methodology.

D14: This comment identifies survey protocols that should be implemented for botanical inventories. Please refer to **Response to Comment D12** above.

D15: The comment requests clarification regarding how significance findings were made given the lack of baseline surveys for the Lemmon's jewelflower, Townsend's big-eared bat, pallid bat, and western mastiff bat. In accordance with CEQA Guidelines, significance findings were made utilizing the Thresholds of Significance on page 4.4-16 of the Draft EIR based on the results of the botanical survey and wildlife surveys, literature review, and professional experience (see **Response to Comment D12** regarding methodology).

As stated in **Response to Comment D12**, it was determined during the botanical survey on July 28, 2006, that there was marginally appropriate habitat for the Lemmon's jewelflower within the mixed grassland habitat on the project site (above the 400-foot elevation contour). Because of the presence of only marginally appropriate habitat, distance from the nearest documented occurrence (approximately 10 miles away), and its legal status (not listed under ESA or CESA), it was determined that the species had a moderate likelihood to occur within the mixed grassland habitat on the project site. Therefore, potential impacts to this species may occur, if present, and were identified and considered less-than-significant with the implementation of the mitigation measure identified in the Draft EIR. Mitigation Measure 4.4-7 of the Draft EIR, which has been revised per comments received from CDFG (please refer to **Biological Resources, Section 4.4, Revisions to the Draft EIR**), includes the requirement to conduct pre-construction surveys to determine presence, and if present, quantify the extent and prepare and implement a mitigation management plan in consultation with CDFG.

Bats are considered a cryptic species and can occupy a site at any time. Although no bats were observed during the field surveys, the field surveys did observe marginal roosting and foraging habitat for the Townsend's big-eared bat, pallid bat, and western mastiff bat within the project site (page 4.4-12 of the Draft EIR). The marginal roosting habitat within the project site includes trees, rocky outcrops, barns, and out-buildings, all of which are limited in number. Because of the presence of only marginal roosting

habitat, distance from the nearest documented occurrences (between 6 and 10 miles away), and their legal status (none of these species are listed under ESA or CESA), it was determined that the three bat species had a moderate likelihood to occur on the site. Therefore, potential impacts to these species may occur, if present, and were identified and considered less-than-significant with the implementation of the mitigation measure identified in the Draft EIR Mitigation Measure 4.4-12 of the Draft EIR, which has been revised per comments received from CDFG (please refer to **Section 4.0 Revisions to the Draft EIR, Biological Resources, Section 4.4,** includes the requirement of a pre-construction survey of potential roosting habitat no more than 30 days prior to impacting any potential roosting habitat.

Although the comment suggests that additional special-status plant species other than Lemmon's jewelflower may occur on-site, pages 4.4-11 and 4.4-18 of the Draft EIR state that no other special-status plant species have the potential to occur on the project site for reasons of lack of suitable habitat and not observed (conspicuous species). Please also see Appendix F of the Draft EIR and **Response to Comment D12** above.

D16: The comment requests clarification regarding how significance findings were made given the lack of baseline surveys for the California red-legged frog and Western spadefoot toad. In accordance with CEQA Guidelines, significance findings for these species were made utilizing the Thresholds of Significance on page 4.4-16 of the Draft EIR based on the results of the botanical survey and wildlife surveys, literature review, and experience (see **Response to Comment D12** regarding methodology). Extensive aquatic surveying was done within the agricultural ponds and reservoir; however, no California red-legged frogs or Western spadefoot toads were observed during any the aquatic surveys. The details of the aquatic sampling effort outlined in Appendix T-3 have been added to the text of the Draft EIR (please refer to **Section 4.0 Revisions to the Draft EIR, Biological Resources**).

As stated on page 4.4-13 of the Draft EIR, the on-site reservoir and associated upland habitat provide potential breeding and estivation habitat for the California red-legged frog. In addition, the project site is located within the historic range of this species and the CNDDB reported several occurrences within 8 km of the project site. In the absence of conducting protocol-level surveys as outlined in the *Revised Guidance on Site Assessment and Field Surveys for the California Red-legged Frog* (USFWS, August 2005), it was determined that there was the potential for the California red-legged frog to occur within the project site. As identified on page 4.4-24 of the Draft EIR, the proposed removal of a potential breeding site and grading of upland estivation habitat (specifically the mixed grassland habitat above the 400-foot contour) were determined to be significant and unavoidable impacts to the California red-legged frog without the results of a presence/absence survey.

Additionally, although the Western spadefoot toad has no listing status and is not protected under the Federal or State ESAs, the project site contains potential breeding habitat (i.e., the reservoir) and upland habitat (i.e., the mixed grassland habitat above the 400-foot contour) and is within the range of the species. As identified on page 4.4-24 of the Draft EIR, the proposed removal of a potential breeding site and grading of upland estivation habitat (specifically the mixed grassland habitat above the 400-foot contour) were determined to be significant and unavoidable impacts to the Western spadefoot toad without the results of a focused survey. Although numerous aquatic surveys were conducted at the project site, the surveys occurred a little late in the toad's breeding period (typically January to May) and, therefore, there is the potential that the toad could not have been identified. Mitigation Measure 4.4-17 of the Draft EIR has been revised to clarify the amphibian survey protocol (please refer to **Section 4.0 Revisions to the Draft EIR, Biological Resources, Section 4.4.**

D17: The comment states that the Draft EIR defers the formulation of mitigation measures to resource-agency consultation and/or permit application citing a case where the Court of Appeal struck down mitigation measures which required formulating management plans developed in consultation with State and Federal wildlife agencies after project approval. Mitigation Measures in the Draft EIR have been

revised to clarify mitigation and timing of the mitigation (please refer to **Section 4.0 Revisions to the Draft EIR, Biological Resources, Section 4.4, Mitigations.**

The comment also states that it is unclear how the significance findings were made for the eleven significant impacts identified without the formulation of mitigation measures. This comment was repeated for seven of these impacts and is addressed in the following responses: for the San Joaquin kit fox, please refer to **Response to Comment D3**; for the pallid bat, Townsend's big-eared bat, western mastiff bat, and Lemmon's jewelflower, please refer to **Response to Comment D15**; and for the California red-legged frog and Western spadefoot toad, please refer to **Response to Comment D16**. The mitigation measures associated with these species (Mitigation Measures 4.4-7, 4.4-9, 4.4-10, 4.4-12, and 4.4-17) have been revised to strengthen the commitment of the City and clearly identify performance standards. The remaining significant biological impacts identified in the comment are addressed in this response below.

Salinas pocket mouse: A comprehensive small mammal trapping study was conducted for this project, and a Salinas pocket mouse was identified within the mixed grassland habitat (above the 400-foot contour) and presence of this species was confirmed within the project site (please refer to page 4.4-11 of the Draft EIR and Appendix B of Appendix T-3 of the Draft EIR). As described on page 4.4-21 of the Draft EIR, due to the loss of habitat and direct and indirect mortality that would occur as a result of constructing the project as designed, impacts to the Salinas pocket mouse were determined to be significant and unavoidable. Although the impact can not be reduced to a less-than-significant level due to current project design, a mitigation measure was identified to reduce the impact to the greatest extent feasible. The mitigation measure (Mitigation Measure 4.4-13) has been revised to strengthen the commitment of the City and clearly identify performance criteria. Please refer to **Section 4.0 Revisions to the Draft EIR, Biological Resources.**

Wildlife Movement and Nursery sites: As described on page 4.4-25 of the Draft EIR, the General Plan EIR was reviewed for the significance determination for impacts to wildlife movement and nursery sites. The General Plan EIR identifies "adverse but not significant" impacts to wildlife movement based on the availability of the Salinas River and Arroyo Seco River corridors in the project area. The General Plan, field surveys, analysis of biological impacts, review of project plans, and professional experience were the basis of the significance determination. The impact was determined to be significant and unavoidable primarily due to the project's proposed development above the 400-foot contour and because the General Plan EIR requires that the portions of the Gabilan Range (an important wildlife corridor) above the 400-foot elevation contour be conserved as open space. Although the mitigation measures identified in the Biological Resources section of the Draft EIR would minimize this impact to the greatest extent feasible, the impact found the project's impacts to wildlife movement and nursery sites to be significant and unavoidable. Even with the revisions to these mitigation measures (please refer to **Section 4.0 Revisions to the Draft EIR, Biological Resources**, this impact remains significant and unavoidable without project redesign to avoid impacts to the habitat above the 400-foot contour.

Habitat Fragmentation: Page 4.4-19 of the Draft EIR identifies the habitat fragmentation impact as significant and unavoidable. The General Plan, field surveys, analysis of biological impacts, review of project plans, and professional experience were the basis of the significance determination. As described on page 4.4-19 of the Draft EIR, the project development would divide and disrupt the vast majority of the wildlife on the project site and would represent an urban encroachment into the foothills of the Gabilan Range. Although mitigation measures were identified to minimize the habitat fragmentation impact to the greatest extent feasible, the impact remained significant and unavoidable without project redesign to avoid impacts to the habitat above the 400-foot contour.

Vegetation/oak tree removal: On page 4.4-18, the Draft EIR identifies the potential impacts to vegetation and tree removal and determines that the impacts are less-than-significant with the implementation of the mitigation measures identified. As described on pages 4.4-1 and 4.4-6, the biological impact analysis

included field surveys to characterize and map the habitats within the 920-acre project site (Please note that the details of the survey methodology outlined in the Appendix T-3 have been added to the text of the Draft EIR. Please refer to **Section 4.0 Revisions to the Draft EIR, Biological Resources**). The data collected during field surveys, literature review, and professional experience were the basis for the significance determination for impacts to vegetation. The project site contains mostly active and fallow agricultural land (approximately 777 acres, or 84% of the project site), and it was determined that the vegetation on-site, although mostly man-made and disturbed, was extensive and provided biological value. Therefore, impacts to vegetation on the project site were determined to be less-than-significant with the implementation of the mitigation measures identified (Mitigation Measures 4.4-3 through 4.4-6). These are standard mitigation measures implemented during the construction phase of the project to protect the vegetation not planned for removal. None of these mitigation measures defer the formulation of mitigation until after project approval; however, in response to the comment, revisions were made to these measures to clarify the intent, ensure the commitment to implementation and clearly identify performance criteria

Since the specific locations of all homes and buildings were not known at time of the field surveys and during the biological analysis, it was assumed that all trees within the project site would be removed, which was considered a potentially significant impact. Due to the presence of many non-native trees and the requirement to comply with General Plan policies, it was determined that the impact could be reduced to a less-than-significant level with the implementation of the mitigation measures identified (Mitigation Measures 4.4-1 and 4.4-2) requiring the preparation of a Forest Management Plan.

D18: Please refer to **Response to Comment D2** above.

D19: Comment acknowledged. As stated in **Response to Comment D4**, additional text has been added to **Section 4.0 Revisions to the Draft EIR, Biological Resources,** to discuss the LSAA requirements and that the project may require a LSAA with CDFG. As discussed on page 4.4-17 of the Draft EIR, the CEQA analysis determined that impacts to wetlands associated with the man-made agricultural ponds and reservoir were considered less-than-significant due to their low function and value and because they support a population of non-native salamanders that threaten native wildlife including other special-status amphibian species – not because the proposed golf course features and stormwater facilities would offset impacts. Therefore, no mitigation is required under CEQA. Prior to filling the reservoir, the project applicant is required to notify the CDFG pursuant to LSAA regulations and determine whether a LSAA with CDFG is required. If a LSAA is required, the project applicant will be required to implement any additional mitigation measures identified in the permit. Further, since the Draft EIR did not find impacts to wetlands significant and unavoidable, thus necessitating a Statement of Overriding Considerations, the CDFG could rely on the City's CEQA findings to support permit issuance. Page 4.4-17 of the Draft EIR includes a discussion of the jurisdiction of the wetlands on the project site. It was determined that the wetlands are not contiguous with other jurisdictional wetlands and/or waters of the U.S and do not have any hydrologic connectivity or abut any permanent water body. The U.S. Army Corps of Engineers (Corps) do not regulate wetlands that are hydrologically isolated and geographically distinct from other jurisdictional resources in the vicinity. As a result, the fringe wetlands identified on site are not under the jurisdiction of the Corps under the Clean Water Act. However, as recommended by this comment, the project applicant will request a jurisdictional determination from the Corps to verify this conclusion. Additional text has been added to **Section 4.0 Revisions to the Draft EIR, Biological Resources,** to discuss the LSAA requirements and that the project will request a jurisdictional determination from the Corps.

D20: As described on page 4.4-24 of the Draft EIR, the project proposes to fill the reservoir within the project site. Although aquatic sampling was conducted numerous times within the reservoir at different times of the year, no California red-legged frogs or Western spadefoot toads were observed. Mitigation Measure 4.4-17 of the Draft EIR, which has been revised per comments received from CDFG (please refer to **Section 4.0 Revisions to the Draft EIR, Biological Resources,** requires that protocol-level

surveys be conducted for California red-legged frogs and Western spadefoot toad at each aquatic resource on the project site prior to issuance of any grading permits. If either species is determined, the project applicant will be required to comply with any additional conditions of the LSAA that pertain to these species. Please refer to **Response to Comment D-16** for more information regarding determining the presence of California red-legged frog and Western spadefoot toad within the project site.

D21: As discussed in **Responses to Comments D4** and **D19**, if a LSAA is required, the project applicant will be required to implement any additional mitigation measures identified in the permit, including preparation and implementation of wetland mitigation plan that includes the criteria described in the comment. As described on page 4.4-17, it is expected that the proposed aquatic features of the golf course and stormwater detention basins will provide equal or better habitat function and value than the man-made agricultural ponds and reservoir. Additional text has been added to **Section 4.0 Revisions to the Draft EIR, Biological Resources,** to discuss the LSAA requirements and that the project may require a LSAA with CDFG.

D22: Additional text has been added to Mitigation Measure 4.4-5 to address this comment. Please refer to **Section 4.0 Revisions to Draft EIR** for more information.

STATE OF CALIFORNIA Arnold Schwarzenegger, *Governor*

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-4082
(916) 657-5390 - Fax

RECEIVED
DEC 8 2008
STATE CLEARING HOUSE

November 13, 2008

Susan Hilinski
City of Soledad
248 Main Street, P. O. Box 156
Soledad, CA 93960

Clear
12/18/08
e

RE: SCH#~~2006061129~~ 200608129 Miravale III Draft Specific Plan; Monterey County.

Dear Ms. Hilinski:

The Native American Heritage Commission (NAHC) has reviewed the Notice of Completion (NOC) referenced above. The California Environmental Quality Act (CEQA) states that any project that causes a substantial adverse change in the significance of an historical resource, which includes archeological resources, is a significant effect requiring the preparation of an EIR (CEQA Guidelines 15064(b)). To comply with this provision the lead agency is required to assess whether the project will have an adverse impact on historical resources within the area of project effect (APE), and if so to mitigate that effect. To adequately assess and mitigate project-related impacts to archaeological resources, the NAHC recommends the following actions:

- ✓ Contact the appropriate regional archaeological Information Center for a record search. The record search will determine:
  - If a part or all of the area of project effect (APE) has been previously surveyed for cultural resources.
  - If any known cultural resources have already been recorded on or adjacent to the APE.
  - If the probability is low, moderate, or high that cultural resources are located in the APE.
  - If a survey is required to determine whether previously unrecorded cultural resources are present.
- ✓ If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure.
  - The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological Information Center.
- ✓ Contact the Native American Heritage Commission for:
  - A Sacred Lands File Check. **USGS 7.5 minute quadrangle name, township, range and section required.**
  - A list of appropriate Native American contacts for consultation concerning the project site and to assist in the mitigation measures. **Native American Contacts List attached.**
- ✓ Lack of surface evidence of archeological resources does not preclude their subsurface existence.
  - Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.
  - Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.
  - Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5(e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

Sincerely,
Katy Sanchez
Katy Sanchez
Program Analyst

CC: State Clearinghouse

LETTER E: CALIFORNIA NATIVE AMERICAN HERITAGE COMMISSION (NAHC)

E1: This comment does not raise an environmental issue that warrants a response under CEQA. No response is necessary.

E2: This comment identifies that the appropriate regional archaeological Information Center should be contacted to conduct a record search to determine if 1) the project site has been previously surveyed, 2) if any known cultural resources have already been recorded on or adjacent to the site, 3) the probability of cultural resources being present on site, and 4) if a survey is considered required to determine the presence of previously unrecorded cultural resources. As identified in **Section 4.5 Cultural Resources** in the Draft EIR, the proposed project site has been the subject of extensive archaeological and historical evaluation. As described in the Draft EIR, a Preliminary Archaeological Reconnaissance, Phase One Historic Review, and CEQA Impact Analysis and Mitigation Report were prepared in support of the Draft EIR. These analyses included a records search of files at the Northwest Regional Information Center and no previously listed archaeological sites were identified.

E3: This comment suggests that, if an archaeological inventory survey is required, then a professional report detailing and findings and recommendations of the records search and field survey should be prepared. A Preliminary Archaeological Reconnaissance was prepared for the proposed project by Archaeological Consulting. Based on Archaeological Consulting's records search and site reconnaissance, they determined that the proposed project should not be delayed for archaeological reasons. Moreover, Archaeological Consulting determined that the project area does not contain surface evidence of potentially significant archaeological resources or any other archeological site of significance.

E4: The City has submitted a request to the Native American Heritage Commission for a Sacred Lands File Check.

E5: This comment identifies that the lack of surface evidence of archeological resources does not preclude their subsurface existence. As a result, this comment suggests that the City should include provisions for the identification and evaluation of accidentally discovered archaeological resources. In addition, the comment also states that measures should be include to ensure that the appropriate culturally affiliated Native American tribe is contacted regarding the disposition of recovered artifacts and human remains. Mitigation Measures 4.5-8 and 4.5-9 contain provisions consistent with the contents of this comment.

cc: Stone

Letter F

LAFCO *of Monterey County*

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KATE McKENNA, AICP
Executive Officer

RECEIVED
DEC 16 2008
PLANNING DEPARTMENT

December 15, 2008

Susan Hilinski, Senior Planner
City Hall
City of Soledad
248 Main Street
Soledad, CA 93960

RE: Notice of Preparation for the Draft Environmental Impact Report for Miravale Phase III Specific Plan

Dear Ms. Hilinski:

Thank you for the opportunity to review and comment on Draft Environmental Impact Report (DEIR) for the Miravale III Specific Plan.

As you are aware, LAFCO has the statutory responsibility to make determinations regarding changes in local government boundaries. For purposes of CEQA compliance, we are a responsible agency for the Miravale III project. In this role, on September 29, 2006, LAFCO commented on the Notice of Preparation for this environmental document. F-1

As outlined in our September 2006 letter LAFCO will need to consider the Miravale III proposal in light of any other Sphere of Influence amendments and subsequent annexation proposals anticipated by the City. We continue to extend an invitation to the City of Soledad to participate in LAFCO's preliminary review process as a way to promote informal dialogue, understanding and cooperation. The preliminary review process would consist of an informal presentation and discussion about the City's comprehensive growth plans as identified in the City's adopted General Plan. The Miravale III project would be part of that discussion. We encourage the City to take part in the preliminary review process prior to formal submittal of Soledad's comprehensive Sphere of Influence amendment proposal and annexation proposals to LAFCO. F-2

The September 2006 letter also noted the statutory requirement for early consultation between the City and County (Government Code Section 56425b) before the formal Sphere of Influence amendment is submitted to LAFCO. Consultations with other cities have included discussion of the preferred direction of city growth, agricultural buffers, mitigation for the loss of agricultural land, and regional transportation issues. This consultation is in addition to the requirements for the City to consult with the County regarding a tax transfer agreement in accord with Revenue and Taxation Code Section 99. F-3

Regarding the specifics of the Draft Environmental Impact Report, LAFCO has the following comments:

- Page 3.0-9: We suggest that the description of the approvals required from LAFCO include a closing statement that: "This required LAFCO approval would include detachment of Miravale III from the Mission Soledad Rural Fire Protection District and the Resource Conservation District of Monterey County." F-4

- Page 4.2-6: The section on "Cortese-Knox Capability Classification" outlines the process for classifying prime agricultural lands under the Cortese-Knox-Hertzberg Local Government Reorganization Act, but does not state the number of acres that are classified as "prime" by this process. Please state the number of acres classified as prime utilizing the Cortese-Knox-Hertzberg definition. F-5

- Pages 4.2-12 through 15: The DEIR states that "the Monterey County Agricultural Commissioner generally recommends at least a 200 foot buffer between agricultural and non-agricultural uses." [page 4.2-13] The DEIR then outlines the project plans for a 60 foot buffer on Miravale III's western border and 50 feet on the north and east, without any discussion of the feasibility of implementing the recommended 200 foot buffer. Please examine the effectiveness of the proposed buffers, particularly on the western edge of the proposed development, which is noted to be adjacent to a large area of "row crops used for vegetable production." It should also be noted that the western, northern, and eastern borders of the proposed Miravale III development are adjacent to lands that are not within the City's approved Sphere of Influence. F-6

- Page 4.13-35: Under the section on "Regional Transportation Impacts" it is stated that "at this time ... the City of Soledad has not committed to collecting the TAMC [Transportation Agency of Monterey County] fee." Conversations with TAMC staff have indicated that the City has executed the Joint Powers Agreement approving the Monterey County Regional Development Impact Fee Agency and that this agreement commits the City to the collection of TAMC Regional Development Impact Fees. Please clarify. F-7

- Page 5.0-12: The DEIR states that the project would constitute a significant cumulative impact to agricultural resources and states that "currently there are no formal mitigation fee and/or conservation easement policies in place" and "no measures are available to fully mitigate the loss of prime agricultural land." F-8

The DEIR should examine the feasibility of the City, or developer, developing and implementing a local mitigation fee and/or conservation easement program. This type of program was developed by the City of Salinas as a part of its 2007 application for an expansion of the its Sphere of Influence. While such a program is not likely to "fully mitigate" the loss of prime agricultural land, the Guidelines of the California Environmental Quality Act (Section 15091[a]) require that significant environmental effects be lessened even if they can not be fully avoided or mitigated. F-8 cont.

- Appendix E: Please include the entire February 21, 2007 letter from AMBAG regarding compliance with the Air Quality Management Plan. Only the first page of this letter is included in the document. F-9

We appreciate the opportunity to provide comments on the Draft Environmental Impact Report of the Miravale III Specific Plan. Our comments are designed to ensure project compliance with the California Environmental Quality Act and to support the findings that LAFCO must make, pursuant to state law, before it can approve a Sphere of Influence update and annexation. F-10

These staff comments are tentative and are subject to review and approval by the Commission. We anticipate that the Commission will consider this matter at the next regular meeting on January 26, 2009.

Please contact me, or Senior Analyst Thom McCue, if you have any questions regarding this letter.

Sincerely,

Thomas A McC for

Kate McKenna, AICP
Executive Officer

Cc: LAFCO Chair Dennis Donohue and Members of the Commission

LETTER F: LOCAL AGENCY FORMATION COMMISSION (LAFCO) OF MONTEREY COUNTY

F1: This comment does not raise an environmental issue that warrants a response under CEQA. No response necessary.

F2: This comment states that LAFCO will need to consider the proposed project in light of any Sphere of Influence (SOI) amendments and subsequent annexation proposals anticipated by the City. This comment reiterates previous comments identified in LAFCO's September 2006 NOP comment letter regarding LAFCO's preliminary review process as a way to promote informal dialogue. This process is typically designed to discuss the City's comprehensive growth plans as identified in the City's adopted General Plan. This comment does not raise an environmental issue under CEQA and is referred to the City for further consideration. No response is necessary.

F3: This comment identifies that the applicable statutory requirements related to early consultation between City and County governments before the submittal of the formal SOI amendment to LAFCO. This comment does not raise an environmental issue under CEQA and is referred to the City for further consideration as part of their preparation for future SOI amendments associated with the proposed project. No further response is necessary.

F4: This comment identifies specific requests for revisions to the text of the EIR regarding LAFCO approvals. In response to this comment, revisions have been incorporated into the EIR; please refer to **Section 4.0 Revisions to the Draft EIR,** for more information.

F5: This comment requests that the Draft EIR state the number of acres classified as prime farmland according to the Cortese-Knox-Hertzberg definition. The text of the EIR identifies the amount of prime farmland per each classification criterion of the definition. Additional text has been added to clarify the analysis of lands classified as prime farmland. Please refer to **Section 4.0 Revisions to the Draft EIR, Agricultural Resources, Section 4.2,** for more information.

F6: This comment requests that the EIR examine the effectiveness of the proposed agricultural buffers. As noted in the comment and the Draft EIR, the County of Monterey Agricultural Commissioner generally recommends a minimum 200' agricultural buffer. The proposed project, however, includes a 60 foot buffer along the project sites western border and a 50 foot buffer on the north and east boundaries of the site. The comment contends that in the absence of an evaluation of the feasibility of the proposed buffers their effectives cannot be ascertained. As discussed in the Draft EIR (see page 4.2-1) an Agricultural Resources Report was prepared for the proposed project by Buchanan Associates, which evaluated the efficacy of the proposed agricultural buffers, in addition to other agricultural issues associated with the proposed project. Consistent with the evaluation contained in that report, the Draft EIR recommended a minimum 50 foot wide buffer along the northern and eastern boundaries of the project site as adequate based on adjacent land uses and uses proposed as part of the Miravale III Specific Plan project; please refer to the Agricultural Resources Report contained in Appendix T-1 for further information. In order to ensure the adequacy of future agricultural buffers located on the western project boundary, the Agricultural Resources Report did recommend a 200 foot buffer noting that "the prevailing wind direction and duration which increase the likelihood for potential conflict between agricultural and residential land uses." While the Draft EIR determined that adequate vegetative screening of the Project's proposed combined with substantial physical barriers (such as an 8 foot high wall) could adequately protect human health, Mitigation measures 4.2-1, 4.2-2, and 4.2-3 have nonetheless been revised to require that the agricultural buffer along the western project boundary be increased to meet the minimum distance requirements recommended by the County of Monterey Agricultural Commissioner. A larger agricultural buffer, in combination with physical barriers in areas where residential or commercial structures will be located, is considered adequate to mitigate potential impacts to a less-than-significant

level. Please refer to **Section 4.0 Revisions to the Draft EIR, Agricultural Resources, Section 4.2 ,** for the complete text of these revisions.

F7: This comment requests that statements contained in the Draft EIR regarding the City's commitment to collecting the Transportation Agency of Monterey County (TAMC) fee for regional improvements be clarified. At the time that the Draft EIR was prepared the City was in the process of determining whether they would collect the TAMC fee and at that point the City had not made a determination. This was reflected in the Draft EIR. As noted elsewhere in this FEIR, the City of Soledad adopted the TAMC Regional Fee Program by ordinance on June 4, 2008. In order to mitigate regional impacts, the proposed project will be subject to the TAMC fee. The EIR has been revised accordingly; please refer to **Section 4.0 Revisions to the Draft EIR,** for more information.

F8: This comment requests that the Draft EIR examine the feasibility of mitigating cumulative level impacts associated with the conversion of prime farmland through the payment of a local mitigation fee and/or a conservation easement program. As identified in the Draft EIR, the proposed project would result in the permanent conversion of farmland into urban uses. The permanent loss of farmland was identified as a significant and unavoidable impact. This determination was based in part on the analysis contained in the Agricultural Resources Report prepared by Buchanan Associates. Consistent with the analysis contained in the City of Soledad General Plan EIR this was identified as a significant and unavoidable cumulative level impact that cannot be reduced to a less-than-significant level. As described on page 5.0-12 of the Draft EIR and the Agricultural Resource Report contained in Appendix T-1, the City of Soledad does not have an adopted mitigation program for agricultural impacts. The proposed project site was identified in the General Plan's Land Use Element as an area of future urban expansion and the cumulative loss of agricultural land was previously considered in the General Plan EIR. The proposed project would not result in additional environmental impacts beyond those previously identified in the General Plan EIR. As described in **Section 1.0 Introduction,** the analysis contained in this EIR is tiered from the General Plan EIR prepared in 2005, which identified significant and unavoidable cumulative level impacts associated with the permanent loss of agricultural lands. No feasible mitigation measures were identified at that time to reduce and/or minimize cumulative level impacts. While the proposed project cannot mitigate the extent of its contribution towards this cumulative level effect, an agricultural educational facility is proposed by the draft Specific Plan,, as described in **Section 3.0 Project Description.** At this time, the City of Soledad does not have an agricultural mitigation program in place to address cumulative impacts due to the permanent loss of farmland. Accordingly, this comment is referred to the City of Soledad decision-makers for further consideration.

F9: This comment contends that the Association of Monterey Bay Area Government's (AMBAG) consistency determination with the Air Quality Management Plan (Appendix E) was not included in its entirety. AMBAG's consistency determination was previously included in its entirety as part of Appendix E. Please see Appendix E of the Draft EIR for more information.

F10: Comment acknowledged. This comment does not raise an environmental issue that warrants a response under CEQA. No response is necessary.

LAFCO of Monterey County

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KATE McKENNA, AICP
Executive Officer

RECEIVED
FEB 25 2009
COMMUNITY
DEVELOPMENT DEPT

February 23, 2009

Susan Hilinski, Senior Planner
City Hall
City of Soledad
248 Main Street
Soledad, CA 93960

Re: Draft Environmental Impact Report for Miravale Phase III Specific Plan

Dear Ms. Hilinski:

This letter is a supplement to LAFCO's letter dated December 15, 2008, which provided comments on the Draft Environmental Impact Report for the Miravale Phase III Specific Plan. At its meeting of January 26, 2009, the Commission affirmed the comments contained in that letter. In addition, the Commission reserved its right to submit further comments to be submitted to the City before or at hearings where the City will consider certification of the Final Environmental Impact Report.

Also on January 26, Commissioners expressed concerns about the timing of the environmental proceedings given the necessity of City/County negotiations. This negotiation process is required prior to the submittal to LAFCO of a Sphere of Influence Amendment proposal (Government Code Section 56425 (b)). The results of those discussions will have an impact on the analysis in the Draft Environmental Impact Report. The Commission encourages the City to engage in that negotiation process at the earliest possible time.

I am also taking this opportunity to remind you of LAFCO's preliminary review process and to encourage the City's participation in that process prior to formal submittal of a comprehensive Sphere of Influence amendment proposal and annexation proposals.

We appreciate this opportunity to provide further comments on the Draft Environmental Impact Report, and look forward to working with the City of Soledad. Please notify me when the Final Environmental Impact Report is available for the Miravale Phase III Specific Plan, and of the proposed public hearing schedule to certify the report. If you have any questions, please contact Senior Analyst Thom McCue or me.

Sincerely,

Kate McKenna

Kate McKenna, AICP
Executive Officer

LETTER G: LOCAL AGENCY FORMATION COMMISSION (LAFCO) OF MONTEREY COUNTY

G1: Comment acknowledged. This comment does not raise an environmental issue that warrants a response under CEQA. No response is necessary.

G2: This comment reflects concerns expressed by LAFCO commissioners regarding the time of environmental proceedings given the necessity of City/County negotiations. This comment notes that consultation between the City and County is required prior to the submittal to LAFCO of a Sphere of Influence (SOI) amendment pursuant to the requirements of California Government Code § 56425(b). The comment contends that the results of those discussions may impact the analysis contained in the Draft EIR. The analysis in the Draft EIR is specific to the potential environmental effects associated with the proposed project. This comment further suggests that the City initiate the consultation process as soon as possible. The County of Monterey has provided written comments on the Draft EIR and those comments are addressed in detail in this EIR. If, as a result of future conversations with the County, additional changes are requested and the project is changed in a fundamental way such that additional environmental impacts would occur, further environmental review in accordance with CEQA would be required. This comment is referred to decision-makers for further consideration.

G3: Comment acknowledged. This comment does not raise an environmental issue that warrants a response under CEQA. No response is necessary.

G4: Comment acknowledged. This comment does not raise an environmental issue that warrants a response under CEQA. No response is necessary.

MONTEREY BAY
Unified Air Pollution Control District
serving Monterey, San Benito, and Santa Cruz counties

Letter H

Fax received 12/18/09 CDD Hm

Interim Air Pollution Control Officer
Ed Kendig

24580 Silver Cloud Court • Monterey, California 93940 • 831/647-9411 • FAX 831/647-8501

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Monterey Peninsula Cities

Ellen Pirie
Santa Cruz County

Ila Mettee-McCutchon
Monterey County

Sam Storey
Santa Cruz County Cities

George Worthy
South Monterey County Cities

December 18, 2008

Sent by Facsimile To:
(831) 678-3965
Original Sent by First Class Mail

Ms. Susan Hilinski
Community Development Department
City of Soledad
P. O. Box 156
Soledad, CA 93960

SUBJECT: DRAFT EIR FOR MIRAVALE III SPECIFIC PLAN

Dear Ms. Hilinski:

The Air District submits the following comments for your consideration:

Consistency Determination
Please request a consistency determination from AMBAG for the 4,200 residential units that could be accommodated by the project. H-1

Construction Impacts: Fugitive Dust and Mitigation 4.3-1. Page 4.3-16.
In addition to the measures listed on page 4.3-16, the Air District suggests that the following be added: H-2

- Haul trucks shall maintain at least 2'0" of freeboard; and
- Cover all trucks hauling dirt, sand, or loose materials.
- Plant tree windbreaks on the windward perimeter of construction projects if adjacent to open land.
- Install wheel washers at the entrance to construction sites for all exiting trucks.
- Pave all roads at construction sites.

Mitigation Measure 4.3-2. Page 4.3-17.
The measure should be written to specify that "Projects developed under the specific plan ~~should~~ shall be evaluated for individual construction period air quality impacts. Project-specific mitigation measures ~~would~~ shall be identified at that time to reduce impacts to a less-than-significant impact, if feasible. However, the following mitigation measures ~~should~~ shall be implemented for all projects to reduce diesel particulate emissions from on-site construction equipment: H-3

Substitute the measure specified on pages 4-3-17 and 4.3-18 with the following:

The following equipment may be used without control devices or additional mitigation measures, without causing acute adverse health effects:

No engines greater than 750 HP are used; and

Engines between 501 HP and 750 HP are model years 2002 and newer; and

Engines between 251 HP and 500 HP are model years 1996 or newer; and

Engines between 175 HP and 250 HP are model years 1985 or newer.

The following equipment may be used without causing acute adverse health effects, if retrofitted with a catalyzed diesel particulate filter (CDPF):

Engines greater than 750 HP, if model year 2006 and newer; and

All engines less than 749 HP, regardless of model year.

If construction equipment uses B99 biodiesel, no acute adverse health effect would be expected in the following:

Engines between 501 HP and 750 HP, if model years 2002 or newer; and

Engines between 250 HP and 500 HP, if model years 1996 and newer; and

Any engine less than 250 HP.

H-4

Plan Generated Operational Impacts. Page 4.3-18.
The 920 acre Specific Plan site is too large for URBEMIS to accurately estimate emissions unless the individual components are analyzed and then totaled.

H-5

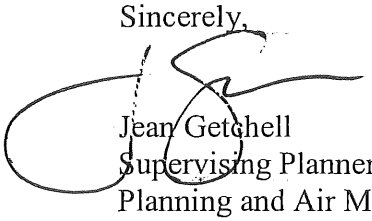
Mitigation Measure 4.3-3. Page 4.3-20.
Given the potentially significant impacts of carbon monoxide and particulates, the Air District appreciates the recommended mitigation measure to prohibit wood-burning fireplaces and stoves. It further suggests the following measure be made a condition of project approval, which would address the installation and operation of wood-burning stoves and fireplaces, and provide enforcement of this mitigation measure.

Natural Gas Hearths / No Wood-Burning Fireplaces or Wood-Burning Stoves
"Fireplaces and stoves shall be gas-fired and meet U. S. Environmental Protection Agency certification requirements. The installation or operation of a wood-burning fireplace or a wood-burning stove shall be prohibited in perpetuity on all residential properties in the Miravale III Specific Plan Development. This restrictive covenant shall be recorded on the title of all parcels in the Miravale III Specific Plan and shall run with the land."

H-6

Thank you for the opportunity to review the document.

Sincerely,



Jean Getchell
Supervising Planner
Planning and Air Monitoring Division

cc: David Craft, Engineering Division
David Roemer, AMBAG

LETTER H: MONTEREY BAY UNIFIED AIR POLLUTION CONTROL DISTRICT (MBUAPCD)

H1: This comment requests that a consistency determination from AMBAG be obtained. A consistency determination was previously obtained from AMBAG for the proposed project. A copy of that determination was included as an appendix to the Draft EIR; please see Appendix E of the Draft EIR for more information. As evidenced in that correspondence, AMBAG determined that the proposed project is consistent with the 2004 regional forecasts and the Air Quality Management Plan.

H2: This comment requests that Mitigation Measure 4.3-1 be revised to include additional requirements to address potential fugitive dusts associated with project construction. Mitigation Measure 4.3-1 has been revised in response to this comment; please refer to **Section 4.0 Revisions to the Draft EIR, Air Quality, Section 4.3,** for more information.

H3: This comment requests specific revisions to Mitigation Measure 4.3-2 in order to make sure that compliance with that measure is obligatory. Mitigation Measure 4.3-2 has been revised in response to this comment; please refer to **Section 4.0 Revisions to the Draft EIR, Air Quality, Section 4.3,** for more information.

H4: This comment recommends additional revisions to Mitigation Measure 4.3-2 to specify certain types of construction equipment that may be used during project construction. Mitigation Measure 4.3-2 has been revised in response to this comment; please refer to **Section 4.0 Revisions to the Draft EIR, Air Quality, Section 4.3,** for more information.

H5: This comment contends that the project site is too large for URBEMIS to accurately estimate project emissions unless the individual components of the project are analyzed and then totaled. The URBEMIS modeling used phasing (four phases) to limit the acreage of development considered in each model analysis and provide a quantitative estimate of future emissions. It is acknowledged that true future emissions are better estimated with URBEMIS at a project-level. Regardless, operational emissions of regional air pollutants were identified as a significant and unavoidable impact on page 4.3-20 of the Draft EIR. Mitigation Measure 4.3-3 has been revised to require project applicants/proponents to implement all feasible mitigation measures to reduce GHG and regional air pollutant precursor emissions in accordance with State CEQA Guidelines. A revised version of the mitigation measure restricting fireplaces is provided separately as a new Mitigation Measure (#4.3-4). In addition, new mitigation measures have been added: 4.3-5 requiring the provision of transit-support facilities (turn-outs and bus shelters), and 4.3-6 requiring all development under the Specific Plan to adhere to the most current standards of the California Building Code pertaining to reduction of air quality impacts and GHG emissions, such as the California Green Building Standards that becomes effective in January 2011. Please refer to **Section 4.0 Revisions to the Draft EIR, Air Quality, Section 4.3,** for more information.

H6: This comment recommends that an additional mitigation measure be required as a condition of project approval to ensure that the installation and operation of wood-burning stoves and fireplaces be prohibited in perpetuity to address significant and unavoidable project impacts due to increases in long-term operational emissions of ozone precursor pollutants. In response to this comment Mitigation Measure 4.3-3, has been revised. Please see **Section 4.0 Revisions to the Draft EIR, Air Quality, Section 4.3,** for more information.

Letter I

TAMC
TRANSPORTATION AGENCY
FOR MONTEREY COUNTY

Regional Transportation Planning Agency • Congestion Management Planning
Local Transportation Commission • Monterey County Service Authority for Freeways & Expressways

December 18, 2008

RECEIVED
DEC 18 2008
PLANNING DEPARTMENT

Ms. Susan Hilinski
City of Soledad
Community Development Department
P.O. Box 156
Soledad, California 93960

SUBJECT: Comments on the Draft Environmental Impact Report for the Miravale III Specific Plan

Dear Ms. Hilinski:

The Transportation Agency for Monterey County is the Regional Transportation Planning Agency and Congestion Management Agency for Monterey County. Transportation Agency staff has reviewed the Draft Environmental Impact Report for the Miravale III Specific Plan.

The proposed project consists of a mixed-use development including 1,470 single-family residential units, 2,730 multi-family residential units, 120 hotel rooms, 275,000 square feet of retail commercial space, and an 18-hole golf course located within unincorporated Monterey County on the northern edge of the City of Soledad. Transportation Agency staff offers the following comments for your consideration: I-1

Regional Roads & Highways

1. The draft document indicates that the project applicant will be required to pay the City of Soledad's Transportation Impact Fee as mitigation for both project-specific and cumulative transportation impacts by stating:

   The Transportation Agency for Monterey County (TAMC) implements the fee program based on the 2004 TAMC "Nexus Study for Regional Development Impact Fee." The TAMC fee is levied against new developments within local member jurisdictions of TAMC, including the City of Soledad. At this time, however, the City of Soledad has not committed to collecting the TAMC fee. In order to address regional improvement, the City of Soledad has incorporated local TAMC improvements projects into their adopted TIF program. Therefore, the collection of impact fees as part of the City's TIF program will include regional improvements and will be in-lieu of payment of an independent TAMC fees. I-2

This information is incorrect and contradicts an earlier section of the document, which notes that traffic impact fees will be imposed upon the project by both the City of Soledad and the Transportation Agency. The Regional Development Impact Fee Program, which is based on the *2007 Regional Impact Fee Nexus Study Update* available on our agency's website, was approved and adopted by ordinance by City of Soledad Council on June 4, 2008, making all new development in Soledad subject to the regional fee. The Transportation Agency supports the payment of the City of Soledad's comprehensive Traffic Impact Fee as mitigation for impacts to local streets and roads; however this does not address cumulative impacts or mitigation. I-2 cont.

Cumulative impacts can be mitigated through a contribution to our agency's regional fee program. Payment of the regional development impact fee is supported by Caltrans and allows new development to adequately mitigate cumulative impacts to state highways and regional roads and remain California Environmental Quality Act-compliant. This method is also consistent with the City of Soledad General Plan Policy C/T-13, which calls for the City to ensure that new development pays its fair share of costs of circulation improvements through a combination of traffic fees and other funding mechanisms. Mitigation measures 4.13-10 through 4.13-14 should be revised to indicate that collection of the Transportation Agency's regional impact fees is the appropriate mitigation measure for cumulative transportation impacts. I-3

Pedestrian & Bicycle Facilities

2. The Transportation Agency supports accommodation of alternative forms of transportation (rail, bus transit, bicycle and pedestrian transportation), both through the design of transportation facilities, and through the design and orientation of land uses. The Transportation Agency supports the City's policies related to alternative transportation that call for facilities that promote the inclusion of bicycle lanes, pedestrian and hiking trails, park-and-ride lots and facilities for public transportation, as well as requiring new development to provide bike lanes and storage facilities.

   To accommodate this policy, our agency appreciates that the project will seek to maintain and promote non-automotive travel within the community by providing adequate bicycle and pedestrian facilities, connecting sidewalks to surrounding developments, and ensuring sufficient right-of-way. Our agency requests that existing bicycle and pedestrian facilities, proposed facilities, and facilities that the project applicant will construct be interconnected, particularly to the bike lanes on Front Street between East Street and Nestles Road, Gabilan Drive from San Vicente Road to West Street, and Orchard Lane from the project boundary to Gabilan Drive. In addition, The Transportation Agency recommends that bicycle racks and lockers be installed and made publicly available in the development, particularly at the planned open space area. Adequate lighting should be provided at these locations to improve safety and visibility I-4

3. The circulation map included with the document depicts that the project will include 70 foot wide collector streets with bicycle facilities. The Transportation Agency requests that any on-street parking will not restrict access to non-motorized vehicle I-5

facilities. Also, street markings or signage should be included to allow for safe use of this space by bicyclists as well as for motor vehicles. I-5 cont.

4. Our agency discourages the use of cul-de-sacs in site designs, as they impede and discourage the use of bicycle and pedestrian travel by creating longer travel times and blocking access to surrounding portions of the development. The circulation map shows that the proposed development will heavily rely on the use of cul-de-sacs. While the map shows that a portion of these will include "neighborhood connectors" to allow access to adjacent parts of the development, there are areas where the map shows blocked access. The Transportation Agency recommends that access be provided to bicyclists and pedestrians through all cul-de-sacs by including bike or pedestrian walkways to adjoining parts of the development or by eliminating the reliance on cul-de-sacs in the site design. I-6

Transit Travel

5. As the document notes, the existing transit system in the City of Soledad is limited, with current service including a stop in Soledad on Line 23 (King City to Salinas) and on-demand taxi service. Monterey-Salinas Transit is in discussion with the South County cities on the possibility of assuming transit service in these areas. While the development may only anticipate that up to 3% of project trips could be made by transit, our agency recommends that the development work closely with the City of Soledad and Monterey-Salinas Transit to ensure that the development will provide adequate access to any planned transit facilities as well as to the facilities that currently exist for Lines 23 and 53. I-7

6. In addition, our agency appreciates that the Miravale III Specific Plan includes a policy to include bus stops in logical locations and that the circulation map shows potential stops. The project applicant should utilize Monterey-Salinas Transit's *Designing for Transit* Guideline Manual as a resource for accommodating any future transit access to the project site. I-8

Thank you for the opportunity to review this document. If you have any questions, please contact Michael Zeller of my staff at (831) 775-0903.

Sincerely,

Debra L. Hale
Executive Director

CC: Dave Murray, California Department of Transportation (Caltrans) District 5
Paul Greenway, Monterey County Department of Public Works
Carl Sedoryk, Monterey-Salinas Transit
Nicholas Papadakis, AMBAG
Ed Kendig, Monterey Bay Unified Air Pollution Control District

LETTER I: TRANSPORTATION AGENCY FOR MONTEREY COUNTY (TAMC)

I1: Comment acknowledged. This comment does not raise an environmental issue that warrants a response under CEQA. No response is necessary.

I2: This comment notes that in order to mitigate regional impacts the proposed project must contribute towards TAMC's Regional Development Impact Fee Program in order to address cumulative impacts. This comment contends that the payment of the City of Soledad adopted Traffic Impact Fee is inadequate mitigation for cumulative level impacts. Please note that at the time the traffic analysis was completed, the City of Soledad had not committed to collecting the TAMC Regional Development Impact Fee. As a result, the City had identified regional facilities that would be provided funding through the payment of the City's adopted TIF. Since that time, however, the City has committed itself to collecting the TAMC fee as a method to address regional and cumulative level impacts. The Draft EIR has been revised in order to clarify the City's responsibility to mitigate cumulative impacts as it relates to the TAMC fee. Please refer to **Section 4.0 Revisions to the Draft EIR** for more information.

I3: This comment requests that Mitigation Measure 4.13-10 through 4.13-14 be revised to indicate that collection of TAMC's Regional Impact Fees are the appropriate mitigation measures for cumulative level impacts. Mitigation Measures 4.13-10 through 4.13-12 have been revised in response to this comment; please refer to **Section 4.0 Revisions to the Draft EIR,** for more information. The improvements identified in Mitigation Measures 4.13-13 and 4.13-14 are not included in the list of regional transportation project impacts funded by the TAMC Regional Development Impact Fee as adopted by the City of Soledad. As these improvements are not identified as regional level improvements, payment of City transportation impact fees is necessary to mitigate the impact at the two intersections at Moranda Road & Front Street and San Vicente Road & Gabilan Drive

I4: This comment requests that existing bicycle and pedestrian facilities, proposed facilities, and facilities associated with the proposed project will be interconnected. The comment specifically requests that the bike lanes on Front Street between East Street and Nestles Road, Gabilan Drive from San Vicente Road to West Street, and Orchard Lane from the project boundary to Gabilan Drive be interconnected. This comment also recommends that bike racks and lockers be installed and made publicly available in the development, especially in areas adjacent to open space. The comment also requests that adequate public lighting be provided at these locations to improve safety and visibility. This comment is referred to the City for further consideration as part of the deliberative process and it is recommended that the proposed project be conditioned to require that all pedestrian and bicycle facilities are interconnected, provide adequate lighting for security purposes, and bike racks and lockers are made available throughout the development, as recommended by the comment.

I5: This comment expresses a specific request by TAMC that on-street parking on proposed 70' wide collector streets be designed so as not to restrict access by non-motorized vehicles. This comment further requests that appropriate street markings and signage be provided to allow for the safe use of this space by bicyclists. As required by the City of Soledad, appropriate street marking and signage will be provided to ensure the safety of cyclists traveling along collector streets. All final design plans will be required to meet the specifications of the City of Soledad and will be required to implement pedestrian and cyclist safety measures consistent with this comment.

I6: This comment requests that pedestrian and cyclist connections be provided through all cul-de-sacs by including bike of pedestrian walkways to adjoining parts of the development or through the elimination of cul-de-sac as part of the site design. The project, as currently proposed, relies heavily on cul-de-sacs as part of the site design and numerous neighborhood connectors have been provided throughout the

Specific Plan consistent with this comment. Nevertheless, this comment is referred to the City of Soledad for further consideration.

I7: This comment requests that the City of Soledad work closely with Monterey-Salinas Transit to ensure that the proposed project provides adequate access to existing and planned transit facilities. Comment noted. A new Mitigation Measure 4.3-4 has been added to the FEIR require the provision of bus shelters and turn-outs to service each development phase of the Specific Plan as may be recommend by the Transit District. See **Section 4.0 Revisions to the Draft EIR.**

I8: Comment acknowledged. This comment does not raise an environmental issue that warrants a response under CEQA. No response is necessary.

Letter J

SOLEDAD UNIFIED SCHOOL DISTRICT

Jorge Z. Guzmán, District Superintendent

"Education for Life"

Soledad High School
425 Gabilan Drive
Soledad, CA 93960
(831) 678-6400

Community Education Center
690 Main Street
Soledad, CA 93960
(831) 678-1279

Main Street Middle School
441 Main Street
Soledad, CA 93960
(831) 678-6460

K-6
ELEMENTARY SCHOOLS

Gabilan School
330 N. Walker Drive
Soledad, CA 93960
(831) 678-6440

Rose Ferrero Elementary
400 Entrada Drive
Soledad, CA 93960
(831) 678-6480

San Vicente School
1300 Metz Road
Soledad, CA 93960
(831) 678-6420

Frank Ledesma School
973 Vista de Soledad
Soledad, CA 93960
(831) 678-6320

DISTRICT OFFICE
1261 Metz Road
P.O. Box 186
Soledad, CA 93960
(831) 678-3987
Fax: (831) 678-2866

December 16, 2008

RECEIVED
DEC 17 2008
PLANNING DEPARTMENT

Susan Hilinski,
City of Soledad
Post Office Box 156
Soledad, CA 93960

Subj.: Miravale III Project – School District Impact

Dear Ms. Hilinski,

We would like to express our serious concerns as to the insufficiency of adequate school sites set aside in this development. The hearing draft dated January, 2008 received by us in November 2008 specifies 1,470 single-family residential units, 2,730 multi-family including 500 senior housing units.

Using the same methodology as our School Facility Consultants in the attached letter, we are arriving at the following numbers:
4,200 homes less 500 senior units = 3,700 homes x 1.16 SGR (Student Generation Rate) = 4,292 students.

J-1

By Grade Level:
K-6 = 3,700 x 0.662 = 2,450 Students = 4 new elem. schools
7-8 = 3,700 x 0.169 = 625 Students = 1 new middle school
9-12 = 3,700 x 0.329 = 1,217 Students = 1 new high school

The plan as submitted only includes 2 elementary schools and 1 middle school. **In order to accommodate student growth the plan should include 2 additional elementary schools and one new high school.**

We also need to confirmation that the selected proposed school sites are not located on any land previously used as a land fill.

J-2

Please feel free to contact me for any additional information.

Sincerely,
for Gertrud Robinson
Jorge Guzman

C: Gertrud Robinson, CBO

SCHOOL FACILITY CONSULTANTS

1130 K Street, LL12
Sacramento, CA 95814
Phone: (916) 441-5063
Facsimile: (916) 441-2848
www.s-f-c.org

September 19, 2007

2 Pages Via Fax:
(831) 678-2866

TO: Mr. Jorge Guzman
Soledad Unified School District

FROM: Kevin Sullivan
School Facility Consultants

SUBJECT: **Review of the District's Analysis of the Impact of the Miravale III Specific Plan**

CC: Ms. Gertrud Robinson, Soledad Unified School District
Alexander R. Murdoch, School Facility Consultants
Matt Pettler, School Facility Consultants
Master File

In response to your request to review the District's analysis of the impact of the Miravale III Specific Plan, we have observed the following:

The District's identified Student Generation Rate (SGR aka, Student Loading Factor), is valid and based on United States Census data from the year 2000. It compares the total number of students in the District in the year 2000 with the total number of occupied households, resulting in each household generating approximately 1.16 pupils.

Application of the total SGR of 1.16 is based on the weighting of the District's current 2006/07 CBEDS enrollment over the elementary, middle and high school grades. This allocates the total SGR of 1.16 into the following grade groups:

Breakdown of Student Generation Rate	
K-6	0.662
7-8	0.169
9-12	0.329
Total	**1.160**

Applying this generation rate to the 4,200 proposed new dwelling units included in the Miravale III Specific Plan results in the generation of the following students:

Anticipated Student Yield of Proposed Development (Miravale III)			
Grade Groups	**K-6**	**7-8**	**9-12**
Student Yield Calculation	4,200 x 0.662 = 2,782	4,200 x 0.169 = 709	4,200 x 0.329 = 1,382
Total Students	**2,782**	**709**	**1,382**

The District has advised that these student yields will require the District to construct elementary schools of approximately 700 pupils, along with middle and high school campuses to serve the new development.

As a result, the District will be required to build four new elementary schools, one new middle school and a second high school. The District will also likely need to expand its current community school/continuation high school program to accommodate increases to the anticipated student population. The District has advised that it plans to construct a new Community Education Center/ Continuation School within the proposed development area in order to accommodate the anticipated growth. J-3 cont.

It is hoped that this review of the District's analysis is helpful in addressing the District's facility planning needs. Please call with any questions.

LETTER J: SOLEDAD UNIFIED SCHOOL DISTRICT (SUSD)

J1: This comment states that the proposed project has inadequate school facilities to accommodate project generated demands and that an additional two (2) elementary schools and one (1) high school will be necessary to serve the proposed project. Consistent with the student projections contained in this comment, the Draft EIR determined that the proposed project would provide inadequate school facilities to accommodate project demands. This was identified as a potentially significant impact in the absence of mitigation. In order to mitigate this potentially significant impact and thereby ensure adequate school facilities, Mitigation Measure 4.12-4 of the Draft EIR, page 4.12-14, requires that the project applicant submit a revised Specific Plan and tentative map demonstrating that an additional two (2) elementary schools and one (1) high school will be provided in conjunction with the proposed project. In the event that these facilities are not provided in conjunction with this project, additional facilities will need to be provided elsewhere in the City of Soledad to accommodate full buildout. Mitigation Measure 4.12-4 has been revised to indicate that in lieu of providing additional on-site facilities, the project may submit payment of its proportionate share of funding towards the acquisition and construction of new school facilities. In order to ensure that adequate capacity is available to serve the various phases of development, development would be restricted until such time that the City of Soledad and the Soledad Unified School District are satisfied that the necessary facilities are available consistent with the requirements of General Plan Policy S-23. Compliance with this mitigation measure and existing General Plan requirements will ensure that: (a) adequate school facilities will be provided in connection with the proposed project, or (b) adequate funding will be provided to allow SUSD to acquire additional school sites need to serve project area residents and construct said facilities. Additionally, the proposed project would be required to pay applicable school impact fees for each type of new development as required pursuant to Mitigation Measure 4.12-5.

J2: This comment requests confirmation that the proposed school sites are not located on any land previously used as a landfill. As described in **Section 4.7 Hazards and Hazardous Materials** of the Draft EIR, the former Soledad Sanitary Landfill is located along the northern boundary of the project site. The Soledad Sanitary Landfill is listed as a closed facility and was primarily used for the purposes of municipal waste disposal. As identified in the Draft EIR, the Soledad Sanitary Landfill site is located within approximately 1,500 feet of several proposed school facilities located along San Vicente Road. While none of the proposed school sites are located on land previously used as a landfill, these school sites could be exposed to hazardous materials and/or emissions as a result of the former landfill use. As a result, the Draft EIR identified Mitigation Measure 4.7-5 as necessary to ensure that the proposed facilities and future students would not be exposed to hazardous conditions. Please see **Section 4.7 Hazards and Hazardous Materials** of the Draft EIR for more information.

J3: Comment acknowledged. This comment is a copy of correspondence provided to SUSD from School Facility Consultants regarding student projections. This correspondence was previously submitted to the City of Soledad and the EIR consultant during the course of preparing the Draft EIR. This comment does not raise an issue related to the analysis contained in the Draft EIR and is part of the administrative record. No response necessary.

Letter K

MONTEREY COUNTY
RESOURCE MANAGEMENT AGENCY
PLANNING DEPARTMENT, Mike Novo, Director
168 W. Alisal St., 2nd Floor
Salinas, CA 93901

(831) 755-5025
FAX (831) 757-9516

December 18, 2008

RECEIVED
DEC 18 2008
PLANNING DEPARTMENT

Susan Hilinski
City of Soledad
Community Development Department
248 Main Street
Soledad, CA 93960

Subject: Miravale III Specific Plan Draft EIR

The Monterey County Resource Management Agency (RMA) has compiled the following comments from the County's land use agencies (Planning Department, Water Resources Agency, Public Works Department, Parks Department, Environmental Health Division, Agricultural Commissioner) regarding the Miravale III Specific Plan Draft EIR: K-1

General Comments

There is a statutory requirement for early consultation between the City and County (Government Code Section 56425b) before the Sphere of Influence amendment is submitted to LAFCO. In addition, referral of the proposed General Plan Amendments to the County and consultation with the County for consistency with the County's General Plan are required in accordance with Government Code Sections 65352 and 65454. Prior to any action by the City, we request that the City meet with representatives of the Resource Management Agency (RMA), Agricultural Commissioner, and Assessor to discuss issues including the proposed direction of city growth, agricultural buffers, mitigation for the loss of agricultural land and regional transportation impacts and County revenue. K-2

Planning Department

Grading (Page 3.0-5) - The EIR should indicate the total quantity (in cubic yards) of grading that is proposed, the number of truck trips (if any) and whether the grading is proposed to be phased or completed all at once. A construction management plan should identify hauling routes that are then evaluated in the EIR relative to impact on sensitive receptors (schools, hospitals, etc) and air quality impacts. K-3

General Plan Amendments Page 3.0-8 – The DEIR states that the project includes modification of Land Use Policy L-45 to allow exceptions to the restriction on ridgeline development. However, this policy is not referenced or addressed in the Aesthetics Chapter of the DEIR. At a minimum, the EIR should explain why the ridgeline policy cannot be satisfied by the proposed project, the impacts on not satisfying the policy, alternatives and proposed mitigation measures. As noted above, a General Plan action requires consultation with abutting agencies (County) and evaluation of consistency with the County General Plan. K-4

Agencies (Page 3.0-9) – In listing the required permits and approvals, the EIR does not include the requirement for the City to enter into a tax transfer agreement with the County pursuant to Revenue and Taxation Code Section 99. K-5

Aesthetics (Pages 4.1-9 - 4.10 and 4.1-14 – 4.1-16) – The DEIR should indicate the level of significance after mitigation for the aesthetic impacts. K-6

Agricultural Buffers (Page 4.2-13) – The DEIR states "the Monterey County Agricultural Commissioner generally recommends at least a 200 foot buffer between agricultural and non-agricultural uses." The DEIR then outlines the project plans for a 60-foot buffer on the site's western border and 50 feet on the north and east, without any discussion of the feasibility of implementing the County's 200 foot buffer. The Agricultural Commissioner has indicated that the proposed 50-foot and 60-foot buffers are inadequate. Any new development adjacent to agricultural areas should include well-defined buffer zones as set forth in Section 21.66.030.F.2 of the County Zoning Ordinance (Title 21). The areas to be utilized as buffer zones shall be placed in permanent easements required as conditions of project approval. The County ordinance requires that development adjacent to "F", PG" or "RG" zoning districts, shall have a 200 foot wide easement or wider where necessary to mitigate adverse impacts between agricultural and adjacent land uses. If 200 foot buffers and not to be provided, the EIR should discuss why this cannot be accomplished and discuss the impacts of not providing the required 200-foot buffers. Alternately, physical barriers should be considered to increase the effectiveness of reduced buffers. K-7

Discussion of buffers must address consistency with the County's General Plan. Evaluation of impacts on agricultural lands needs to distinguish between permanent edges (no future growth) and temporary edges (allow for possible future growth). The County's draft General Plan (Policy AG-1.2) removes specific set back distance, and requires a project to justify set backs based on criteria including, but not limited to:

a. Wind direction and intensity. . Set backs larger than 200 feet may be necessary to allow aerial spraying of adjacent agricultural properties.

b. Topography

c. Impact on agricultural operations must be fully mitigated on the development properties. Reduced buffer for areas adjacent to lands under Williamson Act contract would be a significant impact.

K-8

Buffers may not include improvements that are incompatible with the agricultural operations. For example, open space that is not properly maintained could result in weeds or rodents that can impact food safety. Buffers must be adequate sized such that they completely mitigate any potential impact. If not, the EIR should conclude significant growth inducing impact and impacts can be feasibly mitigated by increasing buffers.

Loss of Prime Farmland (Page 5.0-12) – The DEIR states that the project would constitute a significant cumulative impact to agricultural resources and states that "currently there are no formal mitigation fee and/or conservation easement policies in place" and "no measures are available to K-9

fully mitigate the loss of prime farmland." However, CEQA requires that all feasible mitigation measures be applied. The County's General Plan (Policy AG-1.12) requires mitigation and without a program established, the City should consult the County in order to establish an acceptable mitigation program for this project. What are the alternatives to converting this amount of prime agricultural land or alternatively how the City will provide for permanent protection of prime agricultural land elsewhere in the County prior to proceeding with the proposed development? In addition, there needs to be a quantifying of the financial loss to the County/region from the conversion of agricultural to the proposed uses, including a discussion of how the agricultural jobs that will be replaced will compare to those created. K-9 cont.

Cultural Resources (Chapter 4.5) – The DEIR does not acknowledge that, since General Plan Amendments are proposed, the City is required to consult with local Native Americans pursuant to Government Code Section 65350 et seq). K-10

Land Use and Planning (Chapter 4.9) – The County's 2007 Draft General Plan encourages city-centered growth (Policies LU-2.15 through LU-2.20). The EIR needs to address how the proposed project is consistent with planned growth both under the County's adopted and Draft General Plan as well as the City's growth plans. Analysis should include justification for a large expansion versus in-fill development opportunities (Policy LU-2.19). Specifically, the EIR needs to include analysis regarding how the project meets County General Plan policies LU-2.18.1 and AG-1.1. K-11

Water Resources Agency

4.8 Hydrology and Water Quality

Surface Water Resources and Water Quality (Page 4.8-1) - The section states that, "Drainage of the surface water in the vicinity of the project generally occurs by overland sheet flow towards shallow ephemeral drainage courses on the site. The drainages on the property typically do not carry surface water except during peak rainfall events." The Agency recommends all development be setback 50 feet from the "top of bank" of any watercourse. As defined by Monterey County, top of bank means the intersection of a plane beginning at the toe of the bank and sloping 1.5 (horizontal): 1 (vertical) with the generally level ground along the watercourse. K-12

Flooding (Page 4.8-3) - The section states that, "Although the City is not located within the 100-year floodplain, flooding has occurred in the downtown portion of the City and a portion of the project site." The Agency extended the Soledad Drainage Improvement Project upstream of Metz Rd, in 2002. These improvements were sized for the 100-year storm event for the Bryant Canyon watershed, but additional flows from adjacent watersheds impact the channel. Additional improvements need to be made to provide flood protection for the surrounding area. The EIR should be updated to include this information. K-13

Surface Drainage/Flooding (Page 4.8-10) - The *Hydraulic Analysis of the proposed storm drain system for the Miravale III Subdivision* included in the DEIR does not provide sufficient details to determine potential impacts. The EIR should include a preliminary drainage analysis that clearly defines watersheds, numeric design criteria, and recommended mitigation measures. The analysis should include supporting maps, calculations, and technical evidence to support all assumptions and K-14

recommendations. The EIR should include a preliminary drainage plan, prepared by a registered civil engineer, showing the location, size, and type of all major drainage facilities. K-14 cont.

If on-site retention is recommended, the EIR should include a geologic investigation performed at the site of the proposed retention facilities. The investigation should determine the suitability of subsurface materials for stormwater retention and aquifer recharge, as well as, potential impacts to geologic hazards. In accordance with the State of California Board for Geologists and Geophysicists *Guidelines for Engineering Geologic Reports*, the analysis should include one or more of the following subsurface investigations:

a. Trenching and any other excavation (with appropriate logging and documentation) to permit detailed and direct observation of continuously exposed geologic units and features.

b. Borings drilled, test pits excavated, and groundwater monitoring wells installed to permit the collection of data needed to evaluate the depth and types of materials and subsurface water. Data points sufficient in number and adequately spaced will permit valid correlations and interpretations. K-15

Geophysical surveys conducted to facilitate the evaluation of the types of site materials and their physical properties, groundwater conditions and any other pertinent site conditions. The types of equipment and techniques used, such as seismic refraction, magnetic, electric resistivity, seismic reflection and gravity, and the name of the geologist or geophysicist responsible for the work.

Depending on the results, the mitigation measures may need to be rewritten to incorporate the recommendations of the geologic investigation.

Public Works Department

This development proposal would provide residential, retail services, school, parks and golf courses that would be available to the entire community, and this project is expected to generate additional regional as well as local trips. Consequently there is the potential for impacts to the regional transportation system. The project developer is responsible for addressing these regional and local impacts, and may do so through payment of the Transportation Agency for Monterey County (TAMC) regional development impact fee and city of Soledad's Traffic Impact fee to address cumulative regional traffic impacts of development throughout the county. K-16

The traffic study for this project identifies impacts and mitigations along Highway 101. Project-specific and cumulative impacts are identified and mitigations developed within this traffic study. The applicant is still responsible for mitigating the impacts of this development proposal, and shall implement direct project-specific mitigation measures prior to completion of the proposed development. Mitigations and improvements within the State right-of-way are subject to Caltrans' review, and implementation of these mitigations shall also be coordinated with Caltrans. K-17

Currently a portion of San Vicente Road from Soledad City limits northerly to its terminus is a County Road. Portions of this County road are within the limits of this development project. K-18

Because this roadway will be primarily serving this development area this roadway should be included in the annexation of the project area to the City of Soledad. K-18 cont.

Parks Department

Historic Structure (Page 4.9-35 of Table 4.9-2) - It is stated that the single historic structure is located on the site and mitigation is achieved by relocating the structure from its current location, consistent with the City of Soledad General Plan Land Use Policies. If the house is considered eligible for listing by the National Historic Register, the proposal to move the house to a new location must be reconsidered. Therefore, the County requests a PHASE I HISTORICAL ASSESMENT for the LORENTZEN HOUSE by a County-certified architectural historian to determined if the structure is eligible for National, State or local listing as a significant historical structure. K-19

Park Requirements - On page 3.0-8 under the proposed "General Plan Amendments," there is stated the need for an exception to the requirement that the development provide its fair share of public park and recreation opportunities (3 acres/1,000 residents):

- By including approximately 8 acres of trails and park connections; and
- on page 2-14 under "Summary of Environmental Impacts and Mitigation," by submitting detailed plans, including a revised Specific Plan and Tentative Map, demonstrating adequate parkland.

On page 4.9-6 of Table 4.9-2, it is stated that as currently proposed, the project includes approximately 45.60 acres of parkland, including 24.27 acres of parkland to be provided in conjunction with the development of the multi-family Village Residential areas. In addition, the proposed project also includes an approximately 1,590 acre golf course, in addition to approximately 62 acres of open space. It is not clear what the request for an exception to the park requirements is referring, unless it is requesting that a later detailed, revised Specific Plan will meet the minimum park requirements of 3 acres/1,000 residents for public park and recreation opportunities. But it must be understood that the minimum 3 acres/1,000 residents is required by both the County (Title 19, Monterey County Subdivision Ordinance, Section 19.12.010) and the State (Quimby Act, Government Code Section 66477 (a) (2)). K-20

The on-site acreage is required by the County's Title 19 Ordinance (Section 19.12.010 F) reflecting the State's Quimby Act (Government Code Section 66477 (a) (7)) when the subdivision proposal consists of 50 or more dwelling units, not withstanding that the parcels may be less than 50 as in the case of multi-family units. In the case of the Miravalle III Specific Plan park requirements, the on-site park requirements based on the 920 acre site and a total of 4,316 dwelling units (1,702 single family dwelling units and 2,614 multi-family units) would be a minimum of 31.7862 acres of parkland. The calculations are as follows: K-21

- 1,470 detached sfd;
- 232 duplex sfd

1,702 sfd

.003 (acres/person) multiplied by 3 (persons/dwelling unit) multiplied by 1,702 (1,470 detached sfd and 116 duplex sfd units) = 15.318 (acres of land required for dedication).

- 2,614 multi family dwellings

.003 (acres/person) multiplied by 2.1 (persons/dwelling unit) multiplied by 2,614 (number of multi-family dwelling units) = 16.4682 (acres of land required for dedication).

15.318 acres of land required for single family households
+16.4682 acres of land required for multi-family households
31.7862 acres of land required for active recreation

K-21 cont.

Note that the 31.7862 acres of land is the minimum acres of land required to provide the land for functional, active recreational units on a local level of service which reasonably serves the subdivision or neighborhood service. Title 19 does not provide credit "...for common open space areas, dedicated scenic easements, dedicated hiking or riding trails or other passive space recreational uses." Active recreational uses include but are not limited to tot lots, play field lots, playgrounds, playfields, and other specialized recreational facilities that may serve the family group and also senior citizens and child care activities. (The proposed semi-private golf course would not be sufficient to reasonably serve the recreational needs of all age groups). This County regulation again reflects the State Quimby Act by insistence upon active recreation improvements of dedicated parkland within new subdivision.

K-22

Title 19 also allows the payment of park in-lieu frees, particularly for projects involving 50 units or less. Where there are public park and recreation facilities within close proximity to a new subdivision (about a ¼ mile, but not greater than a ½ mile walking distance), the Parks Department considers the use of in-lieu fees for projects of a larger size.

K-23

Subsection 19.12.010 (I) of the Subdivision Ordinance allows credit for recreation improvements to dedicated parkland. It states that if a subdivider dedicates parkland, "...the value of the improvements together with any equipment located thereon shall be a credit against the payment of fees or dedication of land required by this section." But in practice, the County has never given credit pursuant to this section. This is because the County's park dedication requirement is at the statutory minimum and, in order to meet the primary intent of the Subdivision Ordinance Section 19.12.010, enough land needs to be provided and active recreational facilities need to be constructed to meet the needs of the future residents of the new subdivision. Anything less than the 3 acres per 1,000 person park standard is viewed to be insufficient to meet the purpose and intent of the County's Ordinance.

K-24

In summary, it appears that the subdivision as currently proposed includes approximately 45.60 acres of parkland, including 24.27 acres of parkland to be provided in conjunction with the development of the multi-family Village Residential areas. The County accepts this proposal when it is demonstrated

a. that the Applicant shall comply with the Recreation Requirements contained in Section 19.12.010 (B) – Requirements, County Subdivision Ordinance, Title 19, Monterey County Code, by providing dedicated land of no less that 31.7862 acres for park and active recreation purposes reasonably serving all age groups residing within the subdivision;

b. that revised Specific Plans do indicate that the parkland is adequately distributed throughout the subdivision serving the various neighborhoods;

K-25

c. that the dedicated parkland complies with Section 19.12.010 (D) – Standards and Formula for Dedication of Land – by providing the County Parks Department with a Master Park and Recreation Plan which includes a development, maintenance, operation and financing component for each dedicated recreation parcel. The Plan shall also delineate the types of improvements within each dedicated park parcel for serving the appropriate recreational needs for all age groups residing within the subdivision.

K-25 cont.

d. that the Master Park and Recreation Plan shall address the park and recreational needs for individuals covered under the American with Disabilities Act.

Environmental Health Division

Hazards and Hazardous Materials (4.7) - As stated in Mitigations 4.7-1 through 4.7-4, a Remediation Plan will be submitted to EHD for review and approval.

Mitigation 4.7-5 speaks to the concerns of the proximity of the closed landfill to proposed school sites. If during the Phase II Environmental Site Assessment it is determined that if any hazards exist that cannot be reduced to an acceptable level through remediation, the applicant in conjunction with the school district will identify new school sites.

K-26

Noise (4.10) – All concerns that EHD were discussed and the appropriate mitigations are in place.

Utilities and Services (4.14) – Water Supplies and Storage - The city's water supplies and storage/distribution system will be expanded to encompass the new development. Also, the city water system is regulated by the California Department of Health Services (DHS), which has oversight and permitting of all aspects of the quality and delivery of potable water. The city is in the Monterey County Zone2C area of the Salinas valley so a long-term sustainable water supply is available.

K-27

Wastewater: the existing two treatment plants will be expanded and upgraded to be able to treat wastewater to California Code of Regulation (CCR) Title 22 standards, specifically Sections 60304 and 60310.for use of recycled wastewater. The California Regional Water Quality Control Board, Central Coast Region (RWQCB), and to a lesser extent the, Monterey County Health Department, Environmental Health Division (EHD), regulate and permit the wastewater treatment facility.

In the Soledad Municipal Code a specific discuses regarding the construction of infrastructure and the use of recycled water to meet State of California Water Code Section 13510, 13550, 461 and CCR 65602(e) for water conservation. On June 6, 2007 the city adopted Ordinance No 645, which amended the Municipal Code to include Chapter 13.11, governing use of recycle water within the City's service area. Sections 13.11.010 through 13.11.190 establish procedures, specifications, limitation and the regulation set forth by the County, State and Federal governmental codes for the safe use and operation of recycled water facilities and systems. A cope of this ordinance must be included in the final EIR.

K-28

Mitigation measures 4.14-1 through 4.14-4 speak to water supply, distribution systems, recycled water facilities and infrastructure construction and means for over site.

Mitigation measures 4.14-5 through 4.14-8 speaks to the wastewater treatment system, permitting and over site.

K-29

Mitigation measures 4.14-9 through 4.14-11 speaks to water and wastewater infrastructure design, placement, permitting and capacity.

With these Mitigation measures in place, these impacts will be less than significant. K-29 cont.

Solid Waste: all concerns that EHD have been discussed and the appropriate mitigations are in place. K-30

EHD will work with the RWQCB as well as the City of Soledad in implementing and overseeing the rules and regulation regarding the use of recycled water to protect the health and well being of the people of Monterey County. K-31

Thank you for the opportunity to comment on the Draft EIR. Feel free to call me or Bob Schubert at (831) 755-5183 if you have any questions.

Sincerely,

Mike Novo
RMA-Planning Director

cc: RMA
RMA-Public Works Department
Water Resources Agency
Parks Department
Environmental Health Division
RMA- Redevelopment Housing
Agricultural Commissioner
Assessor
County Counsel
LAFC0
Sheriff

LETTER K: MONTEREY COUNTY RESOURCE MANAGEMENT AGENCY (MCRMA)

K1: Comment acknowledged. This comment does not raise an environmental issue that warrants a response under CEQA. No response is necessary.

K2: Comment acknowledged. This comment does not raise an environmental issue that warrants a response under CEQA. This comment is referred to decision-makers for further consideration as part of the deliberative process. No response is necessary.

K3: This comment requests that the EIR identify the total quantity of cubic yards of grading proposed in connection with the project, identify the number of truck trips (if any), and whether grading is proposed to be phased or completed all at once. Grading for roads, other infrastructure improvements and related development would be phased based on the proposed phasing plan contained in the Specific Plan. According to preliminary estimates provided by the applicant's representative, development of the proposed project would entail approximately 2.05 million cubic yards of cut/fill. These are considered preliminary estimates and final cut/fill calculations will be based on project-level detail as individual applications and improvement plans are submitted to the City of Soledad for development within the Specific Plan area. As identified in the Draft EIR, this EIR is a programmatic level document and future proposals within the Specific Plan area may require additional environmental review if they are inconsistent with the analysis contained in this EIR.

This comment also identifies that a construction management plan should identify proposed haul routes that are evaluated in the Draft EIR for impacts to sensitive receptors and potential air quality impacts. The Draft EIR clearly evaluates potential impacts associated with construction generated traffic, including associated air quality impacts; please refer to Draft EIR **Section 4.3 Air Quality** for further discussion. The analysis in the Draft EIR identifies potential impacts associated with construction traffic and mitigation measures have been identified to address impacts to sensitive receptors, where appropriate (see Mitigation Measures 4.3-1 and 4.3-2 as revised in **Section 4.0 Revisions to the Draft EIR**). Moreover, the analysis in the Draft EIR is at a programmatic level and future projects within the Specific Plan will be reviewed by the City of Soledad to determine whether additional environmental review is warranted under CEQA.

K4: This comment identifies that the proposed project includes a General Plan amendment to allow exceptions to City of Soledad General Plan Land Use Policy L-45, which prohibits ridgeline development. This comment contends that this policy is not addressed or referenced in **Section 4.1 Aesthetics** and the Draft EIR should identify 1) why the proposed project cannot satisfy this policy, and 2) the corresponding environmental impacts of failing to comply with this policy.

As discussed in detail in **Section 4.1 Aesthetics,** the proposed project would result in significant and unavoidable aesthetic-related impacts due to development above the 400' elevation contour, which for the purposes of this EIR would constitute ridgeline development. Although not specifically identified in **Section 4.1 Aesthetics**, the Draft EIR clearly identifies in **Section 4.9 Land Use and Planning**, that the proposed project would be inconsistent with General Plan Land Use Policy L-45 since the proposed project would result in development above the 400 foot elevation contour. Numerous mitigation measures have been identified in the Draft EIR to minimize the extent of visual impacts associated with ridgeline development; however, not to a less-than-significant level. In addition, the proposed Specific Plan contains specific Hillside Development Standards to minimize potential adverse impacts associated with ridgeline development; copies of these standards are contained in Appendix C of the Draft EIR. Additional mitigation measures have been identified in the Draft EIR to further ensure that potential impacts are minimized to the extent feasible given the nature of the proposal project. In order to provide additional clarification regarding the extent of aesthetic impacts, revisions have been incorporated into the

Draft EIR in response to this comment. Please refer to **Section 4.0 Revisions to the Draft EIR** for more information.

This comment also suggests that the Draft EIR should evaluate a project alternative that would entail the proposed project complying with applicable General Plan policies, particularly those policies related to ridgeline development. The Draft EIR clearly evaluates an alternative to the proposed project that would be consistent with the City's 2005 General Plan; please see **Section 6.0 Alternatives** for further discussion. As described in that section, this alternative would avoid a number of significant project impacts and would ensure project consistency with the General Plan thereby eliminating the need to amend the 2005 General Plan.

K5: This comment states that the EIR does not include the requirement for the City to enter into a tax transfer agreement with the County as requirement pursuant to Revenue and Taxation Code Section 99. The text of the Draft EIR has been revised to reflect this comment; please refer to **Section 4.0 Revisions to the Draft EIR.**

K6: This comment contends that the text of the Draft EIR should be revised to identify the level of significance after mitigation has been incorporated for aesthetic-related impacts. The Draft EIR clearly identifies that the proposed project would represent a significant and unavoidable impact that cannot be mitigated to a less-than-significant level in regards to a scenic vista and the visual character of the site and surrounding area. Even with the incorporation of mitigation measures these impacts cannot be reduced to a less-than-significant level. Please see Draft EIR **Section 4.1 Aesthetics** for more information; see also Table 2-1 which summarizes that level of significance after mitigation.

K7: This comment identifies specific concerns regarding the adequacy of the proposed agricultural buffers. A detailed response to this comment is provided in **Response F6.** As discussed in that response, the agricultural buffers were evaluated in the Agricultural Resources Report prepared by Buchanan Associates. Based on the analysis contained in that report it was determined that the proposed northern and eastern buffers were adequate based on existing and proposed land uses; please refer to Appendix T-1 for more information. Mitigation Measures 4.2-1, 4.2-2, and 4.2-3 were revised to ensure that the proposed western buffer include adequate buffer and appropriate physical barriers to further minimize potential conflicts with agricultural uses Please refer to **Section 4.0 Revisions to the Draft EIR,** for more information.

K8: This comment states that the proposed agricultural buffers must be analyzed for consistency with Monterey County General Plan policy AG-1.2, which identifies certain specifications for determining the appropriate size of agricultural buffers. The analysis contained in the Draft EIR regarding the proposed agricultural buffers summarizes the findings of the Agricultural Resources Report prepared by Buchanan Associates, which evaluated the proposed buffers in accordance with Monterey County General Plan policy AG-1.2. Based on the analysis contained in that report (see Appendix T-1), it was determined that the proposed northern and eastern agricultural buffers were adequate. Mitigation measures were incorporated into the Draft EIR, based in part on the recommendations of the Agricultural Resources Report, to ensure that the proposed buffers were supplemented by physical barriers, where appropriate, to ensure that the proposed project would not significantly impact existing agricultural operations. The proposed 60 foot western buffer, however, was determined to be inadequate and additional buffer area combined with a physical barrier was identified as necessary. The Draft EIR has been revised to reflect this requirement; please see **Section 4.0 Revisions to the Agricultural Resources, Section 4.2.**

This comment also states that if the proposed buffers are determined to be inadequate then the Draft EIR must conclude that this would represent a significant growth-inducing impact. As described above, the Draft EIR and supporting Agricultural Resources Report evaluated the proposed buffers and determined that mitigation measures were necessary to ensure that the proposed project would not significant impact

existing agricultural operations. Based on the analysis contained in the Draft EIR, as modified in **Section 4.0 Revisions to the Draft EIR,** this would not represent a growth-inducing impact.

K9: This comment recommends that the City of Soledad consider developing a farmland mitigation program in order to address the loss of prime farmland associated with buildout of the General Plan and this project in particular. As identified in the Draft EIR, the proposed project would result in the permanent conversion of farmland into urban uses. The permanent loss of farmland was identified as a significant and unavoidable impact. This determination was based in part on the analysis contained in the Agricultural Resources Report prepared by Buchanan Associates. Consistent with the analysis contained in the City of Soledad General Plan EIR, this was identified as a significant and unavoidable cumulative level impact that cannot be reduced to a less-than-significant level. As described on page 5.0-12 of the Draft EIR and the Agricultural Resource Report contained in Appendix T-1, the City of Soledad does not have an adopted mitigation program for agricultural impacts at this time. The proposed project site was identified in the General Plan's Land Use Element as an area of future urban expansion and the cumulative loss of agricultural land was previously considered in the General Plan EIR for which Statements of Overriding Considerations were adopted. The proposed project would not result in additional environmental impacts beyond those previously identified in the General Plan EIR. As described in **Section 1.0 Introduction,** the analysis contained in this EIR is tiered from the General Plan EIR prepared in 2005, which identified significant and unavoidable cumulative level impacts associated with the permanent loss of agricultural lands. No feasible mitigation measures were identified at that time to reduce and/or minimize cumulative level impacts. While the proposed project cannot mitigate the extent of its contribution towards this cumulative level effect, an agricultural educational facility is proposed in connection with this project, as described in **Section 3.0 Project Description.** This comment raises a number of additional questions related to City efforts to preserve farmland in the future and recommends that financial loss to the County/region from the loss of agricultural jobs should be evaluated. These comments do not generally relate to an environmental issue that warrants a response under CEQA or reflect policy decisions that can only be made by City officials. Accordingly, this comment is referred to the City of Soledad decision-makers for further consideration.

K10: Comment acknowledged. As suggested in this comment, the City of Soledad is required to consult with the appropriate Native American tribe pursuant to Government Code Section 65350 prior to project approval. In accordance with this requirement, the City sent consultation letters to representatives of four Native American tribes in the region in March of 2008; to date, no responses have been received. These letters are available for public review at the Community Development Department at the City Hall.

K11: This comment states that the Draft EIR needs to address how the proposed project is consistent with planned growth under the County's adopted and Draft General Plan as well as the City's growth plans. The comment specifically requests that the proposed project be evaluated for consistency with Draft Monterey County General Plan policies LU-2.18-1 and AG-1.1.

As described in detail in the Draft EIR (see **Section 4.9 Land Use and Planning**) the proposed project is located within several areas designated as Expansion Areas under the City's existing General Plan. The City of Soledad previously determined that these areas within the General Plan Planning Area represent a logical expansion of the City's existing boundaries and are suitable for urban expansion The impacts of this expansion and future growth of the City were previously analyzed in the City of Soledad General Plan EIR at a programmatic level (September 2005; SCH #2005032722). The General Plan EIR contains a detailed analysis of the General Plan's relationship with Monterey County City Centered Growth policies and that analysis determined that the 2005 General Plan was consistent with those principles. While the Draft EIR for the Miravale III Specific Plan determined that the proposed project would conflict with a number of policies contained in the General Plan for the purposes of avoiding and/or mitigating an environmental effect, the proposed project would nevertheless occur within an area that is considered suitable for urban expansion. Mitigation identified in the Draft EIR ensures that the overall

level of development intensity proposed in the expansions area would not increase as a result of the proposed project.

The General Plan EIR also analyzes the consistency of the General Plan with applicable Monterey County General Plan policies related to agricultural resources. The General Plan EIR recognizes that potential land use compatibility issues could arise at the interface between urban uses and farmlands as the City continues to expand. Mitigation Measures identified in this EIR ensure that potential land use compatibility issues associated with agricultural and urban uses would be minimized to a less-than-significant level by ensuring that adequate agricultural buffers are incorporated into the project design. Please refer to **Response F6** and **K7** for more information. An analysis of the proposed project's consistency with Draft Monterey County General Plan would be inappropriate since the General Plan has not been adopted by the County.

K12: This comment recommends that all development be setback 50' from the top of bank of any ephemeral drainage courses on the site. As discussed in **Response B2**, the project, as currently proposed, would eliminate a number of existing on-site drainage features to accommodate the project. As identified in the Draft EIR and supporting technical analyses (see Nolan, 1995), existing on-site drainage occurs by overland sheet flow towards shallow ephemeral drainages. These drainages do not typically carry surface water except during peak rainfall events. The project has proposed a series of drainage improvements, including the enlargement of two existing agricultural ponds, to accommodate stormwater runoff associated with the proposed project. While the Draft EIR determined that the proposed drainage system, as currently designed, is inadequate to meet project demands, the City of Soledad has determined that proposed storm drainage facilities can be improved to meet project demand and comply with the City's adopted Storm Drain Master Plan (SDMP), which analyzed the storm drain improvements necessary to serve the proposed Miravale III Specific Plan.. In addition, the Draft EIR specifically evaluated several project alternatives, including the General Plan Consistent Alternative and Reduced Project Alternative, that would avoid the elimination of several small drainages. These alternatives would lessen the extent of project impacts related to existing on-site drainage by avoiding and/or minimizing the extent of development on the hillside portions of the site. Please refer to **Section 4.0 Revisions to the Draft EIR** for more information regarding project alternatives. While the proposed project would still nonetheless eliminate these drainages and mitigation measures have been identified to reduce the extent of this impact, this comment is referred to City decision-makers for further consideration during the deliberative process. If determined appropriate, the City of Soledad could require that a policy be added to the Specific Plan that requires all development be setback a sufficient distance from all existing drainages consistent with this comment.

K13: This comment states that the Draft EIR should be updated to identify that the Monterey County Water Resources Agency completed drainage improvements upstream of Metz Road in 2002 as part of the Soledad Drainage Improvement Project. This comment identifies that additional drainage improvements need to be implemented in order to provide flood protection to the surrounding area. In response to this comment, revisions have been incorporated into the Draft EIR to amplify the background discussion regarding flooding hazards within the City of Soledad and surrounding area; please refer to **Section 4.0 Revisions to the Draft EIR, Hydrology and Water Quality, Section 4.8,** for more information.

K14: This comment contends that the hydraulic analysis of the proposed storm drain system does not provide sufficient details to determine the potential effects associated with project development. This comment contends that the EIR should be revised to include a preliminary drainage analysis that clearly defines 1) watersheds; 2) numeric design criteria; and 3) recommended mitigation measures. The comment further contends that the Draft EIR should include a preliminary drainage plan prepared by a registered civil engineer showing the proposed drainage facilities.

As described in the Draft EIR, Bestor Engineers, Inc. submitted technical documentation to the City of Soledad addressing drainage features associated with the proposed project. Proposed drainages features are depicted on the Vesting Tentative Map and supporting calculations and correspondence were submitted to the City of Soledad for consideration as part of the Draft EIR. This documentation was subsequently reviewed by RM Associates on the behalf of the City of Soledad Public Works Department. RM Associates evaluated the proposed system using HYDRA software. According to that analysis, which is included as an appendix to the Draft EIR (see Appendix G), the proposed system failed to meet a number of design criteria established in the City's Storm Drain Master Plan (SDMP).

The City of Soledad Public Works Department has undertaken a number of City-wide planning efforts to ensure that adequate public facilities will be provided throughout the City. These studies are intended to ensure that existing system deficiencies are adequately addressed and that future development provides adequate facilities to the specifications of the City. The purpose of the 2007 SDMP is to ensure that storm drainage improvements are planned in a comprehensive manner that accounts for existing needs and future improvements necessary to accommodate additional growth and development as contemplated in the City's 2005 General Plan. The 2007 SDMP ensures that adequate storm drain facilities will be available throughout the City and future expansion areas. As part of the 2007 SDMP, the City evaluated the proposed project to determine whether the proposed facilities were considered adequate based on City standards and the intensity of development associated with the proposed project. Based on that analysis, the City determined that the proposed facilities were inadequate to serve anticipated demand; however, the City also concluded that the facilities could be enlarged and enhanced to meet the requirements of the 2007 SDMP. According to the City of Soledad Public Works Department, compliance with the 2007 SDMP would ensure that the proposed project has adequate drainage facilities to ensure that post-project stormwater runoff will be at pre-project conditions. This analysis is reflected in the Draft EIR and was supported by technical evidence prepared by RM Associates. Mitigation measures were developed based on comments received from the City of Soledad Public Works Department and RM Associates to ensure that the proposed project will provide sufficient drainage facilities to meet project demands. Revisions have been incorporated into the Draft EIR to provide additional clarification regarding the relationship of the SDMP and the proposed project; please refer to **Section 4.0 Revisions to the Draft EIR, Hydrology and Water Quality, Section 4.8,** for more information.

K15: This comment recommends that a geologic investigation of the proposed retention facilities is incorporated into the Draft EIR in accordance with the State of California Board for Geologist and Geophysicists *Guidelines for Engineering Geological Reports.* The City of Soledad Public Works Department has gone to extensive lengths to ensure that adequate public facilities will be available to serve the City's existing needs, in addition to full-buildout as envisioned in the General Plan. The City of Soledad prepared a Storm Drain Master Plan (SDMP) in 2007 to ensure that storm drainage improvements are planned in a comprehensive manner that accounts for existing needs and anticipated future improvements to accommodate additional growth and development as contemplated in the City's 2005 General Plan. The 2007 SDMP ensures that adequate storm drain facilities will be available throughout the City and future expansion areas. As explained in prior **Response K14**, the City evaluated the proposed project as part of the 2007 SDMP to determine whether the proposed facilities were considered adequate based on City standards and the intensity of proposed development. Although the City determined that the proposed facilities were inadequate to serve anticipated demand, it found that that the facilities could be enlarged and enhanced to meet the requirements of the 2007 SDMP.

According to the City of Soledad Public Works Department, compliance with the 2007 SDMP would ensure that the proposed project has adequate drainage facilities to ensure that post-project stormwater runoff will be at pre-project conditions. At the time that final design-level engineering plans are submitted to the City a supporting geological investigation will be submitted as required by the City. Such analysis is considered unnecessary at this time since the 2007 SDMP determined that sufficient facilities could be accommodated on-site to meet project demands and ensure that post-project flows would be at pre-project conditions. Additionally, the Draft EIR is a programmatic level analysis, and final design of all proposed

drainage facilities will be required to comply with existing regulatory requirements as required by the State of California and the City of Soledad.

K16: This comment identifies that the proposed project would result in increased traffic which could result in impacts to regional facilities. As a result, the comments identifies that the proposed project is responsible for mitigating these impacts, and may do so through the payment of TAMC's regional impact fee. The Draft EIR has been revised to clarify that the proposed project will be subject to the TAMC regional impact fee; please refer to **Section 4.0 Revisions to the Draft EIR, Traffic and Circulation, Section 4.13,** for further discussion.

K17: Comment acknowledged. This comment does not raise an environmental issue that warrants a response under CEQA. No response is necessary.

K18: Comment acknowledged. This comment does not raise an environmental issue that warrants a response under CEQA. No response is necessary.

K19: This comment identifies that the proposed project would result in the relocation of the Lorentzen House in order to mitigate project impacts to a historical structure. The comment notes that the City should prepare a Phase 1 Historical Assessment of the Lorentzen house to determine whether the house is eligible for National, State or local listing as a significant historical structure. As described in **Section 4.5 Cultural Resources,** a Phase 1 Historical Assessment of the Lorentzen House was completed by Kent Seavey. Based on that analysis, it was determined that the Lorentzen house is eligible for listing on the California Register. A copy of that analysis is contained in Technical Appendix T-4. No further response is necessary.

K20: This comment requests that additional clarification be provided regarding the identified General Plan amendments that are considered to be necessary in order to accommodate the project as proposed. Specifically, the comment requests that additional clarification be provided regarding the project's obligation to provide parkland. Based on the City of Soledad's review of the Draft Specific Plan, the City identified that a number of General Plan amendments would be necessary in order to accommodate the project as proposed. One of those amendments included an exception from current City requirements related to parkland since the proposed project failed to provide an adequate amount of parkland in accordance with the City's adopted standards. The Draft EIR has been clarified to identify that these amendments were identified in order to accommodate the project as proposed. In addition, Mitigation Measure 4.12-6 has been revised to ensure that the proposed project provides an adequate amount of parkland (5 acres/1,000 residents) consistent with provisions of Appendix B of the General Plan, which establishes standards and policies for specific plans completed for the designated Expansion Areas. As identified in Mitigation Measure 4.12-6, a revised Specific Plan must be submitted to the City of Soledad demonstrating compliance with this measure. Please refer to **Section 4.0 Revisions to the Draft EIR,** for more information.

K21: This comment identifies the minimum required parkland contribution pursuant to Title 19 of the Monterey County Municipal Code. Please see **Response K20** above. As discussed above, the proposed project fails to meet the minimum parkland requirements according to Appendix B of the General Plan. The project applicant will be required to submit a revised Specific Plan demonstrating that adequate parkland is provided in accordance with City requirements. Mitigation Measure 4.12-6, as modified herein, will ensure that adequate parkland will be provided in connection with the proposed project as required pursuant to Appendix B of the General Plan. This mitigation will ensure that the proposed project will provide additional parkland opportunities to future residence beyond the requirements of the County of Monterey and the Quimby Act.

K22: Comment acknowledged. Mitigation Measure 4.12-6 as revised specifically requires that the proposed project provide improved parkland in order to meet the active recreational needs of future residents. Please see **Section 4.0 Revisions to the Draft EIR.**

K23: This comment notes that the County of Monterey also allows the payment of in-lieu fees as mitigation for potential impacts to parkland. The proposed project will be required to provide adequate parkland as discussed in **Response K20** and **K21**. The proposed project will also be required to pay Park Facilities Impact fee as required by the City of Soledad. Please see Mitigation Measure 4.12-6 and 4.12-7 for more information. Please also refer to **Section 4.0 Revisions to the Draft EIR, Public Services and Recreation, Section 4.12,** for more information.

K24: This comment identifies that a parkland contribution less than three acres/1,000 residents is considered inadequate to meet the requirements of the County for parkland contribution. As detailed in **Response K20** and **K21**, the proposed project will be required to contribute a minimum of five acres/1,000 residents in accordance with Appendix B of the General Plan; please see those responses for more information. Please also refer to **Section 4.0 Revisions to the Draft EIR, Public Services and Recreation, Section 4.12,** for more information**.**

K25: This comment identifies that the County is supportive of the mitigation and approach identified in the Draft EIR provided that: 1) the applicant comply with the recreation requirements contained in Section 19.12.010(B) of the County Municipal Code; 2) that a revised Specific Plan indicate that parkland is distributed throughout the subdivision; 3) a Master Park and Recreation Plan is provided to the County demonstrating that the dedicated parkland complies with Section 19.12.010(D) of the County Municipal Code; and 4) the Master Park and Recreation Plan addresses that park and recreational needs for individuals covered under the American with Disabilities Act.

As described in the preceding responses, the City of Soledad requirements for a Specific Plan exceeds the minimum parkland contribution required by the County of Monterey. The proposed project will be required to provide a minimum parkland ration of five acres/1,000 residents. Mitigation Measure 4.12-6 has been revised to require that a Master Park and Recreation Plan be prepared for each phase of development prior to the recordation of a final map consistent with the facility standards of the City's General Plan and adopted citywide Parks and Recreation Master Plan, which requires that new parks facilities be ADA compliant. Please refer to **Section 4.0 Revisions to the Draft EIR, Public Services and Recreation, Section 4.12,** for more information.

K26: Comment acknowledged. This comment does not raise an environmental issue that warrants a response under CEQA. No further response is necessary.

K27: This comment identifies that the project site is located within the Zone 2C area of the Salinas Valley and that a long-term sustainable water supply is available to accommodate project demands. This comment does not require a response under CEQA.

K28: This comment states that a copy of Ordinance No. 645, adopted by the City Council in 2007, must be included in the Final EIR. A brief synopsis of the requirements of Ordinance No. 645, which amended the Soledad Municipal Code to include Chapter 13.11- Water Recycling Service is provided on page 4.14-9 of the Draft EIR, and it is unnecessary to include a copy of the full ordinance as part of the Final EIR. As proposed by the draft Specific Plan and described in the Draft EIR, the proposed project will be required to comply with the requirements of this ordinance.

K29: This comment identifies that the mitigation measures provided in **Section 4.14 Utilities and Service Systems** are adequate to ensure that project impacts will be less-than-significant. No response is necessary. Comment acknowledged.

K30: Comment acknowledged. No response is necessary.

K31: Comment acknowledged. This comment does not raise an environmental issue that warrants a response under CEQA. No further response is necessary.

Letter L

A Public Comment on the EIR
for the Miravale III Proposal

David Baker
300 Market St.
Soledad, CA 93960
Dec. 16, 2008

RECEIVED
DEC 19 2008
PLANNING DEPARTMENT

The Miravale III project is exactly the opposite of what Soledad needs: 20,000 more residents without local jobs. Soledad already has a severe imbalance in its jobs-to-housing ratio. There is already a very large number of commuters (and a lot more houses already approved) in proportion to the number of local jobs. Many workers are forced to drive 60 to 180 mile round-trips every work day. The impact of millions of miles of collective commuting per year is enormous: millions of dollars of hard-earned wages going out the exhaust pipes; countless hours of family time, precious parenting time, lost forever. "Bed room community" is a contradictory expression because a real community, a healthy community, even a sense or feeling of community is almost impossible when you build a commuters suburb. The EIR is completely lacking in its performance when it comes to making an honest assessment of these potentially significant social impacts.

L-1

Alternatives to this over-sized project need to be studied. For example, a policy of first building jobs and then adding housing only as jobs increase might have more economic and social benefits.

Sincerely,
David Baker

David Baker, 12-17-08

LETTER L: David Baker

L1: This comment asserts that the Draft EIR is inadequate because it fails to analyze the social impacts associated with the proposed project, specifically impacts related to a jobs-housing imbalance. This comment contends that these social impacts would represent a significant impact under CEQA. This comment also suggests that Draft EIR should consider an alternative to the proposed project that would entail more job creation.

An impact under CEQA is only considered significant when the impact would result in a physical impact to the environment. As identified in CEQA Guidelines § 15131(a), economic or social effect of a project shall not be treated as significant effects on the environment. Social effects may be considered significant, if and when, it can be demonstrated that those effects would result in significant physical changes in the environment. The analysis in the Draft EIR has clearly evaluated the potential environmental effects associated with the proposed project and mitigation measures have been identified to lessen the extent of those impacts, where feasible. The potential social effects identified in this comment would not result in any additional environmental effects beyond those already identified in the Draft EIR.

The Draft EIR evaluated a range of project alternatives consistent with the requirements of CEQA as described in **Section 6.0** of the Draft EIR. The Buildout Consistent with the General Plan Alternative would result in considerably less residential use while still providing commercial uses at the scale proposed as part of this project. Although the proposed project itself would not necessarily result in a balanced jobs-housing ratio, buildout as envisioned in the General Plan would result in a more balanced distribution of land uses. Please refer to the analysis in the Draft EIR for more information.

Letter M

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PLANNING DEPARTMENT

December 18, 2008

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Via Email & Mail

Susan Hilinski
Community Development Director
City of Soledad
248 Main Street
Soledad, CA 93960

Re: Miravale III Specific Plan Draft Environmental Impact Report

Dear Ms. Hilinski,

RRM Design Group has carefully reviewed the October 2008 DEIR for the Miravale III Specific Plan. As a result of that review we have submitted comments on the DEIR.

Please review the attached table that identifies the applicant's response to each proposed mitigation measure. If you have questions regarding any of the proposed mitigations or other attachments, please do not hesitate to contact us to discuss the analysis and other information that led to the mitigated plan. Thank you for your attention to this matter.

M-1

Sincerely,
RRM DESIGN GROUP

Debbie Rudd
Principal Planner

cc: N. Ahga

Attachment: Description of Mitigation Measures of the Mitigated Project

aln\\apollo\on-site\2006\1006059-Soledad-Miravale-III-SP\Planning\EIR\EIR Response Miravale III 12-18-08COVER.docx

SOLEDAD MIRAVALE III

Acceptability of Mitigation Measures Recommended in the DEIR

December 16, 2008

DEIR MITIGATION MEASURE	ACCEPTABLE	NOT ACCEPTABLE	ACCEPTABLE WITH REVISIONS	NOTES...	
4.1 Aesthetics					
4.1-1	X				
4.1-2	X				
4.1-3			X	Measure should acknowledge Appendix A of the Miravale III Specific Plan - Hillside Development Standards. Is the intent for each lot to demonstrate the extent of proposed development with staking and flagging or can a typical lot be identified?	M-2
4.1-4	X				
4.1-5	X				
4.1-6	X				
4.1-7	X				
4.1-8	X				
4.1-9	X				
4.1-10			X	Measure should acknowledge page 2-48 of the Miravale III Specific Plan. This page includes gateway design guidelines.	M-3
4.1-11			X	Measure should acknowledge Chapter 2 of the Miravale III Specific Plan contains village residential design guidelines which address this measure. The applicant already revised the Specific Plan per City Council and staff direction on integrating the affordable housing. Affordable lots have been sprinkled into the single family neighborhoods per their direction. Table 6-1 in the Specific Plan delineates the number of affordable units per phase and per Village Residential neighborhood. This table illustrates that the affordable units are adequately dispersed.	M-4
4.1-12			X	Measure should acknowledge page 2-26 of the Miravale III Specific Plan which contains development standards relating to landscaping and open space areas.	M-5
4.1-13	X				
4.1-14			X	Measure should acknowledge page 2-45 of the Miravale III Specific Plan which includes commercial lighting standards.	M-6
4.1-15			X	Measure should acknowledge page 2-50 of the Miravale III Specific Plan which includes lighting design guidelines.	M-7

DEIR MITIGATION MEASURE	ACCEPTABLE	NOT ACCEPTABLE	ACCEPTABLE WITH REVISIONS	NOTES...	
4.1-16			X	Measure should acknowledge page 2-45 of the Miravale III Specific Plan which includes commercial lighting standards.	M-8
4.2 Agricultural Resources					
4.2-1	X				
4.2-2	X				
4.2-3	X				
4.2-4	X				
4.2-5	X				
4.3 Air Quality					
4.3-1		X		2.5 acres/day is not reasonably feasible and is not consistent with the standard of operation for grading. 2.5 acres is not enough area to accommodate both the cut and fill activities for a large property. This will force the contractor to stock pile soil from the grading which will cause more dust instead of reducing the dust. The other mitigation measures will effectively reduce dust. The multiple movements of earth resulting from this 2.5 acre/day requirement will result in more air quality impact from both dust and emissions.	M-9
4.3-2			X	Two minutes is too short.	M-10
4.3-3			X	Onsite child care is only applicable when there is a large employer (500+ full-time employees). This is not applicable to Miravale III. Applicant is willing to consider if it is warranted.	M-11
4.4 Biological Resources					
4.4-1	X				
4.4-2	X				
4.4-3	X				
4.4-4	X				
4.4-5	X				
4.4-6	X				
4.4-7	X				
4.4-8		X		Medians offer a safe place for refuge for people and wildlife as they cross the street. In order to make Miravale III a more sustainable project, more trees and landscaping should be encouraged to reduce the heat island effect. Medians also encourage reduced vehicle speeds by narrowing the ROW which is again a sustainable solution and encourages walking. The applicant feels this measure is unreasonable.	M-12
4.4-9	X				
4.4-10	X				
4.4-11	X				
4.4-12	X				
4.4-13	X				

DEIR MITIGATION MEASURE	ACCEPTABLE	NOT ACCEPTABLE	ACCEPTABLE WITH REVISIONS	NOTES...	
4.4-14	X				
4.4-15	X				
4.4-16	X				
4.4-17	X				
4.4-18	X				
4.4-19	X				
4.4-20	X				
4.4-21	X				
4.5 Cultural Resources					
4.5-1		X		Measure should also allow for the option for proponent/developer to retain the historic structure.	M-13
4.5-2	X				
4.5-3	X				
4.5-4	X				
4.5-5	X				
4.5-6	X				
4.5-7	X				
4.5-8	X				
4.5-9	X				
4.6 Geology, Soils and Mineral Resources					
4.6-1	X				
4.6-2	X				
4.6-3	X				
4.6-4	X				
4.6-5	X				
4.6-6		X		Measure should be revised to allow for sustainable/LID solutions such as bio swales to be incorporated.	M-14
4.6-7	X				
4.6-8	X				
4.6-9	X				
4.7 Hazards and Hazardous Materials					
4.7-1	X				
4.7-2	X				
4.7-3	X				
4.7-4	X				
4.7-5	X				
4.7-6	X				
4.8 Hydrology and Water Quality					
4.8-1	X				
4.8-2	X				
4.8-3	X				

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DEIR MITIGATION MEASURE	ACCEPTABLE	NOT ACCEPTABLE	ACCEPTABLE WITH REVISIONS	NOTES...	
4.9 Land Use and Planning					
4.9-1			X	The January 2008 Draft Miravale III Specific Plan has incorporated these comments. This measure should be removed as these comments have already been addressed in the Specific Plan.	M-15
4.10 Noise					
4.10-1			X	Insert the word "exterior" before "noise exposure."	M-16
4.10-2	X				
4.10-3	X				
4.10-4		X		It also needs to be quantified i.e. shall incorporate noise reduction methods where noise levels are above the existing interior level requirement of 45dBA.	M-17
4.10-5	X				
4.10-6	X				
4.10-7	X				
4.10-8	X				
4.10-9	X				
4.10-10	X				
4.10-11	X				
4.10-12	X				
4.10-13	X				
4.10-14	X				
4.10-15	X				
4.11 Population and Housing					
4.11-1	X				
4.11-2	X				
4.11-3			X	Not true. The January 2008 Draft of the Miravale III Specific Plan is in compliance with the Housing Element of the General Plan. Specific Plan Figures 2-3 & 2-4 illustrate how the applicant intends to fully integrate market rate housing. The applicant already revised the Specific Plan per City Council and staff direction on integrating the affordable housing. Affordable lots have been sprinkled into the single family neighborhoods per their direction. It has also been integrated into each Village Residential neighborhood. Table 6-1 in the Specific Plan delineates the number of affordable units per phase and per Village Residential neighborhood. This table illustrates that the affordable units are adequately dispersed.	M-18

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DEIR MITIGATION MEASURE	ACCEPTABLE	NOT ACCEPTABLE	ACCEPTABLE WITH REVISIONS	NOTES...	
4.11-4			X	Not true. The January 2008 Draft of the Miravale III Specific Plan illustrates compliance with the Inclusionary Housing Ordinance in Figure 2-4, table 2-3, and table 6-1. Figure 2-4 illustrates the location of affordable housing and the percentage of Village Residential units dedicated to affordable housing. Table 6-1 in the Specific Plan delineates the number of affordable units per phase and per Village Residential neighborhood. This table illustrates that the affordable units are adequately dispersed.	M-19
4.12 Public Services and Recreation					
4.12-1		X		The developer is donating a 1.3 acre site for a public safety facility. The construction costs should be covered by the project impact fees. The actual construction and operation of the facility will be out of the developer's control and should not be part of the mitigation.	M-20
4.12-2			X	The impact fees should be adjusted/credited to reflect any property donation.	M-21
4.12-3	X				
4.12-4		X		The developer will work with the City and the school district to develop the needed number of schools. The needed number will be less than currently projected due to the developer's desire to incorporate 1,500 senior housing units and 1,000 studio units. The project is expected to be developed over 15 to 20 years.	M-22
4.12-5			X	School impact fees should be adjusted/credited to reflect any property donation.	M-23
4.12-6		X		Not true. The January 2008 Draft of the Miravale III Specific Plan is in compliance with the City's General Plan requirement to provide 3 acres of parkland per 1,000 residents. Table 4-2 illustrates compliance. State specific plan guidelines do not require formal design plans for future parks to be included in a specific plan. Therefore, village parks have been noted with an asterisk symbol on figure 4-2 to illustrate their general location. Actual placement of village parks will be determined in their respective Village Rresidential devolvement plans. Park acreage for each of the village parks has been identified on figure 4-2 based on their respective projected populations. Village residential development plans will be required to incorporate the minimum parkland acreage identified on figure 4-2.	M-24

DEIR MITIGATION MEASURE	ACCEPTABLE	NOT ACCEPTABLE	ACCEPTABLE WITH REVISIONS	NOTES...	
4.12-7	X				
4.13 Traffic and Circulation					
4.13-1			X	Insert "unless at a traffic light" after "at grade golf cart crossings shall not be permitted along streets"	M-25
4.13-2		X		The mitigation should clearly state that the project will contribute its fair share toward offsite improvements and the traffic impact fees will be credited accordingly. Insert "associated with the phase being constructed" at the end of sentence "...submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance in order to mitigate the impact" This will link the impact fees to the phase being constructed. Fully constructing the improvements should not be part of the mitigation.	M-26
4.13-3		X		See comment above.	
4.13-4		X		See comment above.	
4.13-5		X		See comment above.	
4.13-6		X		See comment above.	
4.13-7		X		See comment above.	
4.13-8		X		See comment above.	
4.13-9		X		See comment above.	
4.13-10		X		See comment above.	
4.13-11		X		See comment above.	
4.13-12		X		See comment above.	
4.13-13		X		See comment above.	
4.13-14		X		See comment above.	
4.14 Utilities and Service Systems					
4.14-1	X				
4.14-2	X				
4.14-3	X				
4.14-4	X				
4.14-5	X				
4.14-6	X				
4.14-7	X				
4.14-8			X	Development impact fees should be adjusted/credited to reflect any property donation or construction of facilities.	M-27
4.14-9	X				
4.14-10	X				
4.14-11	X				
4.14-12	X				
4.14-13	X				

Additional Comments

1. Page 3.0-3 Section 3.3 The Specific Plan shows a minimum lot size of 5,000 sf not 6,000 sf as stated. M-28

LETTER M: RRM DESIGN GROUP, APPLICANT REPRESENTATIVE

This comment letter generally reflects the applicant's opposition to mitigation measures developed as part of the Draft EIR on a variety of grounds. The mitigation measures contained in the Draft EIR have been specifically developed to address project-related impacts in order to reduce those impacts to a less-than-significant level wherever possible. The individual comments contained in this letter do not typically raise an issue on environmental grounds that would warrant a response under CEQA. To the extent possible, individual responses are provided below. For the most part, however, these comments are referred to decision-makers for further consideration as part of the deliberative process.

M1: Comment acknowledged. This comment does not raise an environmental issue that warrants a response under CEQA. No further response is necessary.

M2: This comment requests specific revisions to Mitigation Measure 4.1-3 to reflect the proposed Hillside Development Standards contained in Appendix A of the Miravale III Specific Plan. MM 4.1-3 is intended to minimize the visual impact of all hillside residential construction above the 400 foot contour line, while the Hillside Development Standards would apply, as proposed, only to those lots with an average slope of 30 percent or more. The requested revision is, therefore, considered unnecessary and would not change the intent or meaning of the proposed mitigation measure. All future development within the Specific Plan will be required to comply with the provisions of the Specific Plan as supplemented by this measure.

M3: The comment requests specific revisions to Mitigation Measure 4.1-10 that does not relate to an environmental issue under CEQA. The requested revision is unnecessary and would not change the intent or meaning of the proposed mitigation measure. The requested revision is referred to decision-makers for further consideration as part of the deliberative process. All future gateway development within the Specific Plan area will be required to comply with the provisions of the adopted Specific Plan as supplemented by this measure.

M4: This comment requests specific revisions to Mitigation Measure 4.1-11 to acknowledge the residential design guidelines contained in Chapter 2 of the Specific Plan. The requested revision is unnecessary and would not change the intent or meaning of the proposed mitigation measure. All future development within the Specific Plan will be required to comply with the provisions of the adopted Specific Plan as supplemented by this measure.

M5: This comment requests specific revisions to Mitigation Measure 4.1-12 to acknowledge the usable open space standards of Table 2-5 of the draft Specific Plan. The requested revision does not relate to an environmental issue under CEQA and would not change the intent or meaning of the proposed mitigation measure. All future development within the Specific Plan will be required to comply with the provisions of the Specific Plan as supplemented by this measure.

M6: The commenter is requesting specific revisions to Mitigation Measure 4.1-14 to reference the lighting guidelines contained in the Specific Plan. However, the requirements contained in the Specific Plan are merely guidelines, whereas this mitigation identifies specific standards related to lighting requirements that all development will be required to comply with. Standards are necessary to ensure that lighting will meet certain minimum requirements to ensure project impacts will be minimized to a less-than-significant level. The requested revision is, therefore, considered unnecessary and would not change the intent or meaning of the proposed mitigation measure. All future development within the Specific Plan will be required to comply with the provisions of the Specific Plan as modified pursuant to this measure.

M7: The commenter is requesting specific revisions to Mitigation Measure 4.1-15 to reference the lighting guidelines contained in the Specific Plan. Please refer to **Response M6** above for further discussion.

M8: The commenter is requesting specific revisions to Mitigation Measure 4.1-16 to reference the lighting guidelines contained in Section 2.11 of the draft Specific Plan. Please refer to **Response M6** above for further discussion.

M9: This comment reflects the applicant's opposition to the requirements of Mitigation Measure 4.3-1 related to grading limitations. This comment contends that the proposed grading requirements would cause increased emission of dust and particulate matter. Mitigation Measure 4.3-1 was determined to be necessary in order to minimize construction-related impacts to the extent possible. The limitation of earth disturbing activities is considered standard practice to minimize the emission of dust and particulate matter. Contrary to the suggestions of the commenter, Mitigation Measure 4.3-1 clearly contains provisions to allow increased grading as more detailed construction information is available. Since this comment generally reflects the applicant's opposition to this mitigation measure, this comment is referred to decision-makers for further consideration as part of the deliberative process.

M10: This comment states that certain requirements contained in Mitigation Measure 4.3-2 are unacceptable. Mitigation Measure 4.3-2 has been revised to specifically reflect requested revisions requested by the MPUAPCD. Mitigation Measure 4.3-2 as revised by this Final EIR specifies the types of diesel construction equipment that will be permitted during construction to ensure compliance with current air quality standards. This revised mitigation measure is necessary to ensure project impacts are reduced to a less-than-significant level.

M11: This comment reflects the applicant's opposition to certain provisions of Mitigation Measure 4.3-3 related to child care centers for large employers. Specifically, this comment identifies that this requirement is not applicable to the proposed project since no larger employers are currently proposed. As identified in Mitigation Measure 4.3-3 components of a Transportation Demand Management Program may include such elements as providing onsite or near site child care centers for large employment centers. Other measures may also be considered. This requirement is only applicable to the extent large employment centers may be located within the boundaries of the project. Since this comment generally reflects the applicant's opposition to certain requirements contained in this mitigation measure, this comment is referred to decision-makers for further consideration as part of the deliberative process.

M12: This comment questions the need for specific mitigation related to medians at the project site. Per the Draft EIR, Mitigation Measure 4.4-8 prohibits the use of medians throughout the project. This was required due to potential California Tiger Salamander (CTS) potential issues. Since the CTS are identified as hybrids, this requirement may not be applicable. However, the Draft EIR maintains this condition and refer the review of requirements of mitigation measure 4.4-8 regarding medians to the City at the project level.

M13: This comment contends that Mitigation Measure 4.5-1 is unacceptable and that the applicant should have the option to retain the historic structure. The analysis contained in the Draft EIR was based on the project as currently proposed, which would include creating new structures, infrastructure and other urban elements that would necessitate the removal of this historic structure. If the project does not result in the removal of the Lorentzen House then the mitigation measures related to the removal and subsequent relocation of the structure would not be applicable.

M14: This comment contends that Mitigation Measure 4.6-6 should be revised to allow for sustainable/low impact development solutions such as bio swales and similar. Please refer to **Section 4.0 Revisions to the Draft EIR** for more information, including the addition of Mitigation Measure 4.8-4 regarding the use of Low Impact Development practices.

M15: This comment contends that Mitigation Measure 4.9-1 should be eliminated since the project applicant has submitted a revised Specific Plan that incorporates these comments. However, it is appropriate for the City to retain this mitigation measure and ensure compliance with its components as part of their review and consideration of the Specific Plan.

M16: The commenter is requesting specific revisions to Mitigation Measure 4.10-1. The requested revision is unnecessary and would not change the intent or meaning of the proposed mitigation measure. The mitigation measure is clearly related to exterior noise levels and this revision is considered unnecessary. No further response is necessary.

M17: The commenter is requesting specific revisions to Mitigation Measure 4.10-4. As described in the Draft EIR (see Draft EIR pages 4.10-12 through 4.10-13), Mitigation Measure 4.10-4 is necessary in order to ensure that exterior noise levels are 65 dBA CNEL or less and/or interior noise levels are within 45 dBA CNEL. The requested revision is unnecessary and would not change the intent or meaning of the proposed mitigation measure. The mitigation measure is clearly related to exterior noise levels and this revision is considered unnecessary. No further response is necessary.

M18: This comment reflects the applicant's opposition the requirements of Mitigation Measure 4.11-3. This mitigation measure reflects the requirements of General Plan program 4-3, which requires that each subdivision approved within a specific plan area be bound by a development agreement with the City of Soledad that prescribes the proportion of very low, low, and moderate-income housing to be built in the project, the location of these units within the subdivision, and the qualifying incomes of families to which the sale and re-sale of the units shall be limited. This is an existing City requirement and the proposed project will be required to adhere to these requirements as specified in Mitigation Measure 4.11-3.

M19: See **Response M18** above.

M20: This comment contends that Mitigation Measure 4.12-1 is unacceptable because the construction and operation of the proposed fire and police facilities are outside the control of the developer. As described in the Draft EIR, this mitigation measure is necessary in order to ensure that adequate public facilities are available to accommodate project demand. These facilities must be operational prior to the initiation of Phase 2 of the proposed project; otherwise there would be inadequate public services available to meet the demands of subsequent phases of development, including Phase 2. In the absence of this mitigation measure, this would constitute a significant and unavoidable impact. Since this comment generally reflects the applicant's opposition to certain requirements contained in this mitigation measure, this comment is referred to decision-makers for further consideration as part of the deliberative process.

M21: Comment acknowledged regarding the applicant's request for a credit to required impact fees. This comment does not raise an environmental issue that warrants a response under CEQA. This comment is referred to decision-makers for further consideration as part of the deliberative process.

M22: This comment contends that Mitigation Measure 4.12-4 is unacceptable. This comment further contends that the needed number of schools will be considerably lower based on the developer's desire to incorporate 1,500 senior housing units and 1,000 studio units. The analysis contained in the Draft EIR is based on the project as currently proposed in the Specific Plan and comments provided by the Soledad Unified School District regarding the required number of school facilities necessary to meet project demands. Since this comment generally reflects the applicant's opposition to certain requirements contained in this mitigation measure, this comment is referred to decision-makers for further consideration as part of the deliberative process.

M23: Comment acknowledged. This comment does not raise an environmental issue that warrants a response under CEQA. This comment is referred to decision-makers for further consideration as part of the deliberative process.

M24: This comment contends that the Specific Plan is in compliance with General Plan requirements to provide three acres/1,000 residents. The proposed project is not in compliance with applicable General Plan requirements related to the dedication and improvement of parkland in the City's future growth areas for which Specific Plans must be completed and adopted. As described in Appendix B of the General Plan, the standard for parkland for Specific Plan areas is five acres per 1,000 residents. Mitigation Measure 4.12-6 has been revised to reflect this requirement; please see **Section 4.0 Revisions to the Draft EIR**.

M25: This comment requests specific revisions to Mitigation Measure 4.13-1 to allow at-grade golf cart crossings on collectors or arterials where safe crossings are allowed by traffic signals. In response to this comment, Mitigation Measure 4.13-1 has been revised; please refer to **Section 4.0 Revisions to the Draft EIR**.

M26: This comment states that Mitigation Measures 4.13-2 through 4.13-14 are unacceptable to the developer and that the mitigation measures should be revised to indicate that the project will contribute its fair share toward offsite improvements and that traffic fees will be credited accordingly. This comment contends that fully constructed improvements should not be considered part of these mitigation measures. Payment of applicable City of Soledad Traffic Impact Fees will ensure that the proposed project contributes its proportional share towards these improvements. In order to ensure that project-generated traffic does not result in additional transportation-related impacts, the mitigation measures contained in the Draft EIR require that the necessary traffic improvements be operational prior to the issuance of an occupancy permit for new residential or commercial developments within the project boundaries that require those improvements. Since this comment generally reflects the applicant's opposition to certain requirements contained in these mitigation measures, this comment is referred to decision-makers for further consideration as part of the deliberative process.

M27: Comment acknowledged. This comment does not raise an environmental issue that warrants a response under CEQA. This comment is referred to decision-makers for further consideration as part of the deliberative process.

M28: This comment identifies that the Specific Plan allows a minimum lot size of 5,000 square feet, not 6,000 square feet, as stated in the Draft EIR. The Draft EIR has been revised to reflect this comment; please see **Section 4.0 Revisions to the Draft EIR**.

BESTOR ENGINEERS, INC.
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(831) 373-2941 • SALINAS 424-7681 • FAX 649-4118

16 December 2008

RECEIVED
DEC 17 2008
PLANNING DEPARTMENT

CITY OF SOLEDAD
Community Development Department
P.O. Box 156
Soledad, CA 93960

Attn: Susan Hilinski

Re: Draft – Environmental Impact Report
Miravale III Specific Plan

Dear Susan:

Comments and concerns are listed below and in accompanying documents, letters and reports for the Draft Environmental Impact Report for the Miravale Phase III Specific Plan State Clearing House #2006081129, prepared for the City of Soledad Planning Department by Denise Duffy & Associates, October 2008. N-1

Cover Sheet, Draft EIR

- The work "Phase" should be removed from "Miravale Phase III Specific Plan" to avoid confusion. All other documents are Miravale III. N-2

Page 1-1

Third paragraph, "This EIR addresses implementation of Miravale III Specific Plan..." N-3
- Insert "and Vesting Tentative Map."

Last sentence, "...agricultural land to the north and east..." N-4
- "East" should be "west".

Last sentence,"...Gabilan Mountain Range to the west." N-5
- "West" should be "east".

Page 2-9

Mitigation 4.2-4, Isn't the existing access to the Braga property on Braga land? Is there an existing easement on Miravale III to be maintained for access? N-6
- No.

Mitigation 4.3-1, Does existing agriculture produce dust? Does farming stop when the winds exceed 15 mph and dust is not contained onsite? What is the dust difference between farming and construction and at buildout? Less? How much less? N-7
- Grading limited to 2.5 acres would preclude grading to one fairway at a time. Is this major grading only? What are the requirements for finish grading? 8.0 acres?

Page 2-10

Mitigation 4.3-1, first line, "Cover truck hauling trucks..." N-8

- Clarify.

Page 2-11

Mitigation 4.3-2, third sentence, "Diesel equipment standing idle for more than two minutes shall be turned off..." N-9

- Two minutes is unreasonable. Five minutes? Ten minutes?

Page 2-33

Mitigation 4.9, Land Use and Planning, second paragraph, "Stormwater Management Plan, Stormwater Master Plan." N-10

- The Stormwater Management Plan and Stormwater Master Plan both have areas that do not adequately or appropriately address Miravale III and offsite drainage. See accompanying correspondence.

Page 2-34

Mitigation 4.10-4, How will mitigation be monitored to "reduce noise levels" by 2 to 3dBA depending on the existing pavement type, traffic speed, traffic volumes and other factor. All new and improved streets within the project area shall use quieter pavement types. N-11

- Which streets would need to be repaved? How many? Extent? How will increase be determined? How will the project be determined for responsibility if several projects contribute to traffic? When will repaving be triggered? How will costs and extent be determined? What are other factors? Offsite repaving will reduce the significant project traffic fees?

Page 2-39

Mitigation 4.12.1, Public Services and Recreation, "Prior to initiation of construction for Phase 2 of the proposed development, the proposed fire and police facilities located on West Street shall be constructed and operational." N-12

- "The facilities are located within Phase 2." They cannot be operated without construction of Phase 2 improvements. What happens if the city doesn't have the money to build or operate the facility after it's built or decides to fund other infrastructure?

Page 2-40

Mitigation 4.12-4, "...demonstrating that an additional two elementary school sites of sufficient size and a 40-acre high school site will be designated within the project boundaries to meet project demands...." N-13

- Appendix A, Notice of Preparation, and comments on the NOP letter from the Soledad Unified School District dated 9/18/06
  - "1. The Miravale III subdivision has two elementary, one middle school/adult education...; considering the loading factors that are being used and the schools that will be constructed district-wide, adequacy for facilities should be sufficient."
  - "2. ...It is my recommendation...to have future developers designate a 40-acre additional high school site in the northwest or future expansion areas."

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A small portion of Miravale III is within the Northwest Planning Area. The letter from the district is evidence. Why are the two additional elementary and 40-acre high school site the district is asking for in future development in the northwest areas included in Miravale III? Phase II is too early for requirement none-the-less. Development to sustain school site to be operational, but site is not requested by the district. N-13 continued

Page 2-42

Mitigation 4.13-3, second sentence, "..., add two EB left-turn lands...." N-14

- "Lands" should be "lanes".

Page 2-43

Mitigation 4-13, Traffic & Circulation, 4.13-2, 4.13-3, 4.13-4, 4.13-5, 4.13-6, 4.13-7, 4.13-8 and 4.13-9.

- Requirements should be constructed when required, not prior to any occupancy. How will the requirements for the implementation of the improvements be determined? Fees submitted are "in order to mitigate the impact at this location." Developer should not also be subject to the improvements being fully constructed. Partial impact and payment of fees may not allow construction of improvements as determined by the city. N-15

Page 2-45 & 2-46

Mitigation 4.13-10 and 4.13-11

- The TAMC fee would mitigate the project's impact. If city fee includes regional improvements, the TAMC fee should not be required. N-16

Page 2-49

Mitigation 4.14-8

- Fees to cover the existing sewer plant improvements should be waived if the developer pays to construct the treatment plant within the project site (scalping plant). N-17

Page 2-50

Mitigation 4.14-11

- Developer should not be required to construct new infrastructure to serve "...in addition to the wastewater providers existing commitments." Determination of existing commitments, time and date to prevent extensive commitments just prior to development. How will Miravale III commitments be protected? N-18

Page 3.0-2

Section 3.1, Project Location

- In the second paragraph add "There is existing high voltage transmission line along existing San Vicente Road." N-19

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Page 3.0-3

Section 3.3, Project Characteristics – Single Family Residential, last sentence, "Lot sizes range from 6,000 square feet to ...."

- Vesting Tentative Map shows a minimum of 5,000 square foot lots with a mixture of 5,000 square foot and 6,000 square foot minimum lots.

N-20

Page 3.0-4

Table 3.0-1, Land Use

- Williamson Act properties acres shown as "104.8". Williamson Act properties through Appendix D area is 108 acres.

N-21

Page 3.0-6

Sanitary Sewer System, fourth sentence, "The existing treatment plant will need to be enlarged and improved."

- Supplemented by an onsite reclamation plant, distribution and irrigation systems (scalping plant).

N-22

Page 3.0-7

Project Implementation, last sentence

- Shouldn't application be for "multiple" spheres of influence amendments?

N-23

Page After 3.0-9

Figure 3.1

- Should show all 11 sheets. The maps are too small; no detail for review.

N-24

Page 4.0-1

Regional Settings, first paragraph, "...north and west, and existing residential subdivision..."

- Should be "...existing residential subdivision to the south...."

N-25

Page 4.2-12

Impact and Mitigation, Conversion of Farmland Due to Changes in Existing Environment, last paragraph, "According to a study by the California Department of Conservation, conversions of farmland to urban uses...."

- No reference, data or footnotes on California Department of Conservation Study. Provide study documentation.

N-26

Page 4.3-2

Setting, fourth paragraph, "The project site is located east of Highway 101 on the eastern border of the City of Soledad...."

- The project is north and west of the City of Soledad.

N-27

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Page 4.4-20

Mitigation 4.4-9d, "Prohibit road medians throughout the development." N-28

- Does this belong here at all? Reason?

Page 4.6-2

Topography, third sentence, "The elevation ranges from 200 to 600 feet above the sea level." Fifth sentence, "Surface slopes on the alluvial portion of the site are approximately 5 to 8 percent gradient...." N-29

- The elevation range should be 178 to 742 feet. The gradient percentages should be 2.0% to 3.5%.

Page 4.6-5

Geology, Soils & Mineral Resources, Local Requirements, City of Soledad General Plan, b.2 N-30

- The 109 full or partial lots above the elevation 400 provide a more aesthetic quality. Figure II-7 on Page II-19, "Mirrisou Specific Plan Area of the Soledad General Plan" shows six areas of single family residential and estates lots located above the 400-foot contour.

Page 4.7-9

Figure 4.7-1, Soledad Sanitary Landfill Buffer Zone N-31

- The landfill footprint is not correct. The city has a specific limit of 19 acres. This affects the landfill buffer and restrictions.

Page 4.8-1

Setting, paragraph two, third sentence, "Surface slopes on the alluvial portion of the site are approximately 5 to 8 percent gradient." N-32

- Slopes on the alluvial portion are actually 2% to 3.5%.

Page 4.8-9

Impacts and Mitigations, Surface Water/Water Quality, third paragraph, last sentence, "The project would also be required to pay fees to the City to fund maintenance costs for onsite BMP's." N-33

- Are these fees supposed to be assessments for a maintenance district? What would the fees be and who will be doing the maintenance? See page 4.8-10

Page 4.8-10

Mitigation, 4.8-2, first sentence, "...the project applicant and/or his/her successor in interest, shall be responsible for the long term maintenance of all percolation basins and related private on-site drainage improvements and shall enter into a maintenance agreement with the City to provide for such." N-34

- Will maintenance be part of assessment to maintain facilities?

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Page 4.11-4

Inclusionary Housing Ordinance, 17.41.050, A-5

- Can't inclusionary units be smaller and more affordable by design like the workforce housing? See first paragraph under heading "Miravale III Specific Plan" on page 4.11-5.

N-35

Inclusionary Housing Ordinance, 17.41.140, under (2), "...no inclusionary units should be located to or in the immediate vicinity of another inclusionary housing development."

- What does "located to" mean? This requirement is unworkable, unfair and will not work. What if property can't be rented at market rate? What about apartments, townhome projects, etc. next to each other?

N-36

Page 4.11-5

Population & Housing, Miravale III Specific Plan, paragraph four, "Sprinkle....", sentence one

- If lots are fenced, smaller lots do not appear larger. In paragraph five, "Locate Duets", most single family units will have double or triple garages. Are corner lots a necessary location for duets?

N-37

Population & Housing, Relevant Project Characteristics, first paragraph

- 15 to 20 year buildout assumes 280 to 210 units per year. Is this reasonable?

N-38

Relevant Project Characteristics, second paragraph, "The overall gross density at buildout would average 10.8 units per acre."

- What is the definition of gross? 4,200 units/920 acres = 4.56 units/acre, not 10.8.

N-39

Page 4.12-5

Policy, S-32, "...pay its fair share..."

- Isn't this a fee, either impact or development?

N-40

Page 4.12-9

Impacts & Mitigation, Police and Fire, third paragraph, next to last sentence

- There is no reference to the paying of a fee for this impact. Construct, fund or pay fee.

N-41

Page 4.12-14

Parks & Recreation, second paragraph

- The golf course is not included as parkland because access is restricted. Other park facilities are also restricted, such as fields (for different teams to play at specific times) and large barbeque areas (also typically reserved for date and time). The golf course should be intended as parkland. The residents are scheduling the use of the course to achieve the full benefits and enjoyment just as in the play fields for soccer and baseball. Revise mitigation 4.12-6.

N-42

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Page 4.14-17

Mitigation 4.14, "...adjusted impact fee in effect at the time of building permit issuance."

- See Subdivision Map Act, Article 5, Section 66483(a), "The ordinance in effect at the time of building permit issuance has been in effect for a period of at least 30 days prior to the filing of the tentative map or parcel map if no tentative map is required." N-43

Page 6-10

6.6 No Golf Course, Utilities and Service Systems.

- No golf course alternative will have a substantial effect of sewer facilities with no place to spray recycled water and effecting the development of storm drain facilities.

  Annual Water Demand from Table 4.14-3 within the golf course would be 1,925.25 AF/yr without the course and using the recycled water the demand is 1,566.70 AF/yr. Recycled water production in a no golf course project would not be feasible. Wastewater produced would be 958.50 AF/yr with 114.6 AF for park and school use. Recycled water plant and infrastructure to irrigate parks and school fields would not be feasible. It would also add 843.9 AF/yr to the Soledad Treatment Plant and city sewer infrastructure. N-44

  Project could inject reclaimed water on site to reduce impact for no golf course alternative.

Appendix B, General Plan Analysis

Chapter VII, Public Services and Facilities

- S-39: Policy S-35 is not negatively affected.
- S-35: Policy is missing. N-45

Appendix D, Miravale III Williamson Act Contract Information

Exhibit A

- Parcel I is 100.00 acres, Parcel 2 is 38.26 acres minus 30 acres for a total of 108.26 acres. The report states 100 acres plus seven-acre parcels. N-46

Appendix G, City of Soledad Storm Drain Master Plan Appendix B and Engineering Reports of the RM Associates, Storm Drain and Hydra Hydraulic Analysis for Miravale III

Map

- Map not included. Recurrence, rainfall intensity, coefficients of runoff are different than pervious reports accepted and adopted by the city which were prepared by Bestor Engineers, Schaaf & Wheeler and Hanna & Brunetti. See accompanying documents. N-47

Appendix J, Traffic Impact Analysis

Figure 8

- Project Trip Distributions has 0% residential distribution for Miravale III and numerous other areas within the existing Soledad limits. There is no node at Orchard and Gabilan. N-48

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Specific Plan

Page 2-12, Table 2-3

- Proposed locations are designated PD 1, 2, 3, 4, 5 and 6. Shouldn't PD be VR (Village Residential)? N-49

Page 3-7, Hillside Road Section

- As shown the section has no provision for slopes. Slopes would have to be in easements on lots. N-50

Page 6-2, Section 6.2.2, Existing Development, second sentence, "Should ownership of these parcels...." N-51

- Should read "this parcel".

See the following previously submitted documents for questions and concerns regarding Miravale III drainage, traffic, sewer, water and reclaimed water facilities and submitted reports as part of the Draft Miravale III EIR. N-52

These documents are submitted as a reference for previous concerns and questions and to reiterate them here for comments on the Draft Miravale III EIR.

Sincerely,
BESTOR ENGINEERS, INC.

James A. Wurz

cc: HMBY

Enclosures
W.O. 6310.00
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BESTOR ENGINEERS, INC. 9701 BLUE LARKSPUR LANE MONTEREY, CALIFORNIA 93940

DRAFT ENVIRONMENTAL IMPACT REPORT
MIRAVALE III SPECIFIC PLAN

Drainage

10/5/2006	Miravale III - Stormwater Flow to City of Soledad (1 page)
10/19/2006	Miravale III Downstream Flood Effect Report (1 page)
11/10/2006	Miravale III - Drainage Response to RM Associates Comments to City of Soledad (2 pages)
12/7/2006	Miravale III Drainage to City of Soledad (3 pages)
2/26/2007	Miravale III - Storm Water Ponding to City of Soledad (2 pages)
6/12/2007	Miravale III to City of Soledad (1 page)
7/2/2007	Miravale III - Revised Vesting Tentative Map sheet 3 of 11 to Denise Duffy & Associates (1 page)

Traffic

11/2/2006	Miravale III, Traffic Conference to City of Soledad (2 pages)
6/26/2007	Miravale III - Omni-Means 2007 Report to City of Soledad (1 page)
7/9/2007	Miravale III - 2007 Traffic Impact Fee Study to City of Soledad (4 pages)

Sewer, Water, Reclaimed Water

6/12/2007	Miravale III to City of Soledad (1 page)
7/2/2007	Miravale III - Revised Vesting Tentative Map sheet 3 of 11 to Denise Duffy & Associates (1 page)
10/26/2006	Miravale III Water System Peak Factors to City of Soledad (3 pages)
7/14/2007	Miravale III Reclaimed Water System Report (1 page)

BESTOR ENGINEERS, INC.
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(831) 373-2941 - SALINAS 424-7681 - FAX 649-4116

5 October 2006

CITY OF SOLEDAD
P.O. Box 156
Soledad, CA 93960

Attn: Cliff Price

Re: Miravale III – Stormwater Flow

Dear Cliff.

My earlier editions of Drainage Analysis report for Miravale III included a discussion of the proposed relief drain from the main detention/percolation pond to be replacement, or relocation of the existing 18-inch culvert at the bend in San Vicente Road. On further study I see that the actual system, as it now exists, could pick up as much as the full capacity of the existing 48-inch RCP, plus gutter flow at substantially more (see attached 1"=40' topographic map, based on 2003 photos).

The existing water shed is actually approximately 2,400 acres, including the natural creek flowing in at our proposed Orchard, as well as 15 or 20 acres west of San Vicente. Even accepting a lesser coefficient of 20% for the 100-year factor, and a 1.2 iph intensity, including the 1.2 miles of only "flat fields" at only about 3% grade within Miravale boundary. There is 2,400 acres x 1.2 inches x 0.20 coefficient = 570 cfs peak 100-year flow (1,070 at 30%). There also is a CMP culvert at the driveway to the farm that can carry at most 40 cfs. The road crown passes some, but the curbed 1.2% half section carries at least 4.5 sf x 6 cfs = 27 cfs and the inlet at the bend will have at least two feet of submergence, hence will accept at least 20% to 30% more than the 24 cfs that I previously ascribed to regarding the crown overflow. I imagine it to be spread at least 100 to 150 feet to the south, hence something more than a few tenths deep at the first cross street, meaning some overflow south, causing catch basin inflow for several blocks.

Consequently, I feel sure that you (the City of Soledad) would presently receive at least 50 cfs, and probably more like 56 cfs – not the 24 cfs I previously said. So our relief line, at elevation 185 and above, should be at least 36 inches, with a 44 cfs capacity (your San Vicente storm drain is 54 inches at 0.3% with 85 cfs capacity, so ours would cause it to flow only about half full, and it doesn't start until local peak is long gone). This would accept a trickle until pond is well above 85 (probably about 25 or 30-year flow); not enough to even lift the mandatory flap gate. And it could accept a maximum (7 cfs) flow up to about elevation 88.6, which is the doomsday spillway. This would be less than the present situation San Vicente flow (50 to 56 cfs), reducing the Braga discharge by an equal amount. We would still put in full capacity elevation 82 pipes, valved, to Braga – but considerably less than present discharge potential of up to 500 cfs (less the effect of however much remains of our present 10 AF ponding capacity).

Your comments are requested.

Sincerely,
BESTOR ENGINEERS, INC.

Carl L. Hooper

cc: Nader Agha
Roy Van Dorst
Walter Grant
Denise Duffy
EIR Consultant

W.O. 5310.00
CLH:mr L:\6310\Docs\061005 City of Soledad.doc

MIRAVALE III
DOWNSTREAM FLOOD EFFECT
W.O. 6310.00
19 October 2006

Miravale III will contain approximately 18 AF in the north pond plus south pond at the start of discharge (elevation 182.0) of 23 + 52 = 75 (+18 upper) = 93 acre feet. Discharge is then controlled to capacity of four x 12" pipes at 8cfs each, totaling 48cfs.

The existing "pond" at the southwest corner captures natural runoff of 0.84 feet average x 19.6 acres = 16.4 acre feet, controlled by the existing farm road on Braga. This farm road is shown at a low point of 180.4 feet in 2002 areal topo (HJW) in an unsurfaced "weir" of perhaps 50 to 80 feet. When overtopped, this unsurfaced road will rapidly erode to allow sheet flow of part of the 16.4 AF contained volume, after which it will stabilize with the natural inflow from approximately 3,000 acres within sections 16, 15, 10, 9 and small portons of the upstream area, as well as part of the 285 acres of former Martines land. In a 100-year storm, this area will pass at least 75 to 80 acre feet in the first 24 hours (3,000 ac x 0.15 runoff x 2.5") at a probable peak rate (2 hour concentration time) of 3,000 ac x 0.15 x 0.5 feet per hour = 225 cfs. This natural or pre-project flow is considerably greater than the post-project flow rate, after detention in the Miravale III ponds with their probable 48 cfs discharge rate.

Considering the 100-year effect, we find that natural flow will be about double the above stated flow, or up to 400 cfs. In the proposed post project situation, which includes both ponds, a total of more than 148 AF of runoff will be impounded. Of this, the northerly pond will contain up to 18 AF (releasing a throttled 93 cfs to the lower pond) whereas the southerly pond will impound four elements:

1. The lower (elevation 162 to 176 feet) portion – 23 AF
2. A portion of driving range (elevation 176 to 182) approximately 29 AF (begin Braga discharge)
3. The mid driving range (elevation 182 to 186) containing approximately 25 AF, at the beginning of the discharge to City of Solead via San Vicente storm drain.
4. To the spillway at elevation 188.7, containing 30 AF, with continued rise at the rate of 1.0 AF for each 0.1 feet of rise above spillway weir.

Totaling 130 acre feet at spillway elevation, less discharge via pipes to Braga at approximately 48 cfs (= 3.97 AF/hr) and pipe discharge to city system at 0-to 15 cfs (up to 1.23 AF/hr), less percolation at variable rate from 0.36 AF/hr to 3.3 AF/hr (1.0 AF/hr = 12 cfs)

Of the total 148 AF impounded, approximately 0.5 x 700 x 3.45" = 102 AF, or 69% is from the development while 31%, or 46 AF, is natural runoff from the off-site area. Therefore, there will be less flooding on downstream lands, and any effect will be drastically reduced, both in total volume and in rate of discharge.

Carl L. Hooper
Registered Civil Engineer #13017
State of California
Expires: 31March 2007

BESTOR ENGINEERS, INC.
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10 November 2006

CITY OF SOLEDAD
P.O. Box 156
Soledad, CA 93960
Via Fax: (831) 678-3965

Attn: Cliff Price

Re: Miravale III - Drainage Response to RM Associates Comments

Dear Cliff:

I have received the Robert James (RM Associates) memorandum to you dated 10/27/06, and have the following comments:

1. In response to his page 2 (unnumbered pages) request for design criteria, I suggest the following:

    a. Recurrence: We normally use 100 year, and base our figures on DWR depth-duration frequency for Soledad, #D20 – 8338 dated 2/14/05, which states RP 100 is 3.45 inches for day 1, 4.64 inches (an increase of 1.19) for day 2, and 5.25 inches (an increase of 0.61 inches) for day 3.
    b. 24 hour intensity: We have normally used the City of Soledad Fee Study dated May 2000, Table 3-2 (IDF curve) which shows 100 year, 1 hour at 0.88 inches, and 2 hours at 0.59 inches. We interpret to 90 minutes i = 0.74 inches.
    c. Coefficients of Runoff: We used the 2000 Fee Study Table 3-4, which shows agricultural land as 0.13 – 0.25, but modified to 0.15 at 10-year and 0.30 at 100-year. It shows 0.5 to 0.6 for low density, (i.e. 4 DU acre). We then used a density-weighted average, considering the presence of golf fairways and open space, at 0.49 for Miravale III (appropriate data was in our July report "Preliminary Drainage Analysis, Miravale III").
    d. Infiltration Rates for Drainage Basins: Our July report stated none available, but we later received the soil engineers data (used also by Mr. Jones) showing 60 minutes per inch for near surface sandy clay, and 3 minutes per inch for deeper sand/gravel We intend to use cased downdrains within the south pond, and will compromise at 15 inches per hour for that 2.2 acres (= 2.75 AF/hr).
    e. Maximum Discharge to City System: As noted by our July report, there will be zero discharge to the city until the pond level rises above 185 3, after which discharge is limited to 14 cfs by 24" RCP at 0.3%. We assume this will only occur if the pipes at elevation 182 to Braga are throttled (or closed). Assuming that the city discharge does occur, it will be only for a few hours, at maximum 50,000 cu ft/ hour (or 1.18 AF/hour).
    f. Maximum Discharge to Braga: As we stated, it will be several valved pipes at elevation 182, after approximately 60 to 80 acre feet has been retained in the two ponds, and is the replacement for the current situation of 16 acre feet retention, followed by impending overflow and washout at the earthen Braga field road. The pipes can be closed, raising spillway discharge elevation to 188.7, after which it is "Wrath of God".

Now, on with other points in Mr. James' report. His marking of the county map (his Exhibit B1) is incorrect. The map is a reduction, apparently at 1"=7 miles (not 5.5 miles), placing centroid of watershed too far north. I measured it at 0.32 inches/hour, not 0.4. Then, using the county formula of 2.22 factor for 100 year, and 90 minutes for TC, we find i = 1.24 inches/hour (James used 0.89 inches/hour). But I also find I_{100} = 3.45, not 4.34 (for 24 hours).

In his calculation of one-day runoff, I also differ. My total average of upstream off-site is 2,050 acres (not 1,930). My project area is 840 acres (not 927), and my one day rainfall is 3.45 inches (not 4.34) where:

inflow volume = 2,055(.3) (3.45/12) + 840(0.5) x (3.45/12) = 177.2 + 120.7 = 297.9 AF/day (not 369.3).

Then outflow computes using both ponds to be:

Percolation upper = 146 x 610 at 1"/hr = 0.16 acres
Percolation lower = 7.2 acres at 1"/hr + 2.2 at 15"/hr = 3.35 AF/hr
Pipe to city = 15 cfs x 3,600 = 1.24 AF/hr (x2)
Pipe to Braga = 4 x 7 cfs x 3,600/43,560 = 2.3 AF/hr (x15)
Outflow in one day = (0.16 + 3.35) 22 + 1.24(2) + 2.3(15) = 77.22 + 2.48 + 34.5 = 114.2 AF
Volume in storage (both ponds) 18.06 + 130 = 148 AF
Versus 279.9 – 114 = 166 inflow – controlled discharge, leaving 18 AF 24 hour weir discharge to Braga. Which is actually 17.5 AF/hr inflow – 7.05 AF/hr outflow = 1.7 hours at 10.5 AF/hr (+ the 2.3 AF/hr pipe flow).

This is in comparison to the pre project outflow of Volume $_{24}$ = 3.45" x 0.3 x (2055 + 840) (12) = 245 AF – 16 (existing pond) – San Vicente gutter flow which I earlier estimated at 27 cfs x 24 x 3,600 \ 4,3560 = 53.55 AF/day (gutter flow), leaving 175 AF which reaches Braga in a 100 year storm. There might be a little percolation loss; but nowhere near the stored volume of 148-acre feet.

So I believe the 148-acre feet of ponding is plenty and I will strenuously defend it. Remember, we started out to create a 9-acre golf driving range, and it evolved into a detention pond. I think it could realistically be reduced by perhaps 18 acre feet by lowering the berm two feet to 188 (now 190) which would also eliminate the 2 or 3 acre feet flow back to San Vicente, and increase the Braga flow to about 85 acre feet instead of the previously estimated 2.3(15 hr) + 30 = 64.5 acre feet. That is still less than half the pre-project 175-acre feet – or we could even drop the berm to 185 and allow more to flow to Braga. After all, it would save nearly 22 acres x 5 feet = 176,000 cubic yards of earthwork x 700-foot average haul. I don't particularly like that idea, since it would leave the hotel site and adjacent 16 acres at as much as 15 to 17 feet below San Vicente Road (now 10 feet below), and it does make the Braga land more vulnerable to flooding. Not as vulnerable as the present, pre-project situation, but more vulnerable.

Then, in the second day of a 100-year storm (0.14"/hr if we use City Table 3, or 1.19"/a day by DWR, which averages out to 0.05"/hr), inflow will average 2,895 acres x 0.05" x 50% / 12 = 6.0 AF/hr. Of this, 2.43 AF/hr will be lost to percolation, and the remaining, 3.57 AF/hr will go partially to the city and partially to Braga, depending on how valves are operated.

At any rate, we certainly don't need the extra 82-acre feet of ponding suggested by Mr. Jones.

Sincerely,
BESTOR ENGINEERS, INC.

Carl L. Hooper
Registered Civil Engineer #13017
State of California
Expires: 31 March 2007

fc: Nader Agha
Roy Van Dorst
Jami Williams (RRM)
Denise Duffy
Walter Grant

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BESTOR ENGINEERS, INC.
CIVIL ENGINEERING - SURVEYING - LAND PLANNING
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7 December 2006

CITY OF SOLEDAD
Department of Public Works
P. O. Box 156
Soledad, CA 93960

Attn: Cliff Price, Public Works Director

Re: Miravale III Drainage

Dear Cliff:

In my earlier Preliminary Drainage Analysis for Miravale III, I had based everything on published DWR intensities (copy enclosed), which show 24-hour rainfall to be 2 year – 1.35 in./day, 10 year – 2.32 in./day and 100 year – 3.45 in./day. I then based time of concentration intensities on Hanna-Brunetti's May 2000 "Storm Drain Impact Study – Final Report", Table 3-2, (pages 3-4), which shows 60 minute intensity to be 60 min., 2 year – 0.36 iph; 60 min., 10 year – 0.59 iph; and 60 min., 100 year – 0.88 iph (with mathematical deviations for various longer or shorter times of concentration).

Then, using area planimetered on a 1"=1000' enlargement of a USGS quad, I found the contributory area for the Section 15 creek to be 1248 acres. Then assumed an average overall runoff coefficient for that mountainous, brushy watershed to be 30% for 100 year, 15% for 10 year and 8% for smaller storms.

From that, I obtained the highly conservative concentration time of 102 minutes for the approximate 3.8-mile long stream at the southeast corner of Section 16 (The Project) (elevation 2102 to 333, average slope 465 feet per mile). This yields i100 = 0.63 inch per hour and Q 100 = 1248 ac. x 0.63 iph x 0.30 = 236 cfs.

Now, in retrospect, I feel there must be some error. I have reviewed the Schaaf & Wheeler study for Monterey County Water Resources Agency, by memo of 7/29/03 to David Foote, in which their specialist, Christy Chung, arrived at a 100 year flow in Bryant Canyon of 328 cfs. This is for the next easterly creek from Section 15, with almost identical terrain and vegetative cover, but with 3098 acres of watershed (versus our 1248, or 2.48 times the area). Ms. Chung used 90 minutes TC, and a composite curve number of 56, to arrive at her HEC-1 result of 328 cfs. This is equivalent to a runoff of 328/3008 = 0.106 cfs/ac. If applied to the Section 16 1248 acres, that yields 132.1 cfs. Stated differently, 323/2.48 = 132 cfs.

Effectively, this would indicate that I should have used a runoff coefficient of 236/132 = 16.7% - **not** my assumed 30%. The net effect would be to reduce the southeast corner inflow to 132 cubic feet per second and to reduce total external (the 1248 acres at the southeast corner plus the 747 acres at the north boundary) to 1995 acres x 3.45 inches x 0.167/12 = 98 acre feet of 100 year, 24 hour impoundment. **Not** the 1995 x 3.45/12 x 0.30 = 172 acre-feet that we had expected from upstream flows.

The on-site 920 acres (including future development of the Williamson Act left blank in our Vesting Tentative Map), as stated in our earlier analysis, would remain at 920 x 3.45/12 x 0.49 = 129.6 acre feet per day.

Using the numbers shown in my letter 11/10/06 for the various types of discharge, our peak day (100 year – 24 hour = 3.45 inches) would become:

Inflow: 98 AF off-site (from above discussion)

129.6 AF on-site from 920 ac. x 3.45 inches/12 x 49% coefficient (includes ultimate development of the Williamson Act ± 110 ac.)

Total Inflow at 24 hr = 227.6 AF

Outflow: Upper pond (north) percolation = 1.6 ac x 3 in/hr x 23 hr/12" = 9.7 AF/day
Lower pond (south) – deep portion = 1.05 ac x 20"/hr/12 x 22hr = 38.6 AF/day
Lower pond (mid section to 182) = 4.46 ac x 3"/hr/12 x 20 hr = 22.3 AF/day
Pipe to Braga: 48 cfs x 18 hr ÷ 43560 = 71.4 AF/day
Pipe to San Vicente: 15 cfs x 2 hr = 2.4 AF/day
Pond, 182 to 188 = 5.0 ac x 3"/hr/12 x 2 hr = 2.5 AF/day
Total to spillway: 146.9 AF discharged

Storage: Upper pond: 21 AF capacity
Lower pond: 108 AF capacity
Total storage required without spillway operation:
227.6 AF inflow – 146.9 AF outflow = 80.7 AF required

In actuality, if our rates of percolation actually are 3"/hr and 20"/hr, we have a surplus storage capacity of 49 acre feet or 60%. That means we could eliminate the San Vicente discharge of 2.4 AF/day and could throttle the Braga pipes to about 10%, or even to close all four valves. We would prefer to have them available, however, to reduce the probability of actually using the spillway.

Remember, 1995 was a 200-year storm (2 days) and we may someday see a 500-year storm of 4.26"/day (or 24% greater than a 100-year storm). Also, final actual percolation rate may not be as great as expected.

As for now, we could reduce the size of the ponds. This would most logically be done at the lower (south) pond, and could simply be done by reducing the berm height. That also enlarges the pond by about nine feet of width for each foot of height. For example, lowering berm (and spillway) by two feet makes the pond 18' wider, hence about 0.4 acres larger, adding to both overall surface and percolation rates. This also allows nearly 20 acres of commercial and hotel area to be lowered, saving about 60,000 cubic yards of fill.

I will await your comments before I make any definitive changes.

Sincerely,
BESTOR ENGINEERS, INC.

Carl L. Hooper

cc: Nader Agha

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MONTEREY, CALIFORNIA 93940

Rainfall Depth-Duration-Frequency for Soledad

DWR # D20 8338 00 | Monterey County | Elevation 400 Feet
Analysis By DWR DLA | | Latitude 36.400°
Data From: DWR, UCD IPM | 20S/12E-17 | Longitude -121.250°

Maximum Rainfall For Indicated Number Of Consecutive Days

	1	2	3	4	5	6	8	10	15	20	30	60	W-YR
1963	1.90	2.73	3.48	3.48	3.48	3.48	3.48	3.50	4.79	4.97	4.97	7.59	12.63
1964	0.90	1.13	1.47	1.47	1.48	1.55	1.55	1.61	1.64	1.64	1.68	2.53	7.28
1965	1.38	1.40	1.60	1.65	1.65	1.65	1.74	2.09	2.91	2.98	3.14	4.14	10.00
1966	1.35	1.75	1.84	2.89	3.01	3.06	3.07	4.02	4.91	4.91	5.94	8.09	10.38
1967	1.75	2.02	2.27	2.51	2.78	2.88	2.88	3.09	3.09	3.66	4.68	6.65	14.28
1968	0.83	0.90	0.90	0.90	1.12	1.21	1.22	1.43	1.53	1.64	1.93	2.45	5.06
1969	1.35	1.61	2.35	2.49	2.63	3.02	4.44	4.58	5.41	6.26	7.43	12.63	18.39
1970	0.87	1.26	1.45	1.45	1.87	2.32	2.38	2.63	2.90	3.11	3.17	6.03	7.95
1971	1.60	2.35	2.57	2.68	2.90	2.98	3.23	3.26	3.41	3.60	5.56	6.57	9.04
1972	1.15	1.21	2.31	2.39	2.63	3.11	3.17	3.19	3.28	3.43	3.91	4.29	5.52
1973	1.60	2.03	2.10	2.53	2.54	2.88	3.38	3.73	4.18	4.35	5.82	9.28	17.83
1974	1.76	2.91	3.15	3.58	4.18	4.18	4.30	4.32	4.72	5.02	5.09	7.13	11.58
1975	2.30	2.75	2.75	2.80	2.84	2.84	3.11	3.28	3.64	3.74	3.74	7.15	12.36
1976	0.74	1.15	1.40	1.45	1.46	1.58	1.58	1.62	1.68	1.72	2.00	2.07	
1977													
1978	1.27	2.24	2.62	3.03	3.75	4.13	4.65	4.83	4.85	4.85	6.95	9.74	17.34
1979	1.04	1.64	1.74	1.77	1.77	1.77	2.24	2.26	2.59	2.59	3.99	6.00	10.48
1980	1.03	1.28	1.41	1.79	2.18	2.53	2.91	3.00	3.11	3.69	4.91	7.27	12.85
1981	0.22	0.36	0.46	0.50	0.63	0.74	0.93	1.07	1.45	1.93	2.68	4.70	7.14
1982	1.20	1.62	1.72	1.74	1.74	1.74	1.74	1.84	2.43	3.07	3.96	5.85	13.76
1983	1.40	2.22	2.99	3.39	3.43	3.49	4.09	4.09	4.49	4.88	6.94	10.54	18.40
1984	0.87	1.07	1.11	1.15	1.19	1.23	1.27	1.43	1.98	2.14	2.81	4.48	5.84
1985	0.83	0.91	0.91	1.03	1.19	1.27	1.38	1.73	2.17	2.57	3.01	4.37	8.55
1986	1.61	1.89	2.43	2.63	2.71	2.79	3.43	3.75	3.83	3.98	5.25	8.36	16.11
1987	0.95	1.03	1.03	1.62	1.62	1.62	1.62	1.62	1.62	2.22	2.26	4.06	8.58
1988	1.32	1.60	1.95	2.10	2.10	2.10	2.10	2.10	2.43	2.53	3.32	5.06	11.62
1989	1.50	1.53	1.66	1.71	1.79	1.79	2.11	2.22	3.02	3.12	3.61	4.80	8.67
1990	0.65	0.67	0.70	0.86	0.86	0.88	0.88	0.88	1.08	1.29	1.60	2.32	5.50
1991	1.32	2.44	3.01	3.18	4.24	4.81	5.22	5.22	5.43	7.32	10.20	10.41	11.65
1992	1.64	1.83	2.06	2.18	2.18	2.79	3.25	3.30	3.80	3.89	4.67	7.10	10.43
1993	1.32	1.81	2.12	2.26	3.10	3.92	3.92	4.30	5.01	6.10	6.80	11.57	17.13
1994	1.63	1.63	1.73	2.30	2.30	2.32	2.32	2.32	3.35	3.75	4.94	5.15	8.59
1995	**3.00**	5.77	**5.81**	**5.81**	**5.81**	5.97	6.53	6.56	6.90	7.62	7.65	10.11	18.42
1996	1.78	2.12	2.12	2.42	2.84	3.54	3.54	3.81	3.85	4.33	5.41	7.68	10.46
1997	1.88	2.18	2.44	2.44	2.44	2.49	2.49	2.65	3.91	3.91	5.81	8.76	12.72
1998	2.70	3.85	4.40	4.73	5.11	**5.71**	**7.41**	**7.67**	**8.48**	**9.61**	**10.97**	**13.24**	26.43
1999	0.88	1.01	1.27	1.51	1.64	1.64	1.67	1.80	2.22	2.50	3.22	4.04	8.52
2000	*0.22*	*0.36*	*0.46*	*0.50*	*0.63*	*0.74*	*0.93*	*1.07*	*1.45*	*1.93*	*2.68*	*4.76*	*9.83*
2001													
2002													
2003													
Average	1.29	1.73	1.98	2.17	2.36	2.54	2.81	3.02	3.44	3.79	4.52	6.40	10.94
Stdev	0.52	0.89	0.97	1.02	1.12	1.22	1.41	1.47	1.59	1.78	2.04	2.80	4.41
Rec Max	3.00	5.77	5.81	5.81	5.81	5.97	7.41	7.67	8.48	9.61	10.97	13.24	26.43
Rec Min	0.22	0.36	0.42	0.42	0.42	0.43	0.43	0.52	0.60	0.70	0.75	1.28	3.73
Z	3.10	4.99	4.01	3.49	3.03	2.84	3.45	3.33	3.18	3.42	3.30	2.40	3.65
Yrs Rec	61	61	61	61	61	61	61	61	61	61	61	61	61
CV	.402	.511	.489	.472	.475	.479	.501	.486	.463	.469	.451	.437	.403
Reg CV	.426	.467	.482	.481	.481	.474	.474	.462	.462	.449	.432	.445	.388
Calc Skew	.7	1.9	1.3	1.0	.8	.8	.9	.8	.7	.8	.8	.4	.9
Reg Skew	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.2	1.3	1.0
FIC	1.14	1.07	1.04	1.02	1.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
RP 2	1.35	1.67	1.85	2.02	2.18	2.37	2.61	2.86	3.25	3.59	4.33	6.07	10.45
RP 5	1.93	2.48	2.77	3.00	3.24	3.47	3.83	4.12	4.69	5.13	6.09	8.66	14.30
RP 10	2.32	3.01	3.39	3.64	3.93	4.16	4.59	4.88	5.55	6.05	7.12	10.20	16.60
RP 25	2.79	3.68	4.15	4.41	4.76	4.98	5.50	5.77	6.56	7.13	8.31	12.01	19.30
RP 50	3.12	4.16	4.71	4.96	5.36	5.56	6.14	6.38	7.26	7.88	9.13	13.26	21.16
RP 100	3.45	4.64	5.25	5.49	5.93	6.11	6.75	6.96	7.92	8.59	9.91	14.45	22.93
RP 200	3.77	5.10	5.78	6.01	6.49	6.64	7.34	7.52	8.56	9.27	10.64	15.59	24.63
RP 500	4.26	5.81	6.59	6.78	7.33	7.40	8.18	8.27	9.41	10.18	11.62	17.12	26.91
RP 1000	4.50	6.15	6.98	7.18	7.75	7.83	8.65	8.74	9.95	10.76	12.23	18.09	28.33
RP 10000	5.50	7.61	8.65	8.79	9.49	9.45	10.44	10.38	11.81	12.76	14.39	21.43	33.34

ENGINEERS, INC.
PLANNING
LAND PLANNING

26 February 2007

CITY OF SOLEDAD
Public Works Department
P.O. Box 156
Soledad, CA 93960

Attn: Cliff Price

Re: Miravale III - Storm Water Ponding

Dear Mr. Price:

On 12/7/06, I wrote you concerning the reduction in storm water ponding for Miravale III (copy attached) using comparable runoff figures from the Schaaf & Wheeler analysis of July 2003. The off-site inflow from a 100-year storm will be used at 132 cfs from the 1,248 acres of section 15 creek. A total of 410 + 72 + 29 acres (or 511 acres), resulting in 0.88 iph x17% x 511 acres = 76 acre feet enters from the north boundary of section 16. I will continue to use 126 acres to the north pond (old San Vicente Road) with its 83 cfs runoff, and find that necessary runoff (ignoring pond percolation) we find that the north pond discharge onto the west portion of Miravale will be a maximum of 85 cfs, or 35 cfs less than shown on our prior Vesting Tentative Map.

Then, we find that the 100-year runoff from the east side total of 565 acres reaches a peak flow at 507 cubic feet per second. This ignores the flow time of probably 25 to 30 minutes on-site (6,000 feet at on average of six to seven minutes – during which rainfall intensity will theoretically decrease from 1.3 iph to 0.88 iph).

We had earlier used over 600 cfs in the lowest pipe at the entrance to the retention/percolation pond, so this is at least a 1 or 2 pipe size reduction, affecting both major lines, or about 16,000 feet of pipe (or at least $300,000 to $400,000).

More importantly, however, we suggest lowering the pond berm. As earlier discussed, we can drop the southwest berm by at least five feet. This will affect about 2,000 feet of berm – making it much narrower, adding to pond capacity – but more importantly, reducing fill height in approximately 25 acres. It also allows Miravale Road to drop to match natural grades at its west end.

My suggestion is to drop berm to 185 (was 190). Decreasing pipe size, while still retaining the pond bottom at elevation 162 allows the driving range to drop from 176 to 170. Berm will be a maximum of four feet of fill (was as much as nine feet) Lowering the driving range will generate enough fill to create a close balance, with haul limited to about 600 feet maximum, whereas we previously had to consider up to 3,000 feet of haul distance. Also, while keeping the tee area (and street) unchanged, the narrower berm (still 12-foot maintenance road at the top) allows the range to be increased to 300 yards.

The south pond will now have 123.7-acre feet. The north pond still retains 18 AF of peak storage for a grand total of 141.7-acre feet. Total 24 hour, 100-year runoff is:

Off-site: 511 + 1,248 = 1,759 acres at 0.167 x 3.45/12 feet = 84.45 AF.

On-site (including future growth on Williamson Act Land): 920 acres at 0.50 x 3.45/12 feet = 132.25 AF.
Total = 216.7 acre-feet of runoff.

Percolation:

Upper Pond	1.6 ac x 3"/hr x 23hr	= 7.36 AF/day
Lower Pond, deep	1.148 ac x 15"/hr x 24hr	= 34.44 AF
Driving Range	6.2 ac x 6"/hr x 12hr	= 6.2 AF/day
Total:		= 48.0 AF/day

Storage available: 123.7 AF + 18AF = 141.7 AF available

Discharge: 216.7 AF run-off – 48 AF percolation – 141.7 AF storage = discharge 27 AF, or 27/84.43 = 32% of offsite run-off.

However, incoming pipes will stand full of water up to the spillway discharge level (184.0) about 1,000 ft of 72", 400 ft of 60" and 700 ft of 45". This is about 1.0 AF. The remaining 26 AF will be discharged at the rate of (1,759 x 0.14 x 0.17) + (920 x 0.14 x 0.5) = 360 cfs, over about a one or two hour period – after which percolation rate of about 0.5 AF/hour will about match the inflow rate. This is much lower than the 85 AF off-site + 45 AF of natural on-site that would pass or 130 AF through the same point in a pre-project 100-year storm, at 130 AF under present conditions

The new plan is in drafting and should be ready tomorrow.

Sincerely,
BESTOR ENGINEERS, INC.

Carl L. Hooper

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CLH/jf.L:/6310' Docs/070226 Cliff Price.doc

BESTOR ENGINEERS, INC.
CIVIL ENGINEERING - SURVEYING - LAND PLANNING
3180 DEL LARKSPUR LANE, MONTEREY, CALIFORNIA 93940
(831) 372-2377 SALINAS 424-7681 · FAX 649-4119

12 June 2007

618-3963
A7

CITY OF SOLEDAD
P.O. Box 156
Soledad, CA 93960

Attn: Cliff Price

Re: Miravale III

Dear Cliff:

Following our meeting with Black & Veatch on Friday (6/8/07) I have reconsidered some items as shown on the latest version of sheet 3 of 11, Miravale III Vesting Tentative Map. After your review and comments, we will furnish revised sheets to the EIR consultants for inclusion in their studies. The principal changes are:

1. Detention Pond/Driving Range is lowered to 184 (was 189) with berm at 185 (was 190). Sides were moved to enlarge storage (berm is still 3:1 with 12 foot road). The center (120 yards) now flat at elevation 170 (was 3% slope). The main pond clearance access was reduced to a 5% gradient. Table of storage volumes added were: 162 to 170 = 12.4 AF; 170 to 180 = 76.2 AF; 180 to 184 = 41.9 AF; Total = 130.5 (plus the northern 18 AF).
2. The sewer was relocated to San Vicente Road widening for 3,000 gpm peak (18-inch at 0.345%), which does NOT require pumping with delivery elevation at 188.0 (assuming headwork at that elevation and using mounded pipeline from San Vicente.
3. The sewer lift station then reduces to approximately 250 gpm (serving 47 single family, 120-room, hotel and approximately 18 acres of commercial) (was 3,300 gpm by about 10-foot lift)
4. The west sewer line above dwelling unit 47 crosses the fairway on sheet 4 about 800 lf across fairway 11.
5. The main storm drain from roundabout location is rerouted to eliminate three right angle bends by using a single 300-foot radius on 72-inch cast-in place pipe (CIP).

Incidentally, our new plan for the driving range/pond requires 146,900 cubic yards of cut, all of which will be used for fill in the hotel, southwest commercial area and reclaimed water plant site, an average of only 600 feet haul distance. I haven't calculated the golf course treated water ponds yet, but they should total bout 50,000 cubic yards, possibly 60,000, which will all be used in golf regrading.

Sincerely,
BESTOR ENGINEERS, INC.

Carl L. Hooper

cc: Nader Agha
Sean Goris (Black & Veatch)

Enclosure
W.O. 6310.00
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BESTOR ENGINEERS, INC.
CIVIL ENGINEERING - SURVEYING - LAND PLANNING
9701 BLUE LARKSPUR LANE, MONTEREY, CALIFORNIA 93940
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2 July 2007

DENISE DUFFY & ASSOCIATES
947 Cass Street, Suite 5
Monterey, CA 93940

Attn: Denise Duffy

Re: Miravale III – Revised Vesting Tentative Map sheet 3 of 11

Dear Denise:

Attached are four copies of the revised sheet 3 of 11 dated 6/12/07, and four copies of my letter to Cliff Price of City of Soledad. The revision changes the southwest stormwater detention pond and the approaching storm drains. It also revises the location and size of sanitary lift station at the recycled water plant adjacent to that stormwater detention pond. Since a large number of revisions were made to sheets 3, we elect to totally replace that sheet, and did not follow our customary practice of "clouded" revised portions. Mr. Price has reviewed these changes and has approved in principle.

Storm Water Changes – The pond is lowered by five feet to provide a better earthwork balance within the roughly 32 acres south of Miravale Road and west of San Vicente Road. This also reduces maximum fill berm height to less than four feet. The potential overflow to existing City of Soledad stormwater system and storage ponds has been eliminated. The previous three right angle bends in the main stormwater entry pipes were also eliminated.

Sanitary Sewer Changes – By rerouting the westerly (Street A) sanitary sewer across the golf course at fairway 11 and adding approximately 900 lineal feet of sewer main, the perpetual lift station size can be reduced from 3,300 gpm to approximately 250 gpm, immeasurably reducing long term operational costs.

Please inform your subcontractor of these changes so that any effect from them can be incorporated in your EIR.

Sincerely,
BESTOR ENGINEERS, INC.

Carl L. Hooper

cc: Nader Agha
~~RMM~~
Cliff Price

Enclosures
W.O. 6310.00
CLH/mr.L:/6310/Docs/070702 Denise Duffy & Assoc.doc

BESTOR ENGINEERS, INC.
CIVIL ENGINEERING - SURVEYING - LAND PLANNING
9701 BLUE LARKSPUR LANE, MONTEREY, CALIFORNIA 93940
(831) 373-2941 · SALINAS 424-7681 · FAX 649-4118

2 November 2006

CITY OF SOLEDAD
P.O. Box 156
Soledad, CA 93960

Attn: Cliff Price

Re: Miravale III, Traffic Conference

Dear Cliff:

Concerning our conference call today regarding the Miravale III traffic study by Hexagon:

Persons present were: Cliff Price, Peter Le, Don Fleming, Susan Hilinski, Robert del Rio (Hexagon) and Walter Grant. On the conference call were: Denise Duffy, Debbie (RRM) and Carl Hooper (Bestor Engineers).

Items discussed were:

1. Gabilan extension to be funded by redevelopment, and shared by impact fees, Soledad Plaza (commercial) and Miravale III. It should enter the Miravale III EIR as available prior to completion of phase 2 (304 dwelling units plus inclusionary and first nine of golf exempt).
2. Miranda extension to Gabilan, concurrent with Gabilan, fronted by Soledad Plaza.
3. San Vicente four-lane road north of Gabilan. Is it part of Gabilan extension or Miravale III?
4. Miravale Road, extension to Camphora Gloria/101 interchange – ultimate, impact fee funded – consider in 2030 EIR.
5. Orchard Lane extension to Metz – consider as existing for Miravale III (part of Orchard Villas and Miravale II). (This provides a Third Street route to downtown and Metz access to winery, rock quarry, etc. to the south via Metz Road).
6. Traffic Distribution – internal for Miravale III to be more thoroughly considered since it provides residential access to commercial in two areas, school, parks, golf and practice facilities, potential theaters, etc. Also more consideration than 5% in downtown, more than 5% in commercial/industrial in south Soledad, also less dependent on 101 northbound for employment. My suggestion is:

Area	%	Use %
Internal Miravale III	20 - 25	23
Downtown	10 - 15	12
Los Coches/Nestle	5 - 10	7
Metz South	2 - 3	2
101 South (Greenfield, King City, etc.)	15 - 20	18
101 North	30 - 40	38
Certainly not 101 N	(was 70)	

7. We are looking at long term 100% growth in Soledad, not merely a bedroom neighborhood.

The main thing is to keep this moving. I feel it is unfortunate that these weren't covered before, but let's all move along now.

Very truly yours,
BESTOR ENGINEERS, INC.

Carl L. Hooper

cc: Don Fleming
Walter Grant
Nader Agha
Roy Van Dorst
Denise Duffy
Hexagon

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MONTEREY, CALIFORNIA 93940

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26 June 2007

CITY OF SOLEDAD
P.O. Box 156
Soledad, CA 93960

Attn: Cliff Price

Re: Miravale III - Omni-Means 2007 Report

Dear Cliff:

I understand there will be a "stakeholders" meeting to discuss the Omni-Means Traffic Impact Fee Report received at the 6/20/07 council meeting. I have several points that should be discussed. I am still reading the reports but here are a few specific items:

1. Potential development table is wrong! Some items seem to be at 2006 fees, some are six times the 2006 rate
2. Shows Bryant Canyon Road going west when it already goes east and north up the canyon (needs new name for westward road).
3. List of improvements (table 4) doesn't match the map for road segment numbers.
4. Shows some streets that are already improved.
5. Budget estimates are haywire, for instance:

BC	$24 million/mile
West	$16 million/mile
Orchard 2 lane	$7.7 million/mile (and goes west instead of north)
Camphora/Gloria	$11 million/mile

6. Interchanges $42.6 million each? (including studies – only $35 million for construction)
7. Includes R/W cost although the developer dedicates.
   Example:

Crest	$758,000
S Street	$590,000
Orchard Lane	$8,397,000
Gabilan	$322,000

8. Table ES-1 says current fees (SFD) are $2,810. The council adopted $1,700 last week. Commercial says $2,867/KSL whereas council adopted $5,024/KSF and $3,737 for offices.

I'm sure I will dream up a few more, but you might start with these.

Sincerely,
BESTOR ENGINEERS, INC.

Carl L. Hooper

cc: Nader Agha
Brian Finegan
Bill Shaw
Roy Van Dorst

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9 July 2007

CITY OF SOLEDAD
P.O. Box 156
Soledad, CA 93960

Attn: Clifford Price

Re: Miravale III – 2007 Traffic Impact Fee Study

Dear Cliff:

As a follow up to the 7/6/07 meeting I offer these comments:

1. General Plan and Study Differences: Enclosed are copies of the General Plan figure V-2 and Study figure 5.

   a. West Street terminates at the section 16 south boundary in G.P., continues 2.27 miles to Camphora Gloria Road in study sheet 5 (Miravale III continues it about 1.1 miles, terminating at the San Vicente relocation). Four-lane in GP and ST, two-lane with left turn lane Miravale III.

   b. In the General Plan, Orchard Lane continues to the north and west to an unnamed street 0.15 miles short of Camphora Gloria Road. The study continues it to Camphora Gloria Road and places it 0.6 miles south of its GP location (Miravale III continues it north into section 9) (two-lane collector all three plans).

   c. Bryant Canyon Misnamed is two-lane in GP, four-lane in the study west of West Street. Miravale Road in Miravale III is actually intended to the ultimately connect to the interchange at Camphora Gloria Road as arterial. Incidentally, it passes awfully close to Dole on the GP whereas it makes more sense aimed at the interchange.

   d. Two east-west streets through section 16 are arterial in GP, collectors in study and actually Hilltop and Crest in Miravale III. They appear as two-lane (20 and 21) in study.

   e. Camphora Gloria is shown in the study as #13, a 1.3 mile, four-lane road. It merely appears as an existing county road in GP. It shows up as $14 million in Table B-2. It's listed as R12 in B-2, as #13 on sheet 5 and estimate, merely as an existing roadway in GP. Incidentally, it includes 12.45 acres of widening (which means 80 feet of widening). I assume it to be a 60-foot current right-of-way, so how could it need to be made 140 feet wide and take $706,000 worth of drainage facilities? That is $552,000 per mile in drainage structures. Is the Traffic Impact Fee intended to absorb this? Sorry, I got a little carried away by this apparent discrepancy.

2. Individual Estimate Questions:

a. Intersections (Table 4): There are more than ten intersection improvements at a total of $24,819,000, or nearly $2.5 million per intersection. Of these, four are on the questionable "Bryant Canyon" westerly extension, three are on the West Street extension that doesn't appear in the General Plan. I question the major portion of these. These appear on page 14 and again on page A8. Is there any possibility of duplicate count?

b. Miscellaneous Items Requiring Correction:

- Figure 7 – City limits do NOT include 41.7 acres of Miravale II or the northwestern Hambey 43 acres. Also, irregular lines such as section 16 and section 9 should reflect actual lines, or be removed. This also includes the Windmill parcel to be corrected.
- Table 6 to be corrected: 8,115 dwelling units? 915 MF? Retail and office? Possible amounts are questionable.
- Page 17 – current fees are wrong. Shown as $2,810, whereas they were increased in June to $1,700 (were $1,580 when the study was prepared and when the Miravale III application was made).

3. Questions about Estimates:

1. Gabilan, Orchard to Bryant, $2.5 million – This already exists as 64 feet within 84 foot right-of-way.
2. Gabilan, Bryant to Metz, $10 million – Where is it?
3. Front Street, Gabilan to Orchard $17.3 million – Apparently 7,000 feet long, apparently Road #10?
4. Orchard, Gabilan to Metz, $4.6 million – Part of Miravale II, includes $301,000 in storm drains.
5. Bryant Canyon, Metz to Orchard, $9.8 million – County road, not allowed as a city street in Miravale II.
6. Camphora/Gloria Road, Orchard to Hwy 101, $14.8 million, includes $5.4 million in right-of-way widening?
7. New collector #14, Bryant Canyon to Orchard, $7.5 milllion, includes $538,000 in drainage by development (not fee) and $2.85 million in right-of-way.
8. San Vicente extention, Bryant to north Orchard, $7.5 million, includes $530,000 in drainage (not fee) and $3.8 million in right-of-way.
9. Bryant Canyon, Camphora to West Street, $25.7 million, includes $9.2 million in right-of-way and $1.2 million in drainage.
10. Bryant Canyon, West Street to Orchard Lane, $3.2 million, includes $232,000 in drainage.
11. West Street, Bryant Canyon to Camphora $28.1 million includes $1,369,000 in drainage and $10.3 million in right-of-way.
12. Orchard Lane extension, Bryant Canyon to Camphora $21.3 million includes $8.4 million in right-of-way and $1.6 million in drainage.
13. Crest, Orchard to West Street, $1.9 million, includes $144,000 in drainage and $768,000 in right-of-way (all within two-lane street in Miravale III).
14. S Street, Orchard to West Street, $1.5 million, this is 700 feet at two-lane street in Miravale III, includes $590,000 in right-of-way and $112,000 in drainage.

BESTOR ENGINEERS, INC. 9701 BLUE LARKSPUR LANE MONTEREY, CALIFORNIA 93940

The rest are all "intersections" but include several million in right-of-way? Isn't that already included in the street cost? For instance, signals cost $200,000 each but take up 60 to 80 kst each at $800,000 to $1 million? And then, of course, is the $120 million in freeway interchanges! Aren't these included in TAMC fees?

Finally, I don't understand Table 6, the Traffic Fee Allocation. If we look at Table 1 (Development Potential) we find "holding capacity" in expansion areas to provide 5,521 SFD and 3,080 MFD, but Table 6 spreads costs over 8,115 SFD and 915 MFD (or a total of 9,030 dwelling units). Of those, about 1,100 are in Miravale II and already covered by the 2006 fee structure and 4,200 are in Miravale III which are also under the current fee structure. So that leaves about 3,730 dwellings to absorb the probable $82 million (after correcting all the apparent errors that I have listed above) or about 60% of the Omni-Means totaling $136 million (less the probable $25 million to be absorbed by FUTURE commercial and industrial uses) leaving $57 million ÷ 3,730 = $15,000 average per dwelling unit (I'll let you and Omni-Means do the math).

I sincerely doubt that the magnitude of fees will result in new development, since they practically eliminate "affordability".

Now, on to another question: Figures 3 and 4 purport to be "typical cross sections" for two or four lane streets of 75 and 104 feet width, but Appendix C of the General Plan shows 60 feet and 100 feet of right-of-way (plus ten feet if bike lanes are provided). Somehow, this discrepancy must be addressed. The numbers in the TIF Study assume right-of-way costs at $10/sq ft, or $436,000 per acre. I doubt that any court would ever require such a high award in an eminent domain suit – and certainly no developer can ever afford such inflated costs.

Remember, the fees must be reasonable and they will no doubt be anticipated as candidates for periodic increases, not unlike the recently adopted Section 14.06, a 7.6% increase from 2006 fees.

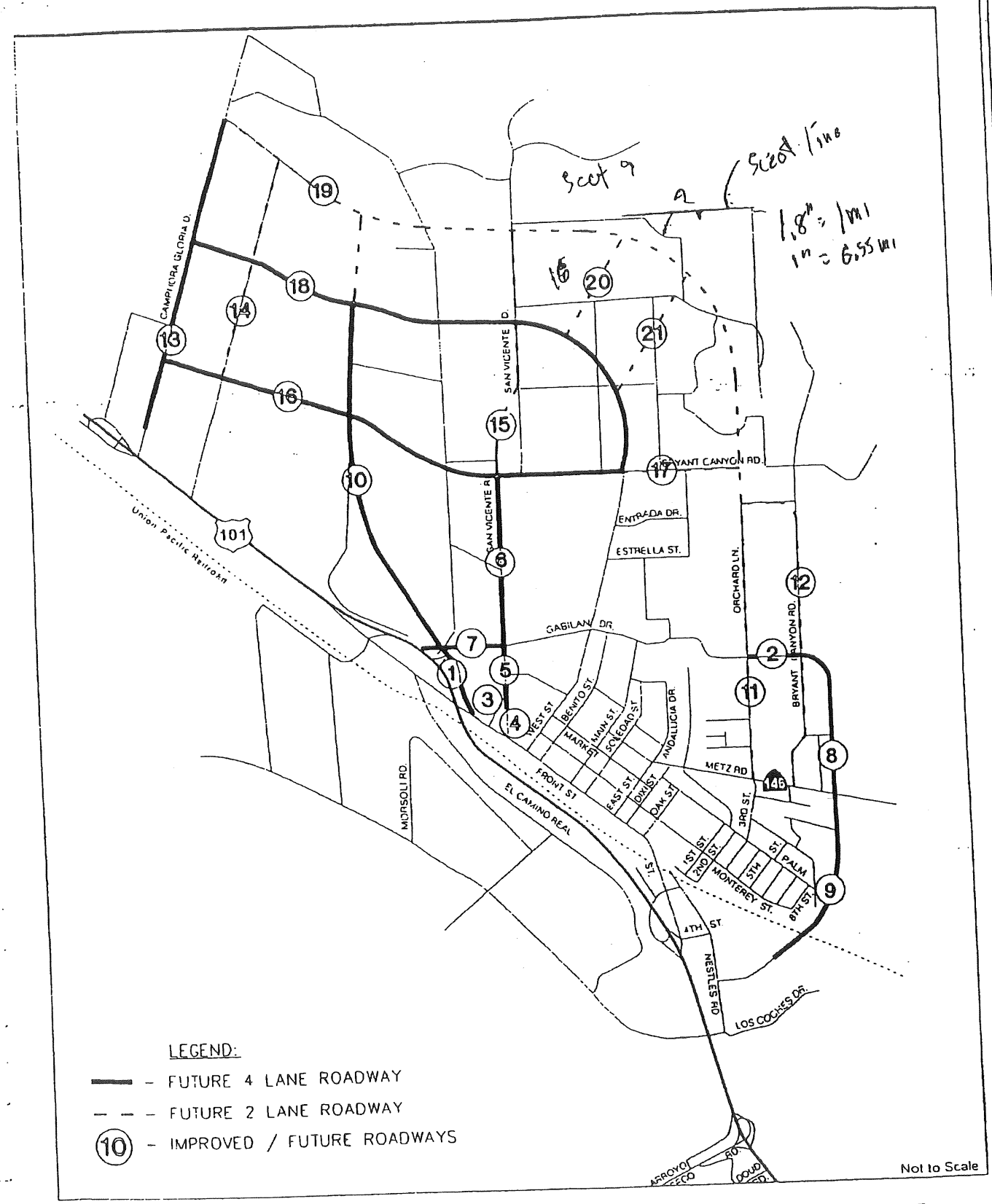
Sincerely,
BESTOR ENGINEERS, INC.

Carl L. Hooper

cc: Nader Agha
Roy Van Dorst
Michael Sullivan (Award Homes)
Omni-Means (Marty)
Noelia Chapa (City Manager)

Enclosure
W.O. 6310.00
CH/jf.L:/6310/Docs/070907 Miravale III – 2007 Traffic Impact Fee.doc

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SOLEDAD TRAFFIC IMPACT FEE UPDATE

Figure 5

2007 TIF ROADWAY IMPROVEMENTS

File: 111407G04.DWG(17MAY07)25-8683-02

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2 July 2007

DENISE DUFFY & ASSOCIATES
947 Cass Street, Suite 5
Monterey, CA 93940

Attn: Denise Duffy

Re: Miravale III – Revised Vesting Tentative Map sheet 3 of 11

Dear Denise:

Attached are four copies of the revised sheet 3 of 11 dated 6/12/07, and four copies of my letter to Cliff Price of City of Soledad. The revision changes the southwest stormwater detention pond and the approaching storm drains. It also revises the location and size of sanitary lift station at the recycled water plant adjacent to that stormwater detention pond. Since a large number of revisions were made to sheets 3, we elect to totally replace that sheet, and did not follow our customary practice of "clouded" revised portions. Mr. Price has reviewed these changes and has approved in principle.

Storm Water Changes – The pond is lowered by five feet to provide a better earthwork balance within the roughly 32 acres south of Miravale Road and west of San Vicente Road. This also reduces maximum fill berm height to less than four feet. The potential overflow to existing City of Soledad stormwater system and storage ponds has been eliminated. The previous three right angle bends in the main stormwater entry pipes were also eliminated.

Sanitary Sewer Changes – By rerouting the westerly (Street A) sanitary sewer across the golf course at fairway 11 and adding approximately 900 lineal feet of sewer main, the perpetual lift station size can be reduced from 3,300 gpm to approximately 250 gpm, immeasurably reducing long term operational costs.

Please inform your subcontractor of these changes so that any effect from them can be incorporated in your EIR.

Sincerely,
BESTOR ENGINEERS, INC.

Carl L. Hooper

cc: Nader Agha
RMM
Cliff Price

Enclosures
W.O. 6310.00
CLH/mr.L:/6310/Docs/070702 Denise Duffy & Assoc.doc

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12 June 2007

618-3963
AT

CITY OF SOLEDAD
P.O. Box 156
Soledad, CA 93960

Attn: Cliff Price

Re: Miravale III

Dear Cliff:

Following our meeting with Black & Veatch on Friday (6/8/07) I have reconsidered some items as shown on the latest version of sheet 3 of 11, Miravale III Vesting Tentative Map. After your review and comments, we will furnish revised sheets to the EIR consultants for inclusion in their studies. The principal changes are:

1. Detention Pond/Driving Range is lowered to 184 (was 189) with berm at 185 (was 190). Sides were moved to enlarge storage (berm is still 3:1 with 12 foot road). The center (120 yards) now flat at elevation 170 (was 3% slope). The main pond clearance access was reduced to a 5% gradient. Table of storage volumes added were: 162 to 170 = 12.4 AF; 170 to 180 = 76.2 AF; 180 to 184 = 41.9 AF; Total = 130.5 (plus the northern 18 AF).
2. The sewer was relocated to San Vicente Road widening for 3,000 gpm peak (18-inch at 0.345%), which does NOT require pumping with delivery elevation at 188.0 (assuming headwork at that elevation and using mounded pipeline from San Vicente.
3. The sewer lift station then reduces to approximately 250 gpm (serving 47 single family, 120-room, hotel and approximately 18 acres of commercial) (was 3,300 gpm by about 10-foot lift)
4. The west sewer line above dwelling unit 47 crosses the fairway on sheet 4 about 800 lf across fairway 11.
5. The main storm drain from roundabout location is rerouted to eliminate three right angle bends by using a single 300-foot radius on 72-inch cast-in place pipe (CIP).

Incidentally, our new plan for the driving range/pond requires 146,900 cubic yards of cut, all of which will be used for fill in the hotel, southwest commercial area and reclaimed water plant site, an average of only 600 feet haul distance. I haven't calculated the golf course treated water ponds yet, but they should total bout 50,000 cubic yards, possibly 60,000, which will all be used in golf regrading.

Sincerely,
BESTOR ENGINEERS, INC.

Carl L. Hooper

cc: Nader Agha
Sean Goris (Black & Veatch)

Enclosure
W.O. 6310.00
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26 October 2006

CITY OF SOLEDAD
P.O. Box 156
Soledad, CA 93960

Attn: Cliff Price

Re: Miravale III Water System Peak Factors

Dear Cliff:

In the water system design for Miravale III we have shown on the Vesting Tentative Map various pipelines, pumps and storage tanks that do not precisely match the size used by Schaaf and Wheeler in their Soledad Water Master Plan. That plan does not take into consideration the use of reclaimed water for irrigation purposes, whereas, at your instruction, we have shown a separate reclaimed water system. That system includes an on-site "scalping plant" which will result in sufficient reclaimed wastewater to irrigate:

a.	The Miravale III golf course –	approximately 125 acres.
b.	Streetscape for all streets -	approximately 14 acres.
c.	Public Parks –	approximately 30 acres.
d.	Public School Athletic Fields –	approximately 15 acres.
e.	Private lot front yards add MF landscape –	approximately 39 acres
	Total	**222 acres**

In aggregate, this is 222/815, or 27% of the total project. Only private rear yards and minor portions of multi-family and/or commercial areas, probably totaling less than 15% of the 815 acre project will be subject to potable water irrigation – certainly not enough to result in doubling fresh water demand.

A second factor to consider is the fact that the fire sprinkler systems will be required in public buildings and most probably in commercial and multi-family buildings, so the excessively large volumes for fire protection in Schaaf and Wheeler's analysis can be substantially reduced. We do not question large volumes in zones A or B, where many buildings lack such provisions. But zone C and the two very small zones above C can certainly avoid such large volume tanks with the inherent loss of quality that accompanies such a lack of turnover in storage.

As the result of our design, the pumps and tanks shown on the Vesting Tentative Map, coupled with the proposed use of a 12-inch double loop main system in zone B and only 8 inch pipelines in zones C, D and E should be adequate. Naturally, computations of individual segment pressure loss and fire flow conditions will be provided in the final design.

Regarding water consumption, we offer the following analysis:

Miravale III Water Consumption, Indoor, GPD

	Number	GPD/Unit	GPD	Peak Hour gpm	
Single Family	1,470	382	562,277	780.9	Avg 4.5/du
Multi-Family	3,730	323	881,790	1,224.70	Avg 3.8
Commercial	275	80/1,000	22,000	100.0	
Schools	2,200 std	20.4 gpd avg.	44,900	187.0	
Hotels	120 rm	167 rm	20,100	93.0	
Other	-	-	46,200	165.0	
Total			**1.577 mgd**	**2,400**	**Total Persons: 17,270**

(Sewer flow = 1.577 mgd + 14% = 1.8 mgd = 2,375 gpm peak hour)

Fresh water irrigation will total approximately 40 acres at 1.8 AF/acre or about 72 acre feet/year. Peak day use will be approximately 5%, or about 3.5 to 4.0 AF, or 1.0 mgd to 1.3 mgd. But this will be spread over probably 5 to 6 hours, requiring about 3,400 gpm make-up pumpage.

Of this, the majority of use will be in zone B. Zone A will be limited to 48 homes, the hotel and westerly commercial (34 acres). Zone C will include 569 total dwelling units (343 single family and 230 multi-family). Zone D (reduced pressure from Tank E) serves 21 single family dwellings. Zone E serves 30 single family dwellings.

Zone	Highest	Lowest	STP	MFD	Commercial/ Other (acres)	School
A	215	185	48	0	18	0
B	215	340	1,028	2,994	17	3
C	340	456	343	236	0	0
D	456	570	21	0	0	0
E	570	705 *	30	0	0	0
Totals			**1,470**	**3,230**	**35**	**3**

* includes two individual booster pumps

Our rationale for storage tanks and pumps is then:

Zone E – 51 customers on tank, but fire protection needs only 2 hours x 500 gallons per minute = 60,000 gallons. Domestic use is 30 customers x 1,500 gallons peak day = 45,000 gallons for a total of 105,000 gallons. Pumpage requirement – 45,000 gallons/1,000 min = 45 gpm. Proposed pumps are 2 at 25 gpm, plus one standby. Could be 2 at 45 gpm.

Zone D – 21 customers, served by 50 gpm reduced pressure zone, using single 8-inch pressure regulator. Storage is included in Zone E tank (only 30 Zone E customers).

Zone C – 343 single family dwelling customers plus 236 multi-family (assuming the split for undesigned PUD). All multi-family dwellings are required to have fire sprinklers, so fire flow is 60,000 gallons; domestic flow for the 579 dwelling units (1,544 occupants) is 115,800 gpd (160 gpm peak flow), plus the 45 gpm usage in zones D and E requires by most standards 205 gpm pump capacity. It requires 1.5 days plus fire flow = 233,700 gallons. We had suggested 320,000 or a 86,300 surplus.

Zone B – the 1,028 SFD plus 2,994 MFD will utilize the existing 2.0 mg tanks (plus a future tank at the same elevation if and when the "windmill" site is ever developed). The existing tanks supply 840,000 gallons of fire storage (3,500 gpm x 4 hours) plus 1,160,000 gallons domestic, or 288 gallons per dwelling unit for the 4,022 dwelling units in this zone. When ultimately built, along with perhaps 600 to 800 dwellings, that northerly 1.0 mg tank would improve storage to 2,160,000 gallons, or at least 430 gallons per dwelling, and would bracket the ends of the two-mile long service area. Pumpage needed is a total of 1,160,000 gpd, or 483 minutes for the current 2,400 gpm available. If discounted to 1,600 gpm (by keeping one existing pump in reserve), it would require 725 minutes of running time. Adding the 205 gpm for zone C requires the zone B pumps to operate 813 minutes. Since most systems are normally used 1,000 minutes per day (or 69% of the time), there is no justification for additional zone B pumpage.

Zone A – the 48 dwelling units plus commercial will cause demand for 47,000 gallons per day or approximately 32 minutes of pumping time for one well at 1,500 gpm. No additional storage is involved, since the existing tanks provide for fire storage.

Respectfully submitted,
BESTOR ENGINEERS, INC.

Carl L. Hooper

cc: Nader Agha
Roy Van Dorst
Walter Grant
Denise Duffy
Jami Williams

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MIRAVALE III
RECLAIMED WATER SYSTEM
14 July 2007

(See also 7/17/06 report entitled "Reclaimed Water and Preliminary Report dated September 2006)

All Miravale III treated waste water is intended for use for irrigation on the golf course, parks, playgrounds, streetscapes and private front yards within Miravale III. This has been previously estimated at 85% of 1.7 mgd, or 1.4 mgd or 4.4 AF per day. The total available irrigation area has been estimated at approximately 125 acres of golf, 59 acres of public facilities and 39 acres of private front yards.

The probable distribution system will consist of approximately 4,200 lf of 12-inch, 8,200 lf of 8-inch and 3,000 lf of 6-inch on the main distribution system, about 11 miles of 4-inch and 2 ½-inch distribution lines in the individual streets. All will be purple pipe, to distinguish it from the potable water pipe. Principal storage facilities will include the 10 to 15 water hazards of the golf course and storage tanks at the 540 and 720 elevations. Individual irrigation pumps, distribution systems and spray heads will be the responsibility of the users (approximately 56% golf course, 26% city and 17% private owners).

The basic system will most probably contain the following pumps:

1. At the treatment plant – Three at 50 Hp (600gpm at 222 feet)
2. At westerly uppermost pond (temporarily at elevation 257, with ultimate extension within the Williamson Act land to the pond at 247) Zone B distribution pumps, probably three at 25 HP (300 gpm at 200 feet head) for distribution to the approximate by 60% of the development within that zone.
3. At pond 310 – two at 60 Hp (500 gpm at 285 feet)
4. At 540 tank site – two at 20 Hp – 100 gpm at 180foot head.

Total eight pumps – 20 at 60 Hp – 100 to 600 gpm at 180 to 285 foot head.

As stated above, these will be required in several phases, as the project proceeds. Until the final design of the golf course, the individual sizes of ponds cannot be determined. They should total the Zone C tank which will serve approximately 10 to 12% of the total development, providing up to about 0.5 acre feet daily, hence approximately 200,000 gallons. The golf course will be expected to use 125 acres.

This amount of irrigatable land can absorb an average of 0.10 to 0.15 inches per day, or about 1.2 to 1.5 AF/day (or about 700 to 1,000 gpm in an average eight hour irrigation period). During periods of extremely high-reclaimed water generation, it may be necessary to slightly extend irrigation hours.

LETTER N: BESTOR ENGINEERS, INC.

N1: Comment acknowledged. This comment does not raise an environmental issue that warrants a response under CEQA. No response is necessary.

N2: Comment acknowledged. This comment does not raise an environmental issue that warrants a response under CEQA. No response is necessary.

N3: Comment acknowledged. Please refer to **Section 4.0 Revisions to the Draft EIR.**

N4: Comment acknowledged. Please refer to **Section 4.0 Revisions to the Draft EIR.**

N5: Comment acknowledged. Please refer to **Section 4.0 Revisions to the Draft EIR.**

N6: This comment is unclear. It appears that the comment is suggesting that Mitigation Measure 4.2-4 is unnecessary since agricultural access can be maintained through the Braga property. The purpose of this mitigation measure is to ensure that potential impacts to on-going agricultural operations are minimized to the extent feasible. The mitigation measure was identified as necessary in the Agricultural Resources Report prepared by Buchanan Associates. This measure would ensure that existing access from the ramp to Highway 101 North would not be adversely impacted by the proposed project.

N7: This comment is also unclear. It appears that this comment is trying to compare the environmental effects of existing agricultural operations and the proposed project. Although agricultural activities may result in emissions of fugitive dust and particulate matter, the analysis in the Draft EIR is specific to the environmental effects associated with the proposed project. The Draft EIR clearly identifies baseline activities and then evaluates the proposed project against specific thresholds of significance developed by the MBUAPCD. This comment incorrectly assumes that all grading is limited to only 2.5 acres per day. Mitigation Measure 4.3-1 was determined to be necessary in order to minimize construction-related impacts to the extent possible. The limitation of earth disturbing activities is considered standard practice to minimize the emission of dust and particulate matter. Contrary to the suggestions of the commenter, Mitigation Measure 4.3-1 clearly contains provisions to allow increased grading as more detailed construction information is available. Since this comment generally reflects the applicant's opposition to this mitigation measure, this comment is referred to decision-makers for further consideration as part of the deliberative process.

N8: This comment requests that the requirements of Mitigation Measure 4.3-1 be clarified. Mitigation Measure 4.3-1 has been revised to reflect comments received on the Draft EIR from MBUAPCD. Please see **Section 4.0 Revisions to the Draft EIR** for more information.

N9: This comment requests that the requirements of Mitigation Measure 4.3-2 be clarified. Mitigation Measure 4.3-2 has been revised to reflect comments received on the Draft EIR from MBUAPCD. Please see **Section 4.0 Revisions to the Draft EIR** for more information.

N10: This comment contends that the proposed project cannot comply with certain provisions of Mitigation Measure 4.9-1 related to stormwater and the City's adopted Stormwater Management Plan. This comment suggests that the Stormwater Management Plan and Stormwater Master Plan do not adequately or appropriately address the Miravale III project site and offsite drainage. The requirements identified in Mitigation Measure 4.9-1 were specifically identified by the City of Soledad as necessary to address the proposed project and also ensure consistency with applicable City-wide planning efforts. To date the applicant's representatives have failed to provide sufficient information to the City to demonstrate that these requirements inadequately address the Miravale III site. This comment is noted and is referred to City decision-makers for further consideration.

N11: This comment raises specific concerns related to Mitigation Measure 4.10-4 pertaining to mitigation of project noise-related impacts. Please refer to the analysis contained in the Draft EIR and supporting technical appendix. The Draft EIR and supporting Noise Assessment clearly identify the roadway segments that will require special treatment to address potential noise-related impacts. Moreover, the comment incorrectly suggests that other area developments may contribute to this impact and therefore the project should only pay its fair share. As described in the Draft EIR and Noise Assessment, this is a project impact and this mitigation is specific to this project. Please see **Section 4.10 Noise** of the Draft EIR for more information; please also see Technical Appendix T-7 in Volume II of the Draft EIR.

N12: This comment expresses specific concerns related to Mitigation Measure 4.12-1, which requires that the proposed fire and police facilities located in Phase 2 are operational prior to the issuance of any building permit for new residential and commercial development in that phase. These facilities must be operational prior to any building of new residential or commercial structures associated with Phase 2, otherwise inadequate public facilities would be available to meet anticipated demand. This could result in inadequate response times and staffing shortages which could result in the exposure of construction personnel and future site occupants to additional hazards. This would represent a significant impact in the absence of this mitigation measure. Mitigation Measure 4.12-1 was developed in consultation with the City of Soledad Police and Fire Departments and is necessary to ensure that adequate facilities will be provided to address the needs of Phase 2 of the project. For more information please refer to **Section 4.12 Public Services and Recreation** of the Draft EIR.

N13: This comment inaccurately asserts that the School district is requiring new school facilities to serve new development in a different project area. It implies that Mitigation Measure 4.12-4 is unnecessary based on earlier correspondence from the Soledad Unified School District (SUSD) on the Notice of Preparation (NOP) for the proposed project. Although this comment correctly identifies that the SUSD had previously identified that adequate schools sites could be provide elsewhere in the community, SUSD has subsequently revised their estimates. Based on subsequent correspondence, SUSD has determined that the proposed project would need to provide two (2) additional elementary schools and a 40-acre high school. Mitigation Measure 4.12-4 is reflective of SUSD's current comments. This mitigation correctly identifies that that high school shall be operational prior to the issuance of any certificate of occupancy for Phase II. This mitigation measure does allow for additional facilities to be provided elsewhere in the community provided that those facilities are available to serve the development at the time additional capacity is necessary. For more information please refer to **Section 4.12 Public Services and Recreation** of the Draft EIR.

N14: Comment acknowledged regarding typographical error in Mitigation Measures 4.13-3 and, similarly, 4.13-4; text is revised in **Section 4.0 Revisions to the Draft EIR.**

N15: This comment contends that Mitigation Measure 4.13-2 through 4.13-9 should be revised to identify that the transportation improvements should be constructed at the time they are required, not prior to occupancy. This comment incorrectly assumes that these mitigation measures represent a general prohibition on the issuance of occupancy permits. These mitigation measures clearly state that occupancy permits shall not be issued for any new residential or commercial development that require the implementation of the improvements identified in the mitigation measures. The City will determine the timing of required road and intersection improvements for each phase of development through an adopted Development Agreement with the Project Proponent and related subdivision improvement agreements. Please see **Section 4.0 Revisions to the Draft EIR** to the extent that revisions address this comment.

N16: This comment notes that TAMC's Regional Impact Fee would address the project's regional impacts. As identified elsewhere, at the time the Draft EIR was prepared the City of Soledad had not committed to collecting the TAMC fees. Since that time, however, the City has adopted the TAMC fee. Mitigation Measures 4.13-1 through 4.13-3 have been revised. Please refer to **Section 4.0 Revisions to the Draft EIR**.

N17: This comment states that fees to cover the existing sewer plant improvements should be waived if the developer pays to construct the treatment plant within the project site. As the City will be responsible for constructing the project's wastewater treatment facility, the project's impact fees will be applied toward the project's pro-rata share of the facility cost, and fees, therefore, will not be waived. Please refer also to **Section 4.14 Utilities and Service Systems** of the Draft EIR. As identified on pages 4.14-16 through 4.14-17 of the Draft EIR, Mitigation Measure 4.14-8 is necessary in order to ensure that adequate on-site treatment capacity will be available to serve future phases of development.

N18: This comment registers applicant's opposition to Mitigation Measure 4.14-11. This measure is meant to ensure the project does not jeopardize the City's ability to adequately provide wastewater services and meet the needs of prior commitments for service. The measure is not intended to require the project to address existing City commitments; Mitigation Measure 4.14-11 has been revised for clarity. Please refer to **Section 4.0 Revisions to the Draft EIR**.

N19: Comment acknowledged regarding additional information to Section 3.1. Please refer to **Section 4.0 Revisions to the Draft EIR.**

N20: Comment acknowledged concerning correction to the range of lot sizes identified in Section 3.3 of the Draft EIR. Please refer to **Section 4.0 Revisions to the Draft EIR.**

N21: This comment states that the total acreage of Williamson Act properties is 108 acres, not 104.8 acres, as noted in Table 3.0-1. The Notice of Non-Renewal contained in Appendix D states that the total amount of Williamson Act land affected by this Notice is 108 acres. Table 3.0-1 has been corrected in **Section 4.0 Revisions to the Draft EIR.**

N22: Comment acknowledged regarding the project's onsite wastewater treatment facility. Please refer to **Section 4.0 Revisions to the Draft EIR.**

N23: Comment acknowledged concerning the possible need for more than one Sphere of Influence amendment. Please refer to **Section 4.0 Revisions to the Draft EIR.**

N24: This comment asserts s that the Draft EIR should be revised to include all of the plans sheets included as part of the vesting tentative map in order to allow for more meaningful review. The Draft EIR contains sufficient detail to allow for meaningful review. The proposed project includes a Specific Plan and Vesting Tentative Map and the Draft EIR contains detailed exhibits that show the location of the proposed project, proposed land uses and circulation system, project vicinity, tentative map, and other characteristics to allow for substantive review.

N25: This comment is unclear. The Draft EIR clearly identifies that there is an existing residential subdivision to the south of the project area.

N26: This citation and source is on page 13 of the Buchanan Associates Agricultural Report for the project. The full report is included as Appendix T-1 of the Draft EIR.

N27: Comment acknowledged. Please refer to **Section 4.0 Revisions to the Draft EIR.**

N28: This comment relates to biological mitigation that requires that medians be prohibited in the development. This comment is addressed to the City as to whether they would consider eliminating this requirement. Refer to **Response M-12.**

N29: This comment states that site elevation ranges are between 178 to 742 feet and that gradient percentage should be 2.0% to 3.5%. The information contained in the Draft EIR is based upon

topographical data and technical reports that were submitted by the project applicant and reviewed by the EIR consultant and City of Soledad. The correct lower elevation is approximately 180 feet above sea level; this is revised in **Section 4.0 Revisions to the Draft EIR.**

N30: This comment contends that development above the 400 foot elevation contour is consistent with General Plan policies because the lots would provide more aesthetic quality and that Figure II-7 of the General Plan indicates residential use above the 400 foot contour line. As described in the Draft EIR, the proposed project would result in significant aesthetic-related impacts as a result of hillside grading and development of roads and structures. Contrary to the comment, this would not provide and/or otherwise enhance the existing aesthetic quality of the area. Moreover, the General Plan clearly states that Figure II-7 (page II-18 of the General Plan) is illustrative only, while the Land Use Diagram, which constitutes established City policy, designates the area above the 400 foot contour for open space and grazing uses.

N31: This comment contends that the landfill footprint is incorrect and that the City has a specific limit of 19 acres. The Draft EIR identified the general footprint of the former Soledad Sanitary Landfill based on records obtained from the Monterey County Environmental Health Division. Although the former landfill is located within the City boundaries, a buffer zone was established consistent with Monterey County standards. The buffer was used for primarily illustrative purposes to demonstrate that future site occupants within that portion of the site could be exposed to fugitive emissions and/or other potential hazards associated with the former landfill.

N32: Comment acknowledged. Please refer to **Response N29** for more information.

N33: This comment requests clarification regarding the responsibility of fees collected for the purposes of maintenance costs for the on-site Best Management Practices (BMPs) identified on Draft EIR page 4.8-9. See also additional information provided in Response N34.

N34: This comment requests additional clarification regarding Mitigation Measure 4.8-2. Specifically, this comment is concerned whether the maintenance will be part of an assessment to maintain facilities. As described in the Specific Plan, the project will require the formation of an assessment district that will be responsible for maintaining project infrastructure including storm drain maintenance and maintenance of other drainage facilities. This mitigation measure was identified as necessary by the City of Soledad to ensure that all facilities were properly maintained in perpetuity.

N35: This comment questions the affordability requirements of the Soledad Inclusionary Housing Ordinance, Chapter 17.41 of the Soledad Municipal Code, In order to meet the requirements of the City's Inclusionary Housing Ordinance, inclusionary housing must meet specific criteria and terms stipulated by the ordinance. Higher density housing that is intended to be affordable by design, including the "workforce housing," proposed by the Miravale III Specific Plan, would not comply with the provisions of the Inclusionary Housing Ordinance unless the affordability of such housing is ensured through enforceable restrictions governing both the price/rents of such units and the eligibility of buyers and tenants. Inclusionary housing provided pursuant to Chapter 17.41 is restricted in terms of pricing, rents and eligible income levels of buyers and renters for a 45-year term to ensure continued affordability of such housing in the community.

N36: As noted in Response N35, the proposed project will be required to adhere to the requirements of the City's Inclusionary Housing Ordinance. The determination of what constitutes "in the immediate vicinity of another inclusionary housing development" will be made by the City during the project review process. The intent of this ordinance requirement is to prevent an over-concentration of affordable housing. This comment does not raise an environmental issue under CEQA and is referred to decision-makers for further consideration as part of the deliberative process.

N37: Comment acknowledged. This portion of the Draft EIR is a synopsis of the applicant's proposed Specific Plan. This comment is addressing the merits of the design of the Specific Plan and does not raise an issue that warrants a response under CEQA. This comment is referred to decision-makers for further consideration as part of the deliberative process.

N38: This comment questions whether a 15-20 year buildout is considered reasonable. At the time the Draft EIR was prepared it was considered reasonable to assume that buildout would occur over a 15-20 year timeframe. This estimate was derived directly from the Specific Plan.

N39: This comment contends that the proposed project would result in an average density of 4.56units/acre not 10.8 as identified in the Draft EIR. Average density was calculated by dividing the total number of residential units (4,200) by the total acreage of residential land uses (approximately 387.76 acres). This equals an average residential density of approximately 10.8 units/acre of residential land use.

N40: This is a specific comment regarding General Plan Policy S-32. This does not relate to an environmental issue that requires a response under CEQA. This comment is referred to decision-makers for further consideration as part of the deliberative process.

N41: This comment states that the Draft EIR should be revised to identify that the project applicant may pay a fee for impacts related to police and fire protection services. Mitigation Measure 4.12-2 clearly identifies that the project applicant will be required to submit payment of all applicable public facility impact fees in accordance with City requirements.

N42: This comment contends that the proposed golf course facility should be considered parkland and that Mitigation 4.12-6 of the Draft EIR should be revised accordingly. This comment reflects the applicant's opinion that the golf course should be credited as parkland. Mitigation Measure 4.12-6 has been revised to indicate that the proposed project will be required to provide improved parkland at a ratio of five acres/ 1,000 residents consistent with the park dedication standard of Appendix B of the General Plan. Please refer to **Section 4.0 Revisions to the Draft EIR** for more information. This comment is referred to decision-makers for further consideration as part of the deliberative process.

N43: Comment is unclear. The reference to Section 66483 (a) of the Subdivision Map Act pertaining to the payment of storm drainage and wastewater treatment impact fees does not appear to be entirely relevant to the referenced Mitigation Measure 4.14-8, and does not raise an environmental issue under CEQA. This comment is referred to decision-makers for further consideration as part of the deliberative process.

N44: Comment acknowledged concerning the "No Golf Course" Alternative. This comment is referred to decision-makers for further consideration as part of the deliberative process. It should be noted that a "No Golf Course" alternative is not mutually exclusive of other alternatives identified by the Draft EIR and has, in fact, been combined in this FEIR with the "Buildout Consistent General Plan" as a sub-alternative. Please refer to **Section 4.0 Revisions to the Draft EIR, Section 6.0 Alternatives.**
N45: Comment unclear.

N46: Comment acknowledged concerning Williamson Act acreage. Please refer to **Section 4.0 Revisions to the Draft EIR.**

N47: This comment reflects specific concerns related to the assumptions used in the analysis prepared by RM Associates in regard to the drainage analysis prepared by Bestor Engineers, Inc. The analysis prepared by RM Associates was prepared in consultation with the City of Soledad. The SDMP has since been adopted by the City of Soledad and the proposed project will be required to comply with its requirements; otherwise, additional technical information, including but not limited to, site specific geotechnical analyses and project-level detail, will need to be submitted by the project applicant to

demonstrate that the proposed system is sufficient. The City has indicated that compliance with the 2007 SDMP would ensure that the proposed project has adequate storm drain facilities in accordance with City specifications. This comment is referred to the City for further consideration as part of the deliberative process.

N48: Figure 8 of the traffic study presents the projected trip distribution for both the residential and retail components of the proposed project. The indication of "0%" distribution in regards to the residential portion of the project indicates an area consisting primarily of existing residential land uses. Therefore, it is assumed that trips from the proposed residential units would not originate or be bound for other existing residential units within Soledad. Similarly, the retail distribution indicates "0%" for areas that consist primarily of other existing retail/commercial land uses.

N49 This comment is addressing the merits of the Specific Plan itself and does not raise an environmental issue under CEQA that warrants a response. No further response is necessary.

N50: This comment also addresses the Specific Plan itself and, as such, does not raise an environmental issue under CEQA that warrants a response. No further response is necessary.

N51: This is a comment on the merits of the Specific Plan itself and does not raise an environmental issue under CEQA that warrants a response. No further response is necessary.

N52: This comment references a number of attachments that are included as part of this comment letter. They consist of previous correspondence submitted to the City of Soledad and are part of the administrative record. These comments were previously considered by the City during the preparation of the Draft EIR and supporting technical analyses. They do not introduce any new issues that have not already been articulated by the project applicant and/or his representatives and considered by the City. For this reason, a detailed response to these attachments is not included as part of this Final EIR.

The following section provides revisions to the text of the Draft EIR, in amendment form. The revisions are listed by page number. All additions to the text are presented in underline, and all deletions are shown in ~~strikeout~~.

Table 2-1, Summary of Significant Environmental Impacts and Mitigation, pages is revised as follows:

Under Introduction, Section 1.0, Page 1-1, the third paragraph is revised as follows:

This EIR addresses implementation of Miravale III Specific Plan and Vesting Tentative Map on 920-acres located within unincorporated lands of Monterey County on the northern edge of the City of Soledad. Full implementation of the Miravale III Specific Plan allows for mixed-use development consisting of approximately 1,470 single-family residential units, 2,730 duplex and multi-family residential units (includes affordable housing, workforce housing, and senior housing units), 120 hotel rooms, 275,000 square feet of retail commercial space and an 18-hole golf course. The project also proposes three school sites (two elementary schools and one middle school), a fire and police substation, a recycled water plant,[2] and approximately 75 acres of open space and recreation areas, including parks, playgrounds, and a trail system. The project proposes sphere of influence amendments and annexation by the City of Soledad from the County of Monterey and future subdivision of the site. The project site is located generally between San Vicente Road and Orchard Lane, and is surrounded by agricultural land to the north and ~~east~~ west, an existing residential subdivision to the south, and undeveloped foothills of the Gabilan Mountain Range to the ~~west~~ east.

Under Project Description, Section 3.1, Page 3.0-2, is revised as follows:

"3.1 PROJECT LOCATION

The project is located within unincorporated lands of Monterey County on the northern edge of the City of Soledad, approximately 35 miles southeast of the Monterey Peninsula and 85 miles southeast of the San Francisco Bay Area (refer to Figure 3-2). The 920-acre project site is generally between San Vicente Road and Orchard Lane and is surrounded by agricultural land to the north and west, an existing residential subdivision to the south, and undeveloped foothills of the Gabilan Mountain Range to the east. (Refer to Figure 3-3). The Assessor's Parcel Numbers are: 417-151-082, 417-151-083, 417-151-084, 417-151-085, 257-081-005, 257-081-026, 257-081-027, and 257-081-032.

The project site consists primarily of undeveloped land. The site's topography is comprised of a natural slope from the southwest corner of the site to the northeast with steeper slopes located at the eastern boundary. The majority of the site ranges in elevation between approximately 180 and 600 feet above mean sea level. The site generally drains to the southwest toward Miravale Road and a large detention basin is proposed at the golf practice range just south. Several small drainages occur in the eastern and western portions of the site. Site vegetation can be characterized primarily with areas of open annual grassland and minimal trees. Existing trees are located near two single family homes, and a row of eucalyptus trees line one side of San Vicente Road. In addition, there is an existing high voltage transmission line that is located adjacent to San Vicente Road."

[2] The proposed recycled water plant is also referred to as a "scalping plant" in other City documents, but for the purposes of this EIR it is referred to as a "recycled water plant."

Under Project Description, Section 3.3, Page 3.0-3, is revised as follows:

"Single Family Residential (M3 – R-1)

Single Family Residential zones occur on approximately 241 acres of the Plan area. These low density areas are located throughout the project site. A total of 1,470 units are proposed within this designation, at a density of approximately one to six dwelling units per acre. The single-family residential development will include a mix of architectural styles, lot sizes, and structure heights. Lot sizes range from ~~6,000~~ 5,000 square feet to ~~30,000~~ 55,000 square feet (for hillside homes)."

Under Project Description, Section 3.3, Page 3.0-6, is revised as follows:

"Sanitary Sewer System

The City of Soledad is responsible for treatment and disposal of wastewater for the project area. The sanitary sewer collection system is also operated and maintained by the City. Buildout of the project would generate approximately 1,579,500 gallons per day of wastewater. The existing treatment plant will need to be enlarged and improved to accommodate projected growth. These upgrades are scheduled to be completed by the end of 2010. Sanitary sewer lines will be located within the proposed street right-of-ways and connect to the existing sanitary sewer lines that serve the City. As proposed, project generated wastewater demands will be accommodated through an on-site reclamation plant, which will supplement the City's existing wastewater treatment system. The sanitary sewer system is evaluated in **Section 4.14 Utilities and Service Systems**."

Under Project Description, Section 3.3, Table 3.0-1, Page 3.0-4, is revised as follows:

First Column – Land Use
"Urban Reserve – ~~84.8~~ 88 acres"

Third Column – Acres
"Williamson Act Properties: ~~104.8~~ 108"

Under Project Description, Section 3.3, Page 3.0-7, final bullet under "Project Implementation" sub-section, is revised as follows:

- **"**Application for ~~a~~ one or more Sphere of Influence amendments and subsequent Annexations approvals from LAFCO of Monterey County."

Under Project Description, Section 3.0, Page 3.0-9, tenth bullet, is revised as follows:

- "Monterey County Local Agency Formation Commission (LAFCO) for the approval of sphere of influence amendment and annexation required for development within the incorporated limits of the City. This required LAFCO approval would include detachment of Miravale III from the Mission Soledad Rural Fire Protection District and the Resource Conservation District of Monterey County."

Under Project Description, Section 3.0, Page 3.0-9, the following bullet is added after bullet 11, is revised as follows:

- "Tax transfer agreement with the County of Monterey pursuant to the requirements of Revenue and Taxation Code Section 99."

Under Aesthetics, Section 4.1, Page 4.1-2, is revised as follows:

"Regulatory Environment

City of Soledad General Plan

The Land Use and Conservation/Open Space Elements of the General Plan guide the City's future physical and spatial form, and appearance. Numerous goals and policies of the General Plan are intended to protect the visual character of the City and surrounding scenic resources. The following aesthetic and visual resource policies apply to development within the project area.

Policy L-45 The City shall require all new development to be planned and designed in a manner which employs design, construction and maintenance techniques that:

a. Avoids locating structures along ridgelines and steep slopes.
b. Incorporates design and screening measures to minimize the visibility of structures and graded areas.
c. Maintains the character and visual quality of the area.

Policy C/OS-7 The City shall require new public and private development to protect scenic resources by:

a. Prohibiting structures along ridgelines, steep slopes (above the 400 foot elevation contour), or in other highly visible locations unless no practical alternative is available, or such a location is necessary to protect public health and safety;
b. Utilizing natural landforms and vegetation for screening structures, access roads, building foundations, and cut and fill slopes;
c. Requiring landscaping which provides a landscape transition between development areas and adjacent open space or undeveloped areas; and is compatible with the scenic resources being protected;
d. Incorporating sound Soil Conservation Service practices and minimizing land alterations. Land alterations shall be minimized by: keeping cuts and fills to a minimum; limiting grading to the smallest practical area of land; limiting land exposure to the shortest practical amount of time; replanting graded areas to ensure establishment of plant cover before the next rainy season; and creating grading contours that blend with the natural contours on site or look like contours that would naturally occur;
e. Designing roads, parking, and utilities to minimize visual impacts. If possible, utilities shall be underground. Roadways and parking shall fit the natural terrain; and
f. Designing projects to fit the sites scale and character. Structures shall be designed and located so: they do no silhouette against ridgeline, or hilltops; roof lines and veridical architectural features blend with and do not detract from the natural background or ridge outline; residential density and massing is decreased with increased elevation where it would mar the scenic quality of the scenic resources; they fit the natural terrain, and they utilize building materials, colors, and textures that blend with the natural landscape and avoid the creation of high-contracts situations."

Under Aesthetics, Section 4.1, Page 4.1-8 through 4.1-9, are revised as follows:

"Scenic Vista

The project site currently consists of relatively undeveloped agricultural and grazing lands. The highly visible foothills of the Gabilan Mountain Range are located on the eastern edge of the project site and serve as a dramatic backdrop to the flat valley land below. The City's General Plan recognizes the scenic value of these foothills and contains numerous policies to protect this scenic resource by limiting new

development below the 400 foot elevation contour. Moreover, according to the General Plan EIR, policies prohibiting development above the 400 foot elevation contour were identified as mitigation measures to ensure that adverse impacts to scenic resources, including the Gabilan Mountain Range, were minimized to the extent feasible. These measures were incorporated as part of the City's General Plan in order to ensure the preservation of the City's unique scenic resources. Due to the relative importance of the Gabilan Mountain Range, development above the 400 foot contour would constitute a potentially significant impact. Therefore, for the purposes of this analysis, these foothills are considered a scenic vista and development above the 400 foot elevation contour would constitute ridgeline development and thereby a significant impact. Development above the 400 foot elevation contour would conflict with several General Plan policies, including but not limited to L-45, C/OS-7, C/OS-8, and C/OS-9. For a detailed evaluation of the proposed project's consistency with applicable General Plan policies please refer to Table 4.9-2."

Under Aesthetics, Section 4.1, Page 4.1-14, Mitigation Measure 4.1-11, is revised as follows:

"4.1-11 Final design plans for proposed residential development shall include form, scale, and character elements which emulate the best characteristics of the existing residential neighborhoods, such as single and two-story dwellings with adequate off-street parking, landscaped front yards with trees, and sidewalks. Prior to the issuance of any building permit for residential development within the Specific Plan area, the project applicant shall submit design-level drawings consistent with the intent of this measure, subject to the review and approval of the City of Soledad. All residential development within the Specific Plan area shall be subject to a conditional use or design-review process as administered by the City of Soledad."

Under Aesthetics, Section 4.1, Page 4.1-15, Mitigation Measure 4.1-14, is revised as follows:

"4.1-15 Ornamental lighting use for streets, parks, public open spaces, trails, bike paths, parking lots, and walkways shall utilize fixtures consisting of metal halide with full cut-off luminaries or other form of similar fixtures in order to control light and glare. Prior to the issuance of any building permit, the project applicant shall provide documentation as part of the exterior lighting plan described in Mitigation Measure 4.1-~~12~~ 14, demonstrating that these measures are incorporated into site lighting, subject to the review and approval of the Soledad Planning Department."

Under Agricultural Resources, Section 4.2, Page 4.2-6, under "Cortese-Knox Capability Classification", add the following text:

"Cortese-Knox Capability Classification. Three of the four criteria above apply to classifying prime lands within the project site. Approximately 500 acres meet criterion #1 exclusively, approximately 430 acres meet criterion #3, and the total potentially irrigated land area of 760 acres (actively cropped plus recently fallowed) could meet criterion #4. Therefore, the vast majority of the project site can meet one of the criteria under the definition for classification under Cortese-Knox. It should be noted that the City General Plan EIR also provides an assessment of land in and around Soledad and acknowledges that almost all of the soils surrounding the urban area of the City meets at least one of these qualifications and, therefore, can be considered prime agricultural land with the exceptions of GhC (Gloria sandy loam 2 to 9 percent slopes) and Xb (Xerorthents, sandy)."

Under Agricultural Resources, Section 4.2, Page 4.2-14 through 4.2-15, Mitigation Measures 4.2-1, 4.2-2, and 4.2-3, are revised as follows:

"4.2-1 Adequate buffer areas between urban and agricultural uses, including a minimum 50 foot buffer along the northern and eastern boundary of the project site and a –200 foot buffer along the western boundary, shall be incorporated into the proposed project. These buffers shall also be

supplemented with physical barriers in areas where residential and commercial structures are to be located, as recommended by the Agricultural Resources Report contained in Appendix T-1. The 200 foot buffer along the project's western boundary may be reduced upon demonstration to the satisfaction of the City that other measures, including those recommended in Mitigation Measure 4.2-2, will adequately protect human health and safety and minimize potential conflicts, and provided that any such reduction shall not result in a buffer width of less than 100 feet. The County of Monterey Agricultural Commissioner shall be consulted regarding the adequacy of the proposed buffers and physical barriers and evidence of said consultation and recommendation shall be submitted to the City prior to approval of the tentative map. Prior to the recordation of any final map, the project applicant shall submit evidence in the form of agricultural setbacks delineating buffer locations consistent with the recommendations contained in the Agricultural Resources Report, subject to the review and approval of the City of Soledad. All agricultural buffers, excluding public right-of-ways, shall be maintained by the Project Proponent and/or his/her successor(s) in interest through easements dedicated to the City or other entity until such time that the adjoining agricultural operation and use no longer exists.

4.2-2 In order to ensure the adequacy of the ~~proposed 60'~~ agricultural buffer located along the western boundary of the project site, as required by Mitigation Measure 4.2-1, the project applicant shall submit a detailed landscape plan that includes vegetative screening in addition to physical barriers, such as fences, walls or similar structures, to protect human health and safety. One or more of the following options may also be used in combination with landscaping requirements to create an ~~60-foot~~ adequate buffer between the agricultural parcel property line and habitable structures within the Plan area:

a. Public or private road right-of-ways;
b. Landscaped islands and planting areas;
c. Recreational trail corridors; and/or
d. Placing dwellings in the rear portion of lots.

Prior to the recordation of any final map along the western project boundary, the ~~an~~ agricultural buffer ~~setback~~ and any related easement shall be delineated on the final map, subject to the review and approval of the City of Soledad.

4.2-3 Prior to the issuance of any certificate of occupancy for residences adjacent or in close proximity to the agricultural buffer ~~to on-going agricultural uses~~ on along the western project boundary, the project applicant shall provide documentation demonstrating that adequate screening, landscaping, and structural improvements have been installed and/or constructed within the ~~60' agricultural~~ buffer, subject to the review and approval of the City of Soledad."

Under Air Quality, Section 4.3, Page 4.3-2, the fourth paragraph is revised as follows:

"The project site is located east of Highway 101 ~~on the eastern border~~ to the north and west of the City of Soledad, about 35 miles southeast of Monterey Bay, and about 25 miles south of Salinas. Winds from the northwest are most common in Soledad and the rest of the Salinas Valley. In general, wind flow is aligned along the valley orientation. In the winter, winds tend to flow down the Salinas Valley from the southeast toward Monterey Bay, averaging about 2.6 miles per hour (mph). In the spring, winds tend to blow from the west (on-shore) averaging about 6.5 mph. In the fall, winds flow from the southeast during the night, and switch to the west and northwest by about 10 a.m., and average about 2.4 mph.[3] Rainfall in the area averages about 13.4 inches per year, with almost all substantial precipitation occurring between November and April. The presence or absence of winter storms and rainfall affect dust generation on

[3] *California Surface Wind Climatology,* California Air Resources Board, Modeling and Meteorology Branch, June 1989.

plowed fields, wildfires, and other factors influencing local air quality. Temperatures are generally mild, with little winter frost, and summer maxima rarely exceeding 100 F."

Under Air Quality, Section 4.3, Page 4.3-16, Mitigation Measures 4.3-1, is revised as follows:

"4.3-1 Prior to start of construction, the project applicant or contractor shall submit to the City of Soledad Public Works Department a construction dust mitigation plan. This plan shall specify the methods of dust control that would be utilized, demonstrate the availability of needed equipment and personnel, use reclaimed water for dust control, and identify a responsible individual who, if needed, can authorize implementation of additional measures. The construction dust mitigation plan shall, at a minimum, include the following measures:

- Limit grading activity to a maximum of 2.5 acres daily. As more detailed construction information becomes available, emissions from grading activities could be reassessed to determine if the area of grading could be increased. Such an assessment would have to be conducted using appropriate assumptions and mitigation measures.
- Water all active construction areas at least twice daily and more often during windy periods. Active areas adjacent to existing businesses should be kept damp at all times. If necessary, during windy periods, watering is to occur on all days of the week regardless of onsite activities.
- Cover all trucks hauling <u>dirt, sand, or loose materials.</u> ~~trucks or maintain at least two feet of freeboard.~~
- <u>Haul trucks shall maintain at least 2'0" of freeboard.</u>
- <u>Plant tree windbreaks on the windward perimeter of construction project if adjacent to open land.</u>
- <u>Install wheel washers at the entrance to construction sites for all exiting trucks.</u>
- <u>Pave all roads at construction sites.</u>
- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.
- Sweep daily all paved access roads, parking areas and staging areas at construction sites.
- Sweep streets daily if visible soil material is deposited onto the adjacent roads.
- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).
- Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles.
- Limit traffic speeds on unpaved roads to 15 mph.
- Replant vegetation in disturbed areas as quickly as possible.
- Suspend excavation and grading activity when hourly-average winds exceed 15 mph and visible dust clouds cannot be contained within the site."

Under Air Quality, Section 4.3, Page 4.3-17 through 4.3-18, Mitigation Measures 4.3-2, is revised as follows:

"4.3- 2 Projects developed under the specific plan ~~should~~ <u>shall</u> be evaluated for individual construction period air quality impacts. Project-specific mitigation measures ~~would~~ <u>shall</u> be identified at that time <u>to reduce impacts to a less-than-significant level, if feasible</u>. However, the following ~~mitigation measures~~ ~~should~~ <u>shall</u> be implemented for all projects to reduce diesel particulate emissions from on-site construction equipment:

- <u>The following equipment may be used without control devices or additional mitigation measures without causing acute adverse health effects:</u>
  - <u>No engineers greater than 750HP are used; and</u>
  - <u>Engines between 501 HP and 750 HP are model years 2002 and newer; and</u>

- Engines between 251 HP and 500 HP are model years 1996 or newer; and
- Engines between 175 HP and 250 HP are model years 1985 or newer.

- The following equipment may be used without causing acute adverse health effects, if retrofitted with a catalyzed diesel particulate filter (CDPF):
  - Engines greater than 750 HP; if model year 2006 and newer; and
  - All engines less than 749HP, regardless of model year.
- If construction equipment uses B99 biodiesel, no acute adverse health effect would be expected in the following:
  - Engines between 501 HP and 750 HP, if model years 2002 or newer; and
  - Engines between 250 HP and 500 HP, if model years 1996 and newer; and
  - Any engine less than 250 HP.
- ~~All off-road construction vehicles/equipment greater than 100 horsepower that will be used on site for more than one week shall: 1) be manufactured during or after 1996, and 2) shall meet the NOx emissions standard of 6.9 grams per brake horsepower hour. Alternatively, the project shall implement a combination of the following emission reduction measures on some or all of the above described vehicles equipment, subject to approval by the MBUAPCD:~~
  - ~~Use alternative fuels (such as biodiesel blends),~~
  - ~~Require diesel particulate matter filters on equipment,~~
  - ~~Require diesel oxidation catalyst on equipment.~~
- ~~The contractor shall install temporary electrical service whenever possible to avoid the need for independently powered equipment (e.g. compressors).~~
- ~~Diesel equipment standing idle for more than five minutes shall be turned off. This would include trucks waiting to deliver or receive soil, aggregate or other bulk materials. Rotating drum concrete trucks could keep their engines running continuously as long as they were onsite and staged away from residential areas.~~
- ~~Properly tune and maintain equipment for low emissions.~~
- ~~Stage large diesel powered equipment at least 200 feet from any active land uses (e.g., residences).~~
- ~~Limit the pieces of equipment used at any one time.~~
- ~~Minimize the use of diesel powered equipment (i.e., wheeled tractor, wheeled loader, roller) by using gasoline-powered equipment.~~
- ~~Limit the daily hours of operation for heavy-duty equipment."~~

Under Air Quality, Section 4.3, Page 4.3-18, is revised as follows:

"Regional Pollutants

The Specific Plan proposes development of 1,470 single-family residences and 2,730 multi-family residences, in addition 120-room hotel, 275,000 square feet of retail, an 18-hole golf course as well as schools and parks. The project's traffic analysis forecasts that the Miravale III specific plan would generate about 35,504 daily vehicle trips. Emissions from these trips would affect regional air quality in terms of contributing to possible exceedances of ambient air quality standards for ozone. Direct and indirect emissions from each phase of the proposed specific plan were calculated using the latest available version of the URBEMIS model (i.e., URBEMIS 2007 ver. 9.2.2) distributed by Rimpo Associates through www.urbemis.com and the updated model template provided through the MBUAPCD website. Specific Plan related emissions were calculated by phase in accordance with the proposed phasing schedule, because the entire project site is too large for URBEMIS to accurately estimate emissions."

Under Air Quality, Section 4.3, Page 4.3-20, Mitigation Measure 4.3-3, is revised and new Mitigation Measures 4.3-4, 4.3-5 and 4.3-6 are added as follows:

~~4.3-3 The project shall apply the following measure to the extent appropriate for the specific land uses proposed:~~

- ~~Develop a Transportation Demand Management Program with the intent of reducing vehicle trips and vehicle miles traveled associated with build out of the specific plan. Components of this plan may include:~~
  - ~~Develop parking strategies for commercial and retail uses that reduce single occupant vehicle trips.~~
  - ~~Provide bicycle storage/parking facilities.~~
  - ~~Provide shower/locker facilities in light industries and office uses.~~
  - ~~Provide onsite or near site child care centers for large employment centers.~~
  - ~~Develop park-and-ride lots.~~
  - ~~Provide opportunities to include or increase transit service to plan area.~~
- ~~Include plans to incorporate safe and efficient modes of bicycle and pedestrian transportation. Bicycle routes and pedestrian paths should include amenities such as signs and traffic signal activation (e.g., loop activators).~~
- ~~Identify energy efficiency goals for new developments that would conserve energy beyond requirements of the State Title 24 building code.~~
- ~~Provide exterior electrical outlets on new buildings that encourage use of electrical landscape equipment.~~
- ~~Prohibit open wood burning stoves or fireplaces in new residences unless they are EPA certified wood heaters that meet EPA's particulates matter emission standard of 7.5 grams per hour.~~

4.3-3. In order to reduce greenhouse gas (GHG) and regional air pollutants and precursors (criteria air pollutants or CAPs) emissions to the extent feasible, the applicant/project proponent shall prepare and submit a GHG and CAP Reduction Plan (GCRP) concurrent with submittal of any revised Tentative Map under the Specific Plan or any Site Plan that differs from the Specific Plan as described in this EIR. The GCRP shall include a description of the measures that are proposed to be implemented by that phase of the project, including one or more of the measures contained in Appendix __ of this Final EIR. The plan shall be approved by the City prior to construction of structures and site improvements, including but not limited to, determination of substantial conformance, building permits, and grading permits. For each of the measures not included, the applicant shall describe why the measure was not included. The GCRP shall present estimated reductions in GHGs and CAPs based on available information source.

No certificate of occupancy for any phase, or portion thereof, of the project shall be granted until all of the feasible, applicable measures have been implemented by the applicant/project proponent. The proponent shall demonstrate that measures that must be implemented throughout the life of the project are included in all applicable CC&Rs, property deeds, commercial center rules and regulations, and draft tenant lease agreements.

4.3-4 Fireplaces and stoves shall be gas-fired and meet U.S. Environmental Protection Agency certification requirements. The installation or operation of a wood-burning fireplace or a wood-burning stove shall be prohibited in perpetuity on all residential properties in the Miravale III Specific Plan Development. This restrictive covenant shall be recorded on the title of all parcels in the Miravale III Specific Plan area and shall run with the land.

4.3-5 Projects developed under the Specific Plan shall facilitate transit service to the plan area by providing the necessary bus shelters and turn-outs to serve each development phase as recommended by the Monterey-Salinas Transit District, subject to approval by the City. Any tentative map or development plan and related improvement plans submitted pursuant to the adopted Specific Plan shall clearly denote the locations and design specifications for such facilities.

4.3-6 Projects developed under the Specific Plan shall adhere to the most current standards of the California Building Code concerning energy efficient construction and buildings, as may be updated and amended periodically, pertaining to reduction of air quality impacts and greenhouse gas emissions. In those instances where the City may have adopted standards that are more exacting than those of the State, the City's standards shall apply."

The measures described above and in **Appendix F-1** of this Final EIR (Appendix F-1 - Greenhouse Gas and Criteria Air Pollutant Reduction Plan Requirements) would reduce emissions of greenhouse gases and ozone precursors; however, the effectiveness and adequacy of these measures for this proposed project are unknown, precluding definitive quantification of emission reductions. Therefore, the significance of the impact related to ozone precursors and GHG emissions with implementation of the above mitigation is considered to be significant and unavoidable.

Under Biological Resources, Section 4.4, Page 4.4-1, after "Introduction," the following sections are added:

"**Methods**

Special-status Species

The project site was surveyed for special-status plant and wildlife species, and appropriate habitat for these species. Special-status species are those plants and animals that have been formally Listed or Proposed as Endangered or Threatened, or are Candidates for such listing under the federal Endangered Species Act (ESA) or the California Endangered Species Act (CESA). Listed and Proposed species are afforded protection under these acts. Plants on the California Native Plant Society (CNPS) lists 1A, 1B, and 2 are also treated as special-status species, as well as CDFG species of special concern. Species of special concern are those that face extirpation in California if current trends continue. Although they have no special legal status, these species (and federal species of concern) are given management consideration whenever possible. Impacts to these species may be considered significant according to the California Environmental Quality Act (CEQA).

In order to determine which special-status species are known or have the potential to occur in the proposed Miravale III project area, California Natural Diversity Data Base (CNDDB) occurrence records for the Soledad quad and all surrounding quads (9 quads total) were reviewed. In addition, the United States Fish and Wildlife Service (USFWS) list of federally protected species known to occur in the County was reviewed. DD&A also contacts other knowledgeable biologists familiar with the region for any additional occurrence information that may not appear in the CNDDB. From these sources, combined with personal knowledge and experience, a list of special-status plant and wildlife species known, or with the potential to occur, in the vicinity of the project site was compiled. Appendix F lists these species along with their legal status, habitat requirements, and a brief statement of the likelihood to occur.

Sensitive Habitats

The project site was surveyed for sensitive habitats. Sensitive habitats include riparian corridors, wetlands, habitats for legally protected species and California Department of Fish and Game (CDFG)

species of special concern, areas of high biological diversity, areas providing important wildlife habitat, and unusual or regionally restricted habitat types. Habitat types considered sensitive include those protected on the CNDDB's working list of "high priority" habitats (i.e. those habitats that are rare or endangered within the borders of California) (Holland 1986; CDFG 1997) and those that are Critical Habitat in accordance with the Endangered Species Act.

Botany

Also reviewed were habitat and distribution information in local and state floras (Howitt and Howell 1964, 1973; Munz and Keck 1973; Hickman 1993; Matthews 1997). Current status information for plant species protected as Threatened or Endangered under the federal ESA and for federal Proposed and Candidate species was obtained from USFWS (2007). The CNPS Inventory (Tibor 2002) was reviewed to identify species on CNPS Lists 1 and 2.

The plants present within the project site were surveyed on July 28, 2006. The entire project site was surveyed for botanical resources following the applicable guidelines outlined in *Guidelines for Conducting and Reporting Botanical Inventories for Federally listed, Proposed and Candidate Plants* prepared by the USFWS (January 2000), *Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities prepared by CDFG* (revised May 8, 2000), and *CNPS Botanical Survey Guidelines* prepared by the California Native Plant Society (revised June 2, 2001). All plant species were identified to the intraspecific taxon necessary to exclude them as being special-status using keys and descriptions in Hickman (1993) and Matthews (1997). Scientific nomenclature for plants in this report follows Hickman (1993); common names follow Matthews (1997). A list of plants observed within the project area is included in Appendix G of the Biological Assessment (Appendix T-3 of the Draft EIR).

Habitats within the project site were characterized during field surveying. Data was recorded on physiognomy of the vegetation and on dominant and characteristic species, as well as basic ecological factors, including topography, slope, aspect, soil type, hydrologic regime, and evident disturbance. The generalized vegetation classification schemes for California of Holland (1986) and Sawyer and Keeler-Wolf (1995) were consulted in classifying the vegetation of the project site. The final classification and characterization of the vegetation of the project site is based on field observations.

Wildlife

A focused review of literature and data sources was conducted in order to determine which special-status wildlife species have potential to occur at the proposed project site, and field surveys were conducted on several occasions. Current agency status information was obtained from USFWS (2007) for species protected as Threatened or Endangered, as well as Proposed and Candidate species for listing, under the federal ESA. Agency status information was obtained from CDFG (2007) for species protected as threatened or endangered by the state of California under the CESA, or protected as "species of special concern" by CDFG. In addition, the following literature and data sources are standard reference used in document preparation: CDFG reports on special-status wildlife (Remsen 1978; Williams 1986; Jennings and Hayes 1994; Thelander 1994); California Wildlife Habitat Relationships (CWHR) species-habitat models (Zeiner et. al. 1988, 1990a, 1990b); as well as general wildlife references (Stebbins 1985 and 2003, Peterson, 1990, Sibley 2002, etc.). A list of all special-status species reported to occur in the vicinity of the project site was compiled by review of the CNDDB (within the Soledad quad or any surrounding quad) and USFWS species-list, is presented in Appendix F. A list of all wildlife species observed within project boundaries is included as Appendix H of Appendix T-3.

Surveying Personnel

DD&A was contracted to assess the potential presence of special-status plants, animals, and/or habitats within the proposed Miravale III residential development in the City of Soledad, CA. Prior to conducting the site assessment, DD&A reviewed all available site plans and created a GIS figure presenting all California Natural Diversity Database (CNDDB) reported occurrences of special-status species within 10 kilometers of the project site.

David Keegan, DD&A Senior Wildlife Biologist, conducted an initial site visit on July, 19, 2006, with the project engineer (Jim Wurtz, Bestor Engineers), and was onsite between approximately 1000-1300 hours (note: other DD&A staff present included Brett Becker, Tyler Potter, and Elizabeth Guzman). David Keegan and Josh Harwayne, DD&A Senior Environmental Scientists, conducted a site review on July 28, 2006, and were onsite between approximately 1000-1500 hours; a preliminary wetland assessment was completed. As the proposed development site is relatively large (920-acres), the site was reviewed via meandering transects. All data were recorded on site plans and/or aerials and in "Rite-in-the-rain" notebooks. Site photographs were recorded using a digital camera.

DD&A contracted Don Roberson (noted Monterey Bay Ornithologist) to assess the "reservoir" portion of the Miravale III site for the potential presence of nesting bank swallows *(Riparia riparia)*. David Keegan and Don Roberson visited the site on August 10, 2006, for approximately 2.5 hours.

DD&A contracted Mark Allaback (Wildlife Biologist) and David Laabs (Wildlife Biologist) of Biosearch to prepare studies on a number of species, including: presence/absence of the Salinas pocket mouse *(Perognathus inornatus psammolphilus*) via a small mammal trapping study (Appendix B of Appendix T-3); preparation of a San Joaquin Kit Fox *(Vulpes macrotis mutica*) Early Evaluation Report for USFWS review (Appendix C of Appendix T-3); California tiger salamander Habitat Assessment Report (Appendix D of Appendix T-3); and, Protocol-level Western burrowing owl *(Athene cunicularia*) surveys at the site (Appendix F of Appendix T-3). Small mammal trapping and San Joaquin Kit fox habitat evaluation occurred August 28-September 1, 2006. David Keegan, Mark Allaback, and David Laabs were onsite together on August 28, 2006 from 1800-2100 hours to design and initiate the study. David Keegan baited the traps on August 29 and 30th, 2006, requiring approximately 3 hours just before sunset each evening (1700-2000 hours per visit). David Keegan and David Laabs checked and closed the traps during 0700-1000 hours on August 30th and 31th, 2006. David Laabs and Mark Allaback checked and closed the traps during 0700-1000 hours on September 1, 2006, then discontinued the study and removed all associated materials. See Appendix B for additional information. The site visits conducted in the course of the small mammal trapping were sufficient to prepare the SJKF Early Evaluation Report for USFWS (see Appendix C of Appendix T-3).

David Laabs conducted an additional site visit on October 17, 2006, to assess all onsite aquatic basins for the potential presence of California tiger salamander (*Ambystoma californiense*, CTS), and was onsite approximately 3 hours (Appendix C of Appendix T-3). Based on the USFWS review of the habitat assessment, protocol-level surveys for this species were initiated by David Keegan on May 8, 2007 (initial round of aquatic sampling at each basin); DD&A biologists were onsite for approximately 5 hours. A second round of aquatic sampling occurred on May 24, 2007; DD&A biologists were onsite for approximately 5 hours. The third round occurred on June 12, 2007; DD&A biologists were onsite for approximately 5 hours. DD&A biologists completed a fourth sampling event at the onsite reservoir on June 26, 2007 to capture CTS larvae and/or paedomorphs and to collect tissue from each individual for genetic analysis at the Shaffer Lab (U.C. Davis). Mark Allaback was also present on June 12, 2007.

The first non-breeding season burrowing owl survey was conducted on January 18, 2007; DD&A and Biosearch biologists were onsite for approximately 4 hours. The second survey was conducted January 31, 2007; DD&A and Biosearch biologists were onsite for approximately 4 hours. The first breeding season survey (third survey total) was conducted on June 26, 2007; biologists were onsite for approximately 4 hours. The second and final breeding season survey was completed on July 11, 2007; biologists were onsite for approximately 4 hours. DD&A and Biosearch biologists were onsite for

approximately 4 hours for the final survey, with an additional 7 hours dedicated to mapping ground squirrel burrow clusters present sporadically throughout the site. The results of these surveys are presented in Appendix F of Appendix T-3."

Biological Resources, Section 4.4, Page 4.4-2, under "State Laws and Regulations," under California Endangered Species Act, the following text is added:

"Sections 2081(b) and (c) of the California Endangered Species Act allow the Department to issue an incidental take permit for a State listed threatened and endangered species only if specific criteria are met. These criteria are reiterated in Title 14 CCR, Sections 783.4(a) and (b), and are as follows:

1. The authorized take is incidental to an otherwise lawful activity;
2. The impacts of the authorized take are minimized and fully mitigated;
3. The measures required to minimize and fully mitigate the impacts of the authorized take: a. are roughly proportional in extent to the impact of the taking on the species, b. maintain the applicant's objectives to the greatest extent possible, and c. are capable of successful implementation;
4. Adequate funding is provided to implement the required minimization and mitigation measures and to monitor compliance with and the effectiveness of the measures; and
5. Issuance of the permit will not jeopardize the continued existence of a State-listed species.

The terms and conditions of the permit will be determined by the CDFG and must ensure that the issuance criteria in items 1 through 5 above are met. Measures to minimize the take of species covered by the permit and to mitigate the impacts caused by the take are outlined in a mitigation plan and submitted as part of the permit.

California Environmental Quality Act (CEQA) and CESA Authority: The CDFG has commented that the Department is a Trustee Agency with the responsibility under CEQA for commenting on projects that could impact fish and wildlife resources, including plants. Pursuant to Fish and Game Code Section 1802, the Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. As a Trustee Agency for fish and wildlife resources, the Department is responsible for providing, as available, biological expertise to review and comment on environmental documents and impacts arising from project activities, as those terms are used under CEQA. The Department is a Responsible Agency when a subsequent permit or other type of discretionary approval is required from the Department, such as an Incidental Take Permit, pursuant to CESA, or a Lake or Streambed Alteration Agreement, issued under Fish and Game Code Section 1600 et seq."

The CDFG's issuance of an Incidental Take Permit is also considered a "project" subject to CEQA (CEQA Guidelines Section 15378). The CDFG typically relies on the Lead Agency's CEQA compliance to make findings, pursuant to CEQA Guidelines Section 15091. A Statement of Overriding Considerations for significant State-listed species impacts will not legally support State Incidental Take Permit issuance."

Biological Resources, Section 4.4, Page 4.4-3, under "California Fish and Game Code," the following text is revised:

"CDFG has jurisdiction over the bed and bank of natural drainages according to provisions of Section 1601 and 1603 of the California Fish and Game Code. Activities that would disturb these drainages are regulated by CDFG via a Lake or Streambed Alteration Agreement (LSAA). Such an agreement typically stipulates certain measures that will protect the habitat values of the hydrologic feature being impacted.

The Fish and Game Code (Section 1602) requires an entity to notify the CDFG of any proposed activity that may substantially modify a river, stream, or lake. Notification is required by any person, business, state or local government agency, or public utility that proposes an activity that will:

- substantially divert or obstruct the natural flow of any river, stream or lake;
- substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake; or
- deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

The notification requirement applies to any work undertaken in or near a river, stream, or lake that flows at least intermittently through a bed or channel. This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water. After the CDFG receives a complete notification package, it will determine whether you will need a LSAA for your activity. An Agreement will be required if the activity could substantially adversely affect an existing fish and wildlife resource. The Agreement includes reasonable conditions necessary to protect those resources and must comply with the California Environmental Quality Act (CEQA). The entity may proceed with the activity in accordance with the final Agreement.

The CDFG's issuance of a LSAA is also considered a "project" subject to CEQA (CEQA Guidelines Section 15378). The CDFG typically relies on the Lead Agency's CEQA compliance to make findings, pursuant to CEQA Guidelines Section 15091. A Statement of Overriding Considerations for significant State-listed species impacts will not legally support the issuance of a LSAA."

Under Biological Resources, Section 4.4, Page 4.4-6 under "Sensitive Habitats," the second paragraph is revised as follows:

"No wetland delineations were undertaken at the Miravale III project site, but a wetland assessment was completed that documented the presence of fringe wetlands. A small vegetated fringe wetland exists adjacent to the onsite reservoir. In addition, fringe wetlands are associated with the agricultural basins to the east of San Vicente Road. A total of approximately 0.17 acres of fringe wetlands of marginal habitat value were documented on site. Please note that these types of fringe wetlands are not typically USACOE jurisdictional given current regulations regarding Section 404 of the Clean Water Act. Moreover, existing on-site wetlands are not hydrologically or geographically linked with other bodies of water or jurisdictional wetlands and are therefore not considered jurisdictional for the purposes of this analysis. Although only the USACOE can determine whether on-site wetlands are considered jurisdictional, the onsite fringe wetlands are not considered to be jurisdictional for the purposes of this analysis for the reason provided above. Additionally, this project may require a LSAA for the filling of the on-site reservoir. Impacts to these areas would also be regulated by ESA and CESA if any federal or state listed or special-status wildlife species utilize these areas as breeding habitat."

Under Biological Resources, Section 4.4, Page 4.4-10 under "Special-Status Plant Species," the text is revised as follows:

"Special-status Plant Species

The CNDDB reports an occurrence of robust spineflower (*Chorizanthe robusta* var. *robusta*) approximately 2 km south of the project site. In addition, the CNDDB reports occurrences of Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*), Indian valley bush mallow (*Malacothamnus aboriginum*), and Gabilan Mountains manzanita (*Arctostaphylos gabilanensis*) within 5 miles of the project site. The CNDDB also reports that Monterey spineflower (*Chorizanthe pungens* var. *pungens*) critical habitat is present within 2 km of the project site. Jolon's clarkia (*Clarkia jolonensis*) has been reported to occur within 1.25 miles of the project site. However, appropriate habitat does not exist on site to support any of these species (please refer to Appendix F, Table of Special-status Species Potentially Present in the

Project Vicinity). Lemmon's jewelflower (*Caulanthus coulteri* var. l*emmonii*) is known to occur approximately 10 miles from the project site, and marginally appropriate habitat occurs in the mixed grassland and rocky outcrop habitats. ~~Jolon's clarkia (*Clarkia jolonensis*) has been reported to occur within 1.25 miles of the project site.~~ The CNDDB does not report the presence of any special-status plant species within or immediately adjacent to the proposed project boundaries and none were identified by DD&A biologists during the botanical survey on July 28, 2006 ~~any of the site visits~~. Therefore, ~~T~~the only plant species with the potential to occur within the project boundaries, Lemmon's jewelflower, is discussed below. Please note that no other special-status plant species are anticipated within project boundaries for the species-specific reasons provided in Appendix F of this EIR."

Under Biological Resources, Section 4.4, Page 4.4-11, Paragraph 3, fifth line, under heading "San Joaquin kit fox," is revised as follows to correct the reporting error in the Preliminary Biological Assessment:

"The CNDDB reports several occurrences of San Joaquin kit fox approximately 10 km east of the project site (Figure 3). In addition, the CNDDB reports the presence of SJKF critical habitat within 10 km of the Miravale III site. DD&A and BioSearch biologists mapped the presence of California ground squirrel burrow "clusters" throughout the mixed grassland potions of the site and in portions of the fallow and active agricultural portions of the site; many of the burrows observed were of appropriate size to support this species. ~~In addition, one active "natal den" was mapped and recorded by the Biosearch biologists.~~

No natal dens were found or recorded by the Biosearch biologists as was originally identified in the Draft EIR. This Final EIR corrects and clarifies that the biologists revised their report, included in Appendix T-3, Under Appendix C, to take out this error and it was inaccurately transferred to the Draft EIR."

Under Biological Resources, Section 4.4, Page 4.4-13, is revised as follows:

"California tiger salamander

California tiger salamander is a federally Threatened and is also a state Threatened species recently list under the CESA on March 3, 2010. ~~designated California state Species of Special Concern~~. Critical Habitat for CTS (70 FR 49379-49458) went into effect on September 22, 2005. CTS is a large, stocky salamander that inhabits grasslands and oak savanna habitats in the valleys and low hills of central and coastal California. Adults spend most of their lives underground, typically in burrows of small mammals. During winter rains between November and February, adults emerge from underground retreats to breed. Adults have been found more than 2 km (1.24 miles) from breeding sites. Eggs are laid singly or in clumps on both submerged and emergent vegetation and on submerged debris in shallow water.

The CNDDB reports several occurrences of this species approximately 4.5 km north of the project site. In addition, the CNDDB reports the presence of CTS critical habitat within 4.5 km of the project site. Upland grassland habitats surrounding the pond represent appropriate estivation habitat for CTS. Tiger salamander larvae and paedomorphs were routinely detected at the onsite reservoir in the course of protocol-level surveys (aquatic sampling only) for this species (see below).

Brad Shaffer of U.C. Davis reports that multiple introductions ~~on~~ of non-native tiger salamanders occurred in the nearby city of Gonzales, and that this portion of the Salinas Valley is a known "epicenter" of non-native genes in Monterey County (David Keegan, pers. comm.). The Shaffer Lab conducted genetic testing on 23 larval CTS tissue samples collected at the reservoir and reports that these animals range between highly hybridized to completely non-native (note: only 22 samples were successfully analyzed). The "nativeness" of these animals is summarized by the Shaffer Lab Report (Appendix E of the June 2008 Preliminary BA) via a Hybrid Index Score (HIS). HIS can range from 0.00 (pure native) to 1.00 (pure non-native). For the samples collected from the onsite reservoir, HIS values ranged from

0.8889-1.00 (i.e., 89-100% non-native). No genotyped individual can be described as "pure native." As such, coordination with USFWS regarding ESA jurisdiction over onsite hybrid/non-native tiger salamanders was initiated by DD&A on November 6, 2007. USFWS Ventura subsequently determined that tiger salamanders present at Miravale Pond 1 (onsite reservoir) are not subject to regulation under ESA and are therefore not within the regulatory jurisdiction of USFWS regulation (USFWS concurrence letter issued February 26, 2008 and presented in Appendix I of the June 2008 Preliminary BA).

While the USFWS declines Federal Endangered Species Act jurisdiction over the non-native tiger salamander population present at the Miravale site, the CDFG has not yet determined the jurisdiction of the California Endangered Species Act over hybridized and non-native tiger salamanders. CDFG may determine that authorization under the CESA is required for "take" of onsite tiger salamanders if CDFG decides to exert jurisdiction over the tiger salamanders. The CDFG has concurred with the USFWS determination that a threat to California tiger salamander is hybridization with non-native salamanders as described in a DFG report, *A Status Review of the California Tiger Salamander* (January 11, 2010), which recommends the listing of the species under the CESA. The CDFG report recommends as a management measure that the DFG "in cooperation with the USFWS, determine what level of CTS x NNTS [California tiger salamander and non-native tiger salamander] hybridization warrants management actions such as eradication or control." Also, as discussed in the CDFG report, Fitzpatrick and Shaffer (2007) recommend that slightly introgressed populations should not lose their protected status. However, as summarized in the genetic study conducted for this project by the Shaffer Lab, the tiger salamander population on-site is highly introgressed, and the USFWS determined that this population is not afforded protection under the federal ESA. Coordination with the CDFG will occur to determine whether the CDFG will take jurisdiction over the on-site tiger salamander population."

Under Biological Resources, Section 4.4, Page 4.4-17, the first paragraph following "Wetlands/Sensitive Habitats" is revised as follows:

"Wetlands/Sensitive Habitats

According to the Preliminary BA prepared by DD&A, development of the proposed project has the potential to directly impact sensitive habitat types, including 0.17 acres of wetlands. According to the US Army Corps of Engineer's Wetland Delineation Manual (1987), wetlands are defined as "[t]hose areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." As detailed in the Preliminary BA and discussed above, a wetlands assessment was conducted to determine whether on-site aquatic features (i.e. agricultural ponds) contained characteristics consistent with wetlands. The wetlands identified on-site exist as a thin band of emergent vegetation on the fringe of four small man made reservoirs/ponds used in conjunction with routine agricultural operations. It is assumed that this resource satisfies the soils, vegetation and hydrologic criteria set forth by the U.S. Amy Corps of Engineers (USACOE) for wetlands. However, the USACOE does not regulate wetlands that are hydrologically isolated and geographically distinct from other jurisdictional resources in the vicinity. The individual aquatic features are not contiguous with other jurisdictional wetlands and/or waters of the U.S. and do not have any hydrologic connectivity or abut any permanent water body. As a result, the fringe wetlands identified on site ~~are~~ have been determined as not falling under the Jurisdiction of the USACOE. Further, impacts to these wetlands would not be in conflict with federal regulation. The USACOE should be contacted and a request for jurisdictional determination should be made to verify this conclusion. Per comments received by the CDFG, this project will likely require a LSAA. The project is required to comply with LSAA regulations and will notify the CDFG prior to filling the reservoir to determine whether a LSAA is required. If a LSAA is required, the project will be subject to the conditions of the permit."

Under Biological Resources, Section 4.4, Page 4.4-20, Mitigation Measures 4.4-1 through 4.4-6 are revised as follows:

"4.4-1 A Forest Management Plan shall be prepared for the project due to proposed tree removals. The Forest Management Plan shall include a map that indicates all of the trees within the project site and denotes which trees are to be removed. The map shall also include notes which clearly state protection procedures for trees that are to be preserved. In addition, the Forest Management Plan shall include, but is not limited to, a description of each tree by species and its condition. The City approved Forest Management Plan (and associated replanting plan) shall be incorporated as a condition of project approval to satisfy General Plan Conditions C/OS 17-19. Prior to the issuance of any grading and/or building permit, the project applicant shall submit a Forest Management Plan, subject to the review and approval of the City of Soledad.

4.4-2 Prior to the onset of construction, ~~T~~trees and vegetation not planned for removal shall be protected during construction to the maximum extent feasible. This shall include the use of exclusionary fencing of herbaceous and shrubby vegetation, such as hay bales and protective wood barriers for trees. Only certified weed-free straw shall be used to avoid the introduction of non-native, invasive species. A qualified biological monitor shall verify that adequate protective measures are in place prior to construction and remain intact throughout the construction phase.

4.4-3 Following construction, the disturbed areas that are proposed as parks and ~~native~~ landscaping areas shall be restored to pre-project contours ~~to the maximum extent feasible~~ and revegetated using locally-occurring native species and native erosion control seed mix to the maximum extent feasible. Landscape plans for all such areas adjoining natural open space, including landscaped strips within right-of-ways, shall be reviewed by a qualified biologist to ensure that only native and non-invasive species are included in the planting palette and shall include a supplemental note and/or report by said biologist documenting compliance with this requirement. Landscape plans for other disturbed areas or for designated parks shall utilize native species to the extent feasible and avoid the use of all invasive species; such plans shall include a note from the licensed professional who prepared the plan(s) or from a qualified biologist documenting compliance with this requirement. Prior to the issuance of any grading and/or building permit, the project applicant shall submit landscape plans prepared by a licensed landscape architect for review and approval by the City of Soledad.

4.4-4 Prior to the onset of construction, ~~P~~protective fencing shall be placed so as to keep construction vehicles and personnel from impacting vegetation adjacent to the project site outside of work limits. A qualified biological monitor shall verify protection is in place prior to construction and remains intact throughout the construction phase.

4.4-5 Grading, excavating, and other activities that involve substantial soil disturbance shall be planned and carried out in consultation with a qualified hydrologist, engineer, or erosion control specialist, and shall utilize standard erosion control techniques to minimize erosion and sedimentation to native vegetation. Only natural-fiber, biodegradable meshes shall be used in erosion control mats, blankets, and straw or fiber wattles. "Photodegradable" and other plastic mesh products will not be used as these materials are known to persist in the environment, ensnaring and killing a variety of terrestrial wildlife species. A qualified biological monitor shall verify that erosion control measures are implemented and materials used are consistent with this measure and remain intact throughout the construction phase.

4.4-6 No construction equipment shall be serviced or fueled outside of designated staging areas. A qualified biological monitor shall verify that this measure is being implemented throughout the construction phase."

Under Biological Resources, Section 4.4, Page 4.4-19, Mitigation Measure 4.4-7 is revised as follows:

"4.4-7 A qualified botanist shall be retained to conduct preconstruction surveys for Lemmon's jewelflower during the typical flowering season of this species (March-May), to determine the presence/absence of this species. If no Lemmon's jewelflower is present, no additional mitigation is required. If Lemmon's jewelflower is present, a qualified biologist shall prepare a mitigation plan to be approved by CDFG prior to initiation of construction. The mitigation plan shall include a description of the special-status plant population(s), map depicting the location(s), and size of the population(s). If feasible, disturbance of the population(s) of Lemmon's jewelflower shall be avoided and its habitat protected utilizing methods developed in coordination with the CNPS and CDFG. Avoidance shall be confirmed by the City prior to the time of tentative map approval for this phase of the project. If impacts to the Lemmon's jewelflower population(s) cannot be avoided, mitigation shall include preservation on- or off-site at a minimum 1:1 ratio (one plant preserved for each plant impacted), or restoration on- or off-site at a minimum 3:1 ratio (three plants planted for each plant impacted). The CNPS and CDFG shall be consulted to evaluate the suitability for transplanting the impacted species to suitable habitat within the identified and established preserve/restoration area. These details shall be described and included in the mitigation plan. Restoration and preservation strategies shall be developed in coordination with the CNPS and CDFG. The City of Soledad Planning Department shall be provided verification of CDFG concurrence and satisfaction prior to issuance of grading permits."

Under Biological Resources, Section 4.4, Page 4.4-20, is revised as follows:

"**Impact** Suitable foraging/dispersal habitat for San Joaquin kit fox is present throughout project boundaries, with potential denning habitat present in the annual grassland, rocky outcrop, and fallow agricultural portions of the site. The vast majority of the habitats present within project boundaries would be directly impacted by the proposed project. The project may result in direct and indirect "take" of individual kit fox (i.e., entombment, increased traffic, mortality/predation due to exposure, loss of habitat, reduced habitat connectivity, attraction of predators, placement of structures and roads, etc.) ~~(grubbing and grading, construction phase impacts, permanent placement of structures and impermeable surfaces, etc.).~~ Impacts proposed in the grassland portions of the site will likely result in kit fox abandonment of the property due to ongoing disturbance, if present at the site. Based on USFWS Ventura Office review of the early evaluation report prepared by Biosearch, protocol-level SJKF northern-range protocol-level surveys were recommended (pers. comm. Roger Root, USFWS). The USFWS and CDFG have stated that a determination of SJKF absence from the proposed project site and a finding of "no take" of the species could only be supported by completing the protocol for this species and having a negative finding. Since protocol-level surveys for this species have not yet been conducted, the Draft EIR assumes kit fox presence within the project site. ~~For this reason,~~ Therefore, the project is assumed to have a significant and unavoidable adverse affect on San Joaquin kit fox (i.e. direct mortality, loss of habitat, loss of dens, etc.). *This impact may be reduced by implementation of the following mitigation measures; however, the impact will not be reduced to a less-than-significant level without completion of the required protocol surveys in coordination with the USFWS and CDFG ~~consultation~~ (Federal Endangered Species Act and California Endangered Species Act, respectively) and implementation of appropriate avoidance measures or redesign, per the CDFG letter of comment on the Draft EIR.*

Please note that the following measures are consistent with direction from USFWS on other projects, ~~but greater or lesser~~ however, additional measures ~~may~~ will likely be required by USFWS and CDFG ~~the regulatory agencies~~ (~~possibly~~ including completion of protocol-level surveys to determine utilization of the site and/or project redesign to avoid development on upper grassland habitat that could cause potential take)."

Under Biological Resources, Section 4.4, Page 4.4-19, Revise Mitigation Measures 4.4-9 and 4.4-10 and add additional mitigation as follows:

"**Mitigation**

4.4-9 The applicants shall enter into consultation with USFWS and CDFG and shall provide evidence of their compliance with applicable requirements of the federal Endangered Species Act and California Endangered Species Act to the City prior to the issuance of building permits.

4.4-10 Pre-construction surveys for kit fox dens shall be required for all development phases of the future project. The preconstruction surveys shall be conducted per Standardized Recommendations for the Protection of the San Joaquin Kt Fox Prior to or During Ground Disturbance (USFWS 1999b), as updated. Potential dens (including man-made structures) and known dens shall be protected by minimum buffers of 50 feet and 100 feet, respectively. If an occupied or unoccupied natal den is detected, no construction shall occur for the Phase until the USFWS and CDFG have been contacted and authorization to proceed has been obtained by the applicant. Pre-construction surveys shall be conducted by a qualified biologist no less than 14 days and no more than 30 days prior to the start of any ground disturbing activities to locate kit fox den sites.

In addition to pre-construction surveys, a qualified biologist, meeting the required qualifications described in the *U.S. Fish and Wildlife Service Standardized Recommendations for the Protection of the San Joaquin Kit Fox Prior to Ground Disturbance*, June 1999 (USFWS Recommendations for SJKF), shall be on-site to monitor construction activities for the San Joaquin kit fox. In the event that an active kit fox den is found, then the standard mitigation actions outlined in the USFWS Recommendations for SJKF, are recommended to avoid possible take of kit fox during future construction activities. These actions are general in nature; therefore, site specific strategies for the project site shall be based upon consultation with USFWS and CDFG, as stated above in Mitigation Measure #4.4-**9**. To reduce the risk of impacts during construction, the applicant shall, at a minimum, implement the following measures, unless directed otherwise through consultation with the USFWS and CDFG:

a) Restrict project-related vehicle speed to 20 mph on project roads.
b) Cover all excavated, steep-walled holes or construction trenches more than 2 feet deep at the close of each working day by plywood or similar materials or provide such holes or trenches with one or more escape ramps constructed of earth fill or wooden planks, inspect such holes or trenches for trapped San Joaquin kit fox prior to filling.
c) Inspect all construction pipes, culverts, or similar structures with a diameter of 4 inches or greater that are stored at a construction site for one or more overnight periods for kit foxes before the pipe is subsequently buried, capped, or otherwise used or moved in any way.
d) Contain all food-related trash items in closed containers and remove food related trash at least once a week from the project site.
e) No firearms shall be allowed on the project site.
f) No pets shall be permitted on the project site.
g) Use of rodenticides and herbicides on the project site shall be restricted to the use of zinc phosphide, in cases where it is necessary to protect public health and safety.
h) A representative shall be appointed by the project proponent who will be the contact source for any employee or contractor who might inadvertently kill or injure a kit fox or who finds a dead, injured or entrapped individual. The representative will be identified during the employee education program. The representative's name and telephone number shall be provided to the Service.

i) An employee education program shall be conducted and shall consist of a brief presentation by persons knowledgeable in kit fox biology and legislative protection to explain endangered species concerns to contractors, their employees, and agency personnel involved in the project. The program shall include the following: a description of the San Joaquin kit fox and its habitat needs; a report of the occurrence of kit fox in the project area; an explanation of the status of the species and its protection under the Endangered Species Act; and a list of measures being taken to reduce impacts to the species during project construction and implementation. A fact sheet conveying this information shall be prepared for distribution to the above-mentioned people and anyone else who may enter the project site.

j) In the case of trapped animals, escape ramps or structures shall be installed immediately to allow the animal(s) to escape, or the Service shall be contacted for advice.

k) To the extent feasible, nighttime construction shall be avoided.

l) Include kit fox mitigation measures on project plans

If active kit fox den sites are found and/or kit fox individuals are observed during the survey, the applicant will be required to comply with all mitigation actions required by USFWS and CDFG and the City shall monitor implementation of those actions. Examples of mitigation actions that may be required by the regulatory agencies may include, but are not limited to:

- To the extent feasible, lot placement shall be situated to create wildlife corridors in protected open space to allow for kit fox and other wildlife movement through the site.

- Fencing shall surround the site to restrict kit fox movement into the development area; types of fencing (e.g. exclusionary or kit fox friendly) shall depend on the density of the development area.

- Speed bumps, rolls, or reduced speed limits shall be employed along project roads in or near open space areas to reduced likelihood of kit fox mortality by vehicle strikes.

- Street lighting shall be situated as to not spill into adjacent open space areas. The height and intensity of street lighting shall be designed to minimize indirect impacts to open space. Outdoor lighting for residential uses adjacent to open space and large lots shall also be restricted to CC&Rs to be low wattage (150 watts or less) and directed toward the residences to reduce effects on kit fox nocturnal activities."

Under Biological Resources, Section 4.4, Page 4.4-21, Mitigation Measures 4.4-11 through 4.4-13 are revised as follows:

"4.4-11 The applicant shall retain a qualified biologist to conduct focused preconstruction surveys for potential American badger dens. These surveys shall be conducted no sooner than 2 weeks prior to the start of construction. Surveys for badger dens may be conducted at the same time as burrowing owl surveys. The results of the survey shall be submitted to the City prior to issuance of grading permit or initiation of grading for that phase of development on the site. ~~Please refer to the mitigation measures in the Preliminary BA (June 2008) for measures that may be implemented B~~based on the results of these surveys, one or more of the following additional measures shall be implemented:

- If the qualified biologist determines that potential dens are inactive, the biologist shall excavate these dens by hand with a shovel to prevent badgers from re-using them during construction. If hand excavation is not practical, careful excavation with an excavator may occur provided that the biologist is onsite to monitor these activities.

- If the qualified biologist determines the presence of active dens, the location of these dens shall be documented and reported to CDFG. Avoidance of active dens, particularly natal dens, is the preferred approach; Impacts to active badger dens shall be avoided by establishing a 100-meter exclusion zones around all active badger dens, within which construction related activities shall be prohibited until denning is complete and/or the den is abandoned. A qualified biologist shall monitor each den once per week in order to track the status and inform the project sponsor of when a den area has been abandoned.

- If avoidance of an active badger den is not feasible, the biologist shall coordinate with CDFG on the appropriate way to evict/exclude badgers from their dens. Please note that special consideration of natal dens is required given the low likelihood that excluded young would survive; a CDFG depredation permit would be required to disrupt a natal den. For non-natal dens, CDFG has permitted badgers to be gradually excluded from their dens by placement of soil, sticks, and debris at den entrances, incrementally increasing the degree of blockage over a period of three to five days (please note that blockage cannot trap/entomb badgers). After the monitoring biologist determines that badgers have stopped using active dens within the project boundary, the dens shall be hand-excavated with a shovel to prevent re-use during construction. If hand excavation is not practical, careful excavation with an excavator may occur provided that the biologist is onsite to monitor these activities. Please note that eviction of onsite badgers will reduce construction phase impacts to this species, but given the large home ranges and territoriality of this species, emigration to alternative habitats may not be feasible without inter/intra specific competition (energetic stress possibly resulting in mortality). CDFG may require that appropriate onsite or adjacent habitat be conserved to allow relocation of excluded animals within their home range.

4.4-12 A qualified bat specialist shall conduct site surveys to characterize bat utilization of the site and species composition present (techniques utilized to be determined by the biologist). The results of the survey shall be submitted to the City prior to issuance of grading permit or initiation of grading for that phase of development on the site. ~~Please refer to the mitigation measures in the Preliminary BA (June 2008) for measures that may be implemented based on the results of these surveys.~~ Based on the results of these surveys, one or more of the following additional measures shall be implemented:

- If it is determined that bats are not present at the site, no additional mitigation is required.

- If it is determined that bats are utilizing the site and would likely be impacted by the proposed project, preconstruction surveys shall be conducted no more than 30 days prior to modification, demolition, or removal of onsite buildings and/or any other occupied habitat. If no bat or bat sign are observed in the course of preconstruction surveys, then demolition/removal of buildings and/or construction initiation may proceed. If bat and/or bat sign are observed during the preconstruction surveys, the biologists shall determine if disturbance will jeopardize a maternity roost, or another type of roost (foraging, day, night).

- If a single bat and/or only adult bats are roosting, demolition or removal of the structure can proceed after the bats have been safely excluded from the roost. Exclusion techniques shall be determined by the biologist and depend on the type utilization; the biologist shall prepare a mitigation plan for provision of alternative habitat to be approved by CDFG and the City.

- If an active maternity roost is detected, work in the vicinity of the roost (and/or demolition of the structure) shall be postponed until the qualified biologist monitoring the roost(s)

determines that the young have fledged and are no longer dependent on the roost. The monitor shall ensure that all bats have left the building and or area of disturbance prior to initiation of construction and/or demolition activities. *If disruption of a maternity roost cannot be avoided, a depredation permit would be required.*

4.4-13 The applicant shall contract a qualified biologist to coordinate with CDFG and prepare a mitigation and monitoring plan for the Salinas pocket mouse. The mitigation and monitoring plan shall include a description of the population and locations of known and potential habitat within the project site, mitigation to avoid and reduce impacts to the species, monitoring actions, success criteria, and adaptive management measures if success criteria are not met. Verification of CDFG concurrence/approval shall be submitted to the City of Soledad prior to issuance of a grading permit for that phase of development of the site ~~initial grubbing and grading of the site~~."

Under Biological Resources, Section 4.4, Page 4.4-24, the text is revised as follows:

"**Impact** **Although extensive aquatic surveys have been conducted, ~~T~~the presence of California red-legged frog and/or Western spadefoot has not been determined at this time. The project as currently designed would fill the onsite reservoir to establish home-sites, removing a potential breeding resource for these species. Pond 3 would likewise be permanently filled as a result of the proposed project. If CRLF or spadefoot are present, proposed impacts to onsite agricultural basins (particularly the reservoir) would result in direct impacts to these species including "take~~.~~" of CRLF under ESA (i.e. loss of individuals and habitat, loss of a breeding resource, direct mortality, etc.). In addition, grading and other earthmoving activities proposed would represent an adverse affect on upland estivation habitat for these species, if present.** ***Therefore, the proposed project would represent a significant and unavoidable impact to a federally Threatened Species and State Species of Special Concern ~~and state regulated wildlife species~~ (if present,) as currently designed. However, implementation of the mitigation measures identified below will reduce these impacts as much as feasible but not to a less-than-significant level without completion of the protocol-level surveys in coordination with the USFWS and CDFG to comply with ESA and Fish and Game Code, and implementation of appropriate avoidance measures or redesign.***

Mitigation

4.4-17 Protocol-level CRLF surveys (USFWS, August 2005) shall be completed at each aquatic resource present within project boundaries. Protocol-level CRLF surveys would likely detect Western spadefoot, if present (Western spadefoot toad surveys are also conducted at night during winter months, preferably January through March, and therefore, overlap CRLF survey protocol requirements). The results of the survey shall be submitted for the review and approval of the City, USFWS, and CDFG. If it is determined that CRLF are present, the applicant shall coordinate with the USFWS to determine the appropriate course of action per the requirements of the federal ESA (e.g., applying for an Incidental Take Permit [Section ~~7 and/or~~ 10 ~~depending on lead agency~~]) and implementing the permit requirements prior to issuance of a grading permit. Any mitigation and avoidance measures required by USFWS for potential impacts to CRLF (if applicable) would likewise reduce impacts to Western spadefoot given their overlapping habitat characteristics. If CRLF is not found on-site and USFWS concurs with a negative finding, no further mitigation is required.

If it is determined that spadefoot are present, but CRLF are not, coordination with CDFG regarding appropriate mitigation to reduce impacts to this species shall be required prior to

issuance of a grading permit. If the Western spadefoot toad is not found on-site, no further mitigation is required.

Under Geology, Soils, Mineral Resources, Section 4.6, Page 4.6-2, the lower elevation range for the project site as noted in the first paragraph is corrected as follows:

"The elevation ranges from approximately 180 ~~200~~ to 600 feet above sea level."

Under Geology, Soils, Mineral Resources, Section 4.6, Page 4.6-19, Mitigation Measure 4.6-6, is revised as follows:

"4.6-6 All drainage from improved surfaces shall be captured by closed pipe or lined ditches and carried to neighborhood storm sewers or natural drainages. At no time shall any concentrated discharge be allowed to spill directly onto the ground adjacent to structures or to fall directly onto steep slopes. The control of runoff is essential for erosion control and prevention of water ponding against foundations and other improvements. The project shall implement Low Impact Development (LID) strategies, as determined appropriate by the City of Soledad consistent with the requirements of Mitigation Measure 4.8-4. LID strategies shall be implemented in connection with the proposed project to the satisfaction of the City of Soledad. Prior to the issuance of any grading and/or building permit for each new structure, the project applicant shall submit an erosion control plan and storm water pollution prevention plan consistent with this measure, subject to the review and approval of the City of Soledad Public Works Director."

Under Hydrology and Water Quality, Section 4.8, Page 4.8-3, is revised as follows:

"Flooding

The General Plan FEIR describes generalized flood hazards within the City of Soledad area. The Salinas River is located approximately 1.25 miles south of the project site and is the primary surface drainage feature that affects the surrounding area. As identified in the General Plan FEIR, the boundaries of the 100-year floodplain generally correspond to the areas surrounding the Salinas River. There are no areas within the project site that are identified within a 100-year flood hazard area on the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map. The 100-year floodplain defines the boundary of flooding statistically anticipated to occur once every 100 years. Although the City is not located within the 100-year floodplain, flooding has occurred in the downtown portion of the City and a portion of the project site. More specifically, flooding occurred during a 1995 storm event that resulted in the Bryant Canyon Channel overflowing. The ~~City of Soledad~~ Monterey County Water Resources Agency (MCWRA) ~~has~~ recently completed improvements along the Bryant Canyon Channel at or near Metz Road to prevent future flooding. According to the City, these improvements are thought to have mitigated potential flooding hazards within the surrounding area (personal communication, S. Hilinski, May 2008). In addition, the MCWRA completed a number of drainage improvements upstream of Metz Road in 2002 to address potential flood-related hazards. MCWRA has indicated that these improvements were sized for a 100-year storm event from the Bryant Canyon watershed, but additional flows from adjacent watersheds impact the channel. As a result, MCWRA has stated that additional drainage improvements are necessary to provide adequate flood protection for the surrounding area."

Under Hydrology and Water Quality, Section 4.8, Page 4.8-10 through 4.8-12, are revised as follows:

"Surface Drainage /Flooding

Development of the proposed project would result in substantial physical changes to the existing drainage conditions within the project area as a result of grading activities, the introduction of impervious surface areas, changes in site topography, and other site disturbing activities. The alteration of existing drainage

patterns combined with the introduction of impervious surface areas has the potential to result in substantial soil erosion, in addition to flooding. Project-induced impacts related to increased soil erosion and sedimentation are addressed in **Section 4.6 Geology, Soils, and Mineral Resources.** Moreover, mitigation measures were incorporated in order to reduce the extent of potential project-related impacts related to increased soil erosion (see mitigation measures 4.6-4 – 4.6-6). Therefore, the following analysis focuses only on potential project-related impacts associated with drainage and associated flooding. For more information regarding project-related impacts associated with increased erosion and sedimentation, please refer to **Section 4.6 Geology, Soils, and Mineral Resources.**

As identified above, implementation of the Miravale III Specific Plan would significantly increase impervious surfaces and stormwater runoff thereby resulting in potential impacts related to surface runoff and on- and off-site flooding. In order to ensure that project-induced impacts would not result in significant on- or off-site flooding, the proposed project would be required to provide adequate drainage facilities in order to accommodate a 100-year storm event. As currently proposed, however, the drainage facilities are inadequately sized to accommodate projected stormwater flows associated with a 100-year storm event. This is considered a potentially significant impact.

Based on design information submitted by Bestor Engineers, Inc. the proposed project would enhance two existing on-site agricultural ponds to provide downstream flood protection and provide additional groundwater recharge benefits. According to preliminary design information provided by Bestor Engineers, Inc. these facilities would be sized to accommodate 148 acre feet and would reduce runoff to pre-project levels. These assumptions are based on calculations submitted by Bestor Engineers, Inc. that indicate that these facilities would be adequate to accommodate on-site and off-site runoff. This documentation is available for review at the City of Soledad. The information submitted by Bestor Engineers, Inc. in support of the Miravale III Specific Plan and associated Vesting Tentative Map was subsequently reviewed by RM Associates as part of the 2007 Storm Drain Master Plan (SDMP) to ensure that the proposed facilities adequately accounted for project demand consistent with the requirements of the SDMP.

The SDMP represents a comprehensive approach to planning storm drain facilities throughout the City and proposed expansion areas to ensure that the City has adequate facilities to accommodate projected development, in addition to existing needs within the City. The SDMP divided the City into a series of on-site and off-site drainage basins. The off-site drainage basins include the Miravale III Sub-basin, which is described as the 920-acre project site which is within a designated expansion area identified in the City's 2005 General Plan. Off-site drainages were included in the SDMP to ensure that the drainage needs of future expansion areas are adequately addressed within the context of the 2007 SDMP. Specific planning, hydrologic, and hydraulic criteria were identified in the SDMP for the purposes of determining whether additional improvements would be necessary to meet existing system requirements and anticipated growth.

The 2007 SDMP contained a detailed analysis of the Miravale III project and associated drainage improvements. Based on that analysis, the SDMP determined that the hydrologic condition of soils within the Miravale III sub-basin was classified as "good." The SDMP determined that the upstream watershed of the Miravale III sub-basin consists of a total of 2,225 acres, of which only 325 acres are considered on-site. The Miravale III sub-basin watershed was identified as consisting of designated Watershed I, III and IV. For a detailed description of these watersheds, please refer to the SDMP available for review on the City of Soledad's website. For modeling purposes, peak flow estimates were developed for a 2-year, 10-year, and 100-year storm event were developed (See SDMP Table 4-1). This information was subsequently used in order to develop a specific analysis of the proposed Miravale III storm drainage system using HYDRA software. Based on the analysis contained in the SDMP, it was determined that the proposed project facilities were inadequate. In order to accommodate projected stormwater flows, the project would need to provide retention facilities with an estimated storage volume of approximately 230 acre feet (RM Associates, Memorandum to City Public Works Director, dated October 27, 2006). As

currently proposed, the project would provide storage facilities with an estimated volume of approximately 148 acre feet, which is considered inadequate to accommodate peak stormwater flows. Inadequately sized facilities could result in off-site flooding and associated impacts, such as property damage, disruption of public services, and similarly related impacts.

As part of the SDMP conducted by RM Associates, several storm water models were developed to evaluate on-site conditions, in addition to off-site conditions on an individual project level, and cumulative level. The results of RM Associates' analysis indicated that the preliminary design proposed as part of the Miravale III Specific Plan does not meet the design requirements delineated in the October 2007 SDMP in regards to flood protection from a 100-year storm event. In addition to providing inadequately sized detention facilities, proposed piping in the major branches were not considered adequately sized to convey stormwater associated with a 100-year storm event. Accordingly, the proposed facilities are considered to be inconsistent with the requirements of the City's adopted SDMP. The applicant's engineer, however, has indicated that RM Associates' analysis does not account for the percolation and disposal of stormwater via native soils. According to the review conducted by RM Associates, the project engineer's design assumptions are not supported by technical evidence and additional geotechnical testing would be necessary to support the project engineer's assumptions. As a result, it was determined that the proposed system would be inadequate to meet the project needs in the absence of additional technical analysis. The City has concluded that compliance with the adopted SDMP would ensure that adequate facilities are provided on-site to meet project generated demand and ensure the post-project runoff is at pre-project conditions. The final location, size, and design of the proposed drainage facilities and associated drainage infrastructure would also be required to be built in conformance with a design-level geotechnical evaluation consistent with the City's standards as evidence of suitable percolation rates at the proposed drainage facilities (refer to Section 3.4 of the Storm Drain Master Plan for design requirements of detention basins).

While the proposed project site is not located within a flood hazard area as delineated by FEMA, localized flooding has been known to occur within the project area and surrounding vicinity. Development of the proposed, which would result in substantial grading, changes in topography, and similarly related activities, has the potential to result in on- and off-site flooding due to changes in existing drainage patterns. In order to ensure that these impacts would be minimized to a less-than-significant level, drainage infrastructure would need to be designed and built in accordance with the City's standards as identified in the SDMP. As currently proposed, the preliminary design is considered inadequate and has the potential to result in additional impacts related to flooding. As a result, project-specific mitigation is warranted in order to ensure that final-design level plans are consistent with adopted City standards. The City of Soledad has determined that compliance with the 2007 SDMP, as applicable to the Miravale III project site, would ensure that adequate storm drainage facilities would be available to meet the demand associated with the proposed project. Moreover, the City of Soledad has also determined that the implementation of Low Impact Development (LID) strategies would ensure that impacts related to drainage and flooding are further minimized to a less-than-significant level.

LID is an integrative stormwater management approach with the goal of maintaining or replicating the natural (pre-development) hydrologic regime of a site through the use of design techniques strategically employed throughout the project area. LID strategy employs a variety of natural and built features to substantially reduce the rate of surface water runoff, filter pollutants out of runoff, and facilitate infiltration of water into the ground. Potential LID measures may include the use of pervious building materials, avoiding the use of coal-tar-based pavement sealers, dispersal of runoff onto onsite pervious surfaces, and similar preventative measures. Mitigation Measure 4.8-4 has been added to ensure that future buildout of the Specific Plan will implement LID strategies to the extent feasible. Implementation of these ~~following~~ mitigation measures ~~is~~ are necessary in order to ensure that impacts would be reduced to a less-than-significant level. Implementation of the following mitigation measure would not result in any new impact beyond those identified elsewhere in this EIR.

Impact **Construction and operation of the project could potentially result in flooding impacts to off-site properties if adequately sized drainage facilities are not provided within the proposed development. Project development could also impact existing drainage as a result of increased impervious surface coverage and modifications to the existing drainage pattern.** ***This is a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation measures.***

Mitigation

4.8-3 In order to ensure that project-induced impacts related to changes in the existing drainage patterns on the project site are minimized, the project applicant shall submit design-level improvement plans for the project's storm drainage collection and retention system. Final design-level plans shall be supported with appropriate soils and hydrologic data in accordance with City standards. All conveyance system and retention basins shall be sized and designed in accordance with applicable City design standards and shall be appropriately sized to accommodate stormwater runoff from a 100-year storm event. Prior to the recordation of any final map, the project applicant shall submit all design-level plans and supporting details to the City of Soledad Director of Public Works for review and approval. The VTM and Specific Plan shall be revised as necessary to reflect final locations of drainage facilities, subject to the review and approval of the City of Soledad.

4.8-4 In order to reduce the extent of impervious surface coverage and potential drainage/flooding impacts, Low Impact Development (LID) strategies shall be implemented, to the maximum extent feasible, in connection with all new development within the Specific Plan area. Prior to the approval of any final map or approval of any permit for all new residential and commercial developments, the project applicant shall submit design-level site and improvement plans to the City of Soledad for review and approval that incorporate the latest approved LID strategies and best practices as applicable, and the City shall ensure that all such measures are included in the final design plans, Examples of various LID strategies and best practices are identified as follows:

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- Where possible, landscaped or grassy areas shall be substituted for impervious surfaces such as building entrances, traffic medians, etc.
- Permeable pavements such as crushed aggregate, turf lock or unit pavers shall be used in place of sidewalks, walkways or overflow parking areas wherever design allows.
- Bioretention cells, planter boxes, vegetated swales, and greenbelt buffer zones shall be implemented in landscaped areas, along streets and sidewalks wherever feasible.
- Final roadway design and street layout shall convey surface water runoff and storm flows into bioretention cells and swales.
- All commercial development shall integrate bioretention into parking lot islands or filter strips distributed throughout the parking area(s) to infiltrate, store and/or convey stormwater flows. In addition, permeable paving materials shall be used in spillover parking that is used only for peak demand periods.

Alternative types of LID strategies and measures may also be approved provided evidence is submitted to the City of Soledad by a qualified engineer demonstrating that said strategies will achieve the intended result of this mitigation measure.

Under Land Use and Planning, Section 4.9, Page 4.9-11, is revised to add a new paragraph following Table 4.9-1 as follow:

"The Draft EIR for the Miravale III Specific Plan was published prior to completion of the City of Soledad's update of its Housing Element. The updated Housing Element was adopted and certified in 2009, Although many of the relevant provisions of the 2009 document or essentially the same or similar to those of the 2003 Housing Element, the 2009 Housing Element includes the following additional requirements applicable to the proposed Specific Plan project:

- Program 2.1.1: Housing affordable to very low-and low-income persons or families shall achieve a minimum density of 20 units per acre;
- Program 2.1.2: A minimum of 30 percent of all units in each new neighborhood must be designed to accommodate rental households in accordance with Housing Element guidelines identified by this program."

Under Land Use and Planning, Section 4.9, Page 4.9-11, is revised as follows:

"Additionally, ~~project development also includes several amendments to the General Plan; they are~~ in order for the Specific Plan and related Vesting Tentative Map to be approved as proposed, a number of amendments to the General Plan, including the adopted 2009 Housing Element, would be necessary as ~~summarized~~ identified below. If the City elects to deny any or all of these proposed amendments for environmental, public service and/or fiscal reasons, the draft Specific Plan and related Tentative Map must then be revised to conform with the applicable General Plan provision.

~~Proposed~~ General Plan Amendments Necessary to Accommodate the Project as Proposed:

- Revision of General Plan land use diagrams to reflect Specific Plan's proposed planning area boundary and land use designations—i.e., Figures II-4 (Northwest Expansion Area), II-6 (San Vicente West Specific Plan Area), II-7 (Mirassou Specific Plan area) and Figure II-9-Land Use Diagram and Figure VI-1-Parks and Trails.

- Revision of Figure V-2 , Circulation Diagram, to reflect the circulation system proposed by the VTM/Specific Plan contingent upon demonstration that the proposed circulation achieves the same objectives—connectivity/service levels, etc.—as that shown by the Fig. V-2.

- Revision of the land use descriptions and development potential tables for the affected Expansion Areas—Northwest Expansion Area (pp. II-11 –II-12), San Vicente West (p.II-16), and Mirassou Specific Plan area (p. II-18) to reflect the alternative land use concept of the proposed Specific Plan. Revisions may include deletion of the L-shaped block from the Mirassou Specific Plan Expansion area.

- Modification of Table II-1, General Plan Development Potential, to allow an additional 1,050 - ~~1,550~~ 1.500 units—over and above the maximum development currently allowed (number of additional units varies depending upon the extent to which development is reduced in the NW Expansion area)

- Modification of Land Use Policy L-45 to allow exceptions to the restriction on ridgeline development per the proposed Specific Plan/VTM.

- Modification of Land Use Policy L-5 and Policy S-1 and S-23 to allow exceptions to the requirements that adequate public services, including schools, be provided concurrent with new development (or demonstration that the existing middle school and high school—with or without improvements—can accommodate the majority of students generated by the project.)

- ~~Modification of PR-33 to allow exception to the requirement that new development provide its fair share of public park and recreation opportunities (the minimum standard of 3.0 acres~~

~~per 1000 residents is being met but this includes approximately 8 acres of trails and park connections; further, the General Plan goal is 5 acres of parkland for each 1,000 persons).~~

- Amendment of the 2009 Housing Element Policy 2.1 and implementing Program ~~4-2~~ 2.1.2 to allow exceptions to requirements that new ~~"development must be organized into functioning~~ neighborhoods ~~that~~ must contain a mix of housing types affordable to very low, low and moderate-income housing that is fully integrated with market-rate single-family housing.,~~"~~ with at least 20 percent of all units in new neighborhoods consisting of duplexes, tri-plexes and smaller multi-family housing. Being "next to" as noted in Section 2.5 of the draft Specific Plan doesn't meet the intent of the Housing Element to achieve "fully integrated" mixed income housing types and affordability."

Under Land Use and Planning, Section 4.9, Pages 4.9-15, is revised as follows:

"Consistency with City of Soledad Jobs/Housing Balance Goals

Evaluation of the existing and future jobs/housing balance considers employment potential (existing and projected), housing demand, new housing production, and available transportation systems. New residential development will be phased so that the number of new units constructed annually is consistent with the jobs-housing balance provision of the City's General Plan.

As currently proposed, the Specific Plan does not provide a balance of jobs and housing due to its substantially larger residential component compared to the employment generating commercial portion. ~~that is consistent with the Housing Element.~~ The Specific Plan includes an industrial, office, and commercial component, which is expected to generate approximately 550 jobs. The housing component of the Specific Plan includes the development of 4,200 dwelling units. This equates to a jobs to housing ratio of approximately 0.13 new jobs for each new home within the Plan area. As a result, the proposed project would result in a substantial increase of housing within the City over a 10-20+ year period while failing to provide a significant source of additional employment opportunities for area residents. In the absence of additional employment generating uses during this same timeframe, the project would exacerbate the imbalance of jobs and housing within the City. While the proposed project itself does not contain a balance of land uses, the ultimate development of the City as envisioned under the General Plan, including development of the proposed project, would provide for a favorable jobs/housing balance in the long-term. More specifically, the City of Soledad anticipates as many as 22,000 jobs and about 14,000 total dwelling units at buildout of the General Plan, which includes the Miravale III site. Should this development potential be realized, the City's ratio of jobs to dwelling units would be about 1.57, or considerably more jobs than dwelling units. ~~The proposed project has substantially larger residential portion compared to employment generating commercial portion.. The ultimate development of the City as envisioned under the General Plan, including development of the proposed project, would provide for a favorable jobs/housing balance.~~"

Under Land Use and Planning, Section 4.9, Pages 4.9-17 through 4.9-37, Table 4.9-2, is revised as follows:

"Based on further review of the proposed Miravale III Specific Plan by the City of Soledad Community Development Department, revisions to Table 4.9-2 were identified as necessary. Specifically, the City has determined that the proposed Specific Plan does not meet the requirements of Appendix B of the General Plan or relevant provisions of the Housing Element, in addition to a number of other planning considerations. Adherence to the Specific Plan standards of Appendix B is mandated by General Plan Policy L-3. These comments/concerns are reflected in the revised Table 4.9-2 identified below. It is important to distinguish that CEQA specifically requires that an EIR evaluate potential conflicts with any land use plan, policy, or regulation that was adopted for the purpose of avoiding or mitigating an environmental impact. These changes would not change and/or substantially alter the analysis in this EIR.

These revisions have been incorporated to provide additional clarification regarding the project's consistency with the General Plan."

Table 4.9-2 Project Consistency with Relevant City of Soledad General Plan Land Use Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Consistency**
GENERAL PLAN			
Land Use			
L-2	Further annexations to the City may occur when a) a substantial portion of the development capacity within the existing city limits has been developed, b) a substantial public benefit can be realized through the annexation, such as the provision of public open space, additional parkland, or the protection of scenic vistas, or natural resources, or c) a special type of use is proposed that cannot be practically accommodated in the existing city limits, and d) the project can be found to provide a financial benefit to the City or to be fiscally neutral. The Planning Commission shall review the merits of a request for annexation based on these criteria, and make a recommendation to the City Council.		The General Plan anticipated future growth in the Miravale III plan area (Mirassou plan area, Northwest and San Vicente West Plan Expansion Areas). The Plan is providing the City with market-rate and affordable housing, a golf course, parks, schools, police and fire sites, and trails. The fiscal impact on the City will be reviewed as part of the City Council consideration of the project. With the preparation of an independent and comprehensive fiscal analysis that accounts for the long-term operational and maintenance costs of the golf course, the City will be able to make a determination concerning the fiscal impacts of this project. In the absence of a complete fiscal impact report, a determination of policy consistency cannot be made. Moreover, a determination of project consistency would be inappropriate in this EIRas this policy is not considered an environmental policy that warrants consideration under CEQA. The Planning Commission (PC) shall review the merits of a request for annexation based on these criteria, and make a recommendation to the City Council to determine consistency with the requirements of this policy. ~~Mitigation measures under the Cumulative and Population and Housing Sections of this EIR also incorporate this policy.~~ **~~With PC determination on above, the project is consistent with this provision.~~**
L-3	A specific plan shall be required for all annexations and development of properties designated Expansion Area. Specific plans shall be prepared in accordance with the standards provided in Appendix B.		The City will review the Miravale III Specific Plan to ensure compliance with policy and that the Specific Plan has been prepared in accordance with the standards provided in Appendix B of the Soledad General Plan. The Specific Plan, as currently proposed, does not meet the requirements of Appendix B of the Specific Plan. Specifically, the proposed project is inconsistent with Appendix B standards #4, #10, #11, #14, #16, and #24. Accordingly, the City has determined that the Specific Plan will need to be substantially revised to achieve consistency with this policy and Appendix B of the General Plan. A number of mitigation measures identified in

Table 4.9-2 Project Consistency with Relevant City of Soledad General Plan Land Use Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Consistency**
			this EIR would ensure that the Appendix B requirements related to environmental issues (i.e. parkland) would be addressed. Nevertheless, the project is inconsistent with relevant General Plan requirements concerning integration of multi-family and other affordable housing, street design, jobs-housing balance, and adequate public facilities (i.e., schools, police and fire facilities – unless mitigated pursuant to MM 4.12-1 through 4.12-7)). **As proposed, the project is not consistent with this provision.**
L-4	The City shall promote patterns of development that allow for the efficient and timely extension of infrastructure and services.		Public services will be provided as described in Section 5 of the Specific Plan and in the Public Services and Utilities section of this EIR. **The project, as mitigated, is consistent with this provision.**
L-5	New development shall not be allowed unless adequate public services are available to serve such new development, or that can be provided at the time of development.		~~**Project consistent.**~~ Development of the proposed project would be required to provide adequate public services in order to accommodate project development. As identified in **Section 4.12 Public Services,** the proposed project, as mitigated (see Mitigation Measures 4.12-1 through 4.12-7), would provide sufficient services to meet project demands. **Therefore, the project, as mitigated, is considered consistent with this policy**
L-6	New development shall pay its fair share of providing additional public services needed to accommodate such development.		~~**Project consistent**~~. **The proposed project, as mitigated in this EIR, is considered consistent with this policy.** As identified in **Section 4.12 Public Services** and **Section 4.14 Utilities,** development of the proposed project would be required to submit payment of its fair share of the cost of providing public services needed to accommodate project development. Moreover, completion of a Development Agreement and Plan for Services required for the project will address the timing and costs of needed public services and facilities.
L-7	Master plans for sewer, water, roads, drainage and other public improvements shall be required for new development on large undeveloped parcels and may be included in the specific plan required by policy L-3, and as determined by the City.		Section 5.0 of the Specific Plan provides conceptual public utility plans. Section 4.0 provides a conceptual circulation plan. Final plans will be submitted upon completion of the vesting tentative map. **The project is consistent with this provision.**

Table 4.9-2 Project Consistency with Relevant City of Soledad General Plan Land Use Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Consistency**
L-8	The City shall permit only low-intensity land uses in areas where natural conditions such as floodplains and steep hillsides are likely to pose a threat to public safety or produce excessive maintenance costs.		The Specific Plan proposes Low Density Residential in hillside locations, subject to the Hillside Development Standards found in Appendix A of the Specific Plan. However, because these standards are proposed to apply only to those hillside lots with average slopes of 30 percent or more and because many of the "standards" are in fact non-mandatory guidelines, the City of Soledad Community Development Department, has determined that the proposed project would be inconsistent with this policy. **The project is ~~consistent~~ inconsistent with this provision.**
Land Use - Jobs/Housing Balance			
L-10	The City shall monitor development and adjust land use designations and new residential project approvals as needed to promote a reasonable balance between employment-generating land uses and housing.		The proposed project will provide 4,200 residential units and 550 jobs as part of project development. This equates to a jobs housing ratio of 0.13 new jobs for each new home within the plan area, which, in the absence of additional jobs created outside the project area, would contribute to an imbalance of jobs and housing within the City (a jobs-housing ratio of 1.0 is considered balanced). Based on further review by the City of Soledad, it was concluded that the project, would not be consistent with this policy as a result of the significant amount of residential development proposed in excess of the General Plan's development threshold for the project area (as identified by General Plan Table II-1). ~~considered a reasonable balance for the proposed project considering development potential associated with General Plan buildout.~~ **The project,** as proposed**, is ~~consistent~~ inconsistent with this provision.**
L-11	The City shall encourage large residential development projects to be phased or timed with development that will provide primary wage-earner jobs.		Miravale III proposes commercial and office job opportunities in Phases 1 and 2, as well as new schools, police and fire facilities in Phases 1-4 to provide sources of employment within the project area. Based upon further review by the City of Soledad, it was determined that the proposed Specific Plan is inconsistent with this policy since it lacks provisions for ensuring that the commercial uses will be constructed prior to or concurrent with the first or second phases of project development. **The project is ~~consistent~~ inconsistent with this provision.**

Table 4.9-2 Project Consistency with Relevant City of Soledad General Plan Land Use Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Consistency**
Land Use - Residential Development			
L-13	The City shall require that residential projects be designed to reflect and consider the relationship of the project to surrounding uses. Residential densities and lot patterns will be determined by these and other factors. As a result, the maximum density specified by the General Plan land use designations or zoning for a given parcel of land may not be realized.		The project Specific Plan proposes a maximum 4,200 units within the Plan Area including a number of PUD areas that have not been fully designed. Residential siting and design of the residential portion of the project will be required to adhere to the residential guidelines contained in the Specific Plan, as modified by the mitigation measures identified in this EIR. Specifically, mitigation measures have been identified in this EIR to: 1) avoid potential land use compatibility issues associated with on-going agricultural operations, 2) ensure that residential development is compatible and complementary to the existing residential neighborhoods located adjacent to the project site, and 3) ensure that potential visual impacts are minimized to the extent feasible. Moreover, future buildout of the project site will be required to adhere to adopted General Plan policies. ~~reflect awareness of surrounding land uses as residential and non residential uses abut similar uses in the surrounding project vicinity.~~ **The project, as mitigated, is consistent with this provision.**
L-14	The maximum allowable residential density for new residential subdivisions or development projects shall be computed based on the gross area of the lot before dedications for highway setbacks, parks, streets, or other requirements.		The maximum residential density for the proposed project is 30 units per acre. Dedications for parks, streets, etc. have been considered and are part of the proposed project. Moreover, additional project-specific mitigation measures have been identified to ensure that adequate facilities are provided as part of project development. **The project, as mitigated, is consistent with this provision.**
L-15	The City shall require new subdivided lots to be adequate in size and shape for the range of primary and accessory uses designated for the area.		The proposed project provides lots of varying size and shape for the range of primary and accessory uses per new zoning designations as provided in the Specific Plan and Zoning Code. **The project is consistent with this provision.**
L-16	The pace of new residential development should be such that new residents can be absorbed into the fabric of the town and existing residents are not overwhelmed by newcomers. This can be accomplished in part by requiring phasing of larger residential projects and by ensuring that adequate infrastructure and public improvements are in place concurrently, or in advance of new		The project will be constructed in 4 phases and includes a Plan for Services. As identified elsewhere in this EIR, mitigation measures have been adopted to ensure project development provides adequate public services in accordance with City requirements. In addition, General Plan policies, as well as, policies identified in the Specific Plan, ensure that adequate

Table 4.9-2 Project Consistency with Relevant City of Soledad General Plan Land Use Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Consistency**
	development.		facilities will be in place concurrently with project development. **The project, as mitigated, is consistent with this provision.**
L-17	Major new residential development is appropriate in the areas on the east and north sides of the developed portions of the City.		The Miravale III Specific Plan area lies north of the developed portions of the City in an area planned for expansion. **The project is consistent with this provision.**
L-19	In general, higher densities of residential development shall be located in areas served by the widest range of urban services, and shall be preferred along collector and arterial streets, within walking distance of schools, city parks and transit stops.		The Plan provides six (6) Village Residential neighborhoods. Villages 1, 2, 4, and 5 are within a ¼ mile walking distance to schools, commercial uses, parks, and transit. Village 3 is adjacent to commercial, transit, and parks. The sixth village (Village 6) is within walking distance to open space, parks, and transit. All villages are located adjacent to collector roads. Mitigation has been incorporated into this EIR to ensure that appropriately sized parks will be provided in connection with the development of the six Village Residential neighborhoods. Moreover, as future development is proposed in connection with the Village Residential neighborhoods, the merits of those developments will be reviewed on. an individual basis to ensure consistency with applicable requirements of the City's General Plan and the Specific Plan at that time. **The project, as mitigated, is consistent with this provision.**
L-20	The approval of new residential subdivisions shall incorporate provisions to ensure that an appropriate amount of new multi-family development is constructed concurrently, or in advance of, new single family residences.		Multi-family development is planned in Phases 1-4. The development agreement will provide policies that require the multi-family development be constructed concurrently, or in advance of, new single family residences. **The project, as mitigated, is consistent with this provision.**
Land Use - Commercial Development			
L-21	New commercial development shall be encouraged in Soledad near the freeway interchanges with Highway 101. Limited new neighborhood commercial development will be allowed within areas designated *Expansion Area*, and/or at specified nodes to provide for the everyday needs of the surrounding residential neighborhoods.		The two commercial centers are sited in the southwest corner of the project site, nearest San Vicente road and the highway 101 freeway interchange. In addition, limited neighborhood serving commercial designations are also included as part of the Specific Plan, which is located within a designated expansion area. **The project is consistent with this provision.**
L-23	In general, new retail commercial development should provide a		Two commercial centers; the Gateway Commercial Center,

Table 4.9-2 Project Consistency with Relevant City of Soledad General Plan Land Use Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Consistency**
	wider range of shopping opportunities for the community.		and the Village Commercial Center are planned to contain a variety of shopping opportunities for the community. **The project is consistent with this provision.**
L-24	New commercial development shall be designed to encourage safe and efficient pedestrian circulation within and between commercial sites and nearby residential neighborhoods.		The ~~two commercial sites within the Plan Area~~ proposed Specific Plan contains policies and guidelines that provide for pedestrian designated walkways through parking lots, wider sidewalks around the building and parcel perimeters, and pedestrian connections to adjacent residential neighborhoods. At the time that design-level proposals are submitted for development within the designated commercial areas, those proposals will be evaluated for consistency with existing General Plan policies and the policies contained in the Specific Plan. The proposed Specific Plan, at a programmatic level, is considered to be generally consistent with this policy. **The project is consistent with this provision.**
L-25	New commercial development shall be designed to minimize the visibility of parking areas from public roadways.	Section 2.16 – Guideline 1	Design level drawings are not available at this stage. Parking lots visible from public streets should be adequately screened from vehicle view through one or more of the following: rolling earth berms, low screen walls, landscaping, changes in elevation, or combinations of above. Moreover, building orientation to the street with parking behind the buildings, main street format, and other guidelines contained in the Specific Plan would ensure consistency with this policy. In addition, mitigation measures have been incorporated into this EIR to ensure that aesthetic/visual impacts are reduced to the maximum extent feasible. **The future project design must comply with this provision.**
L-26	The visitor-serving sector of the local economy shall be maintained and expanded. New motels/hotels shall especially be encouraged in areas within walking distance of the downtown. Visitors to the nearby Pinnacles National Monument offers another potential market for visitor-serving land uses.		The project includes an opportunity site for future hotel adjacent to the golf course to expand the visitor-serving sector of the City's economy. Based on further review by the City of Soledad, the City has determined that consistency with this policy cannot be determined in the absence of a hotel market feasibility study to verify that the hotel site and use is feasible with and without the proposed golf course. Accordingly, a determination of policy consistency cannot be made in the absence of this additional information.. ~~**The project is**~~

Table 4.9-2 Project Consistency with Relevant City of Soledad General Plan Land Use Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Consistency**
			~~**consistent with this provision.**~~
Land Use - Public-Quasi-Public/Office Development			
L-32	The City shall designate adequate, appropriately located land for the development of City and County facilities and offices, schools, medical facilities, water facilities, and public safety facilities.		**Project consistent.** The proposed project, as mitigated, will provide adequate public facilities, including parks, open space, schools, and a police and fire station.
L-34	When considering plans for large-scale development, the City shall designate adequate, appropriately-located land for the development of quasi-public land uses, such as, hospitals, churches, private schools, cemeteries, and utility uses.		The Plan Area provides a church opportunity site as well as areas for infrastructure/utilities on site. **The project is consistent with this provision.**
L-35	The City shall promote the clustering of public and quasi-public uses such as schools and parks, libraries, child care facilities, and community activity centers. Joint use of public facilities shall be promoted, and agreements for sharing costs and operational responsibilities among public service providers shall be encouraged.		Joint use of the three public schools and adjacent parks is intended to be implemented in the development agreement. Policies have been incorporated into the Specific Plan to promote the joint use of public facilities. **The project is consistent with this provision.**
L-36	The City shall encourage efforts to locate adequate emergency services and other types of health care facilities in Soledad to meet the present and future needs of its residents.		The plan provides a potential site for a joint police/fire station. **The project is consistent with this provision.**
Land Use- Expansion Areas/Specific Plan Areas			
L-42	The City shall use Community Design Guidelines as a decision-making tool to ensure that new development incorporates the qualities and character desired by Soledad residents.		Design Guidelines have been provided for each urban land use within the Miravale III Specific Plan. Based on further review by the City of Soledad Community Development Department, the City has determined that the proposed Specific Plan is inconsistent with the requirements of Appendix B of the General Plan, which identifies specific standards for Specific Plans. Development in accordance with the guidelines contained in the proposed Specific Plan, as supplemented by existing General Plan requirements (see GP Policy L-3) will ensure that the proposed project, as mitigated, will be consistent with this policy. **The project, as mitigated, is consistent with this provision.**
L-43	Specific plans prepared for major expansion areas shall incorporate the standards described in Appendix B – Standards		a. Similar residential product types along the southern portion of the Plan Area and the extension of West Street and San

Table 4.9-2 Project Consistency with Relevant City of Soledad General Plan Land Use Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Consistency**
	for Specific Plans. In general: a. New residential projects should be designed to integrate with existing neighborhoods to ensure that they do not destroy the established character. Subdivisions in City expansion areas should be designed so that individual, separately developed projects work together to create true neighborhoods with a sense of identity, instead of disjointed or isolated enclaves. b. Subdivision design should emphasize pedestrian connectivity within each project, and to adjacent neighborhoods, and nearby schools and parks. All streets and walkways should be designed to provide safe and pleasant conditions for pedestrians. Streets within neighborhoods should be no wider than needed to accommodate parking and two low-speed travel lanes. Sidewalks should be separated from curbs by parkway strips of at least four feet in width; and the parkways should be planted with canopy street trees. c. Specific plans should provide a range of residential housing types affordable to the widest range of income groups, consistent with the goals, policies and programs of the Housing Element of the General Plan. d. Subdivisions should be designed to provide usable public open spaces in the form of parks, linear bicycle and pedestrian trails, squares, and greens, as appropriate.		Vicente Road creates neighborhoods that are integrated and linked with existing residential development b. Pedestrian connectivity has been emphasized with the provision of 65 pedestrian park connections and neighborhood connections (refer to section 4.2.7 of the Specific Plan). Local streets cross-sections have been designed per City direction but many substantially exceed the maximum length of 520 feet per Appendix B standards. Sidewalks are separated from curbs by landscaped parkway strips in all instances except for Hillside Roads which do not require a parkway strip. c. Although a variety of housing types are planned, including single family detached, attached duplex, townhouses, and for rent apartments, the proposed Specific Plan does not provide the total amount of affordable housing required or adequately integrate such housing at the neighborhood level. **The provision of affordable housing is therefore inconsistent with the Housing Element of the City's General Plan.** d. Development of the proposed project entails the provision of public open space, parklands, and a semi-private golf course. In addition, mitigation measures have been identified in order to ensure the proposed project provides adequate public facilities to meet project generated demands. As the Specific Plan is inconsistent with additional standards in Appendix B of the General Plan, the City has determined the proposed project to be inconsistent with this policy. Appendix B identifies specific development standards with which Specific Plans must comply and implement. The City has generally identified that the proposed Specific Plan is inconsistent with the requirements of items #3, 5, 7, 8, 10, 11, 14, 15, 16, 19, 25, and 26. Consistency will require revision of the Specific Plan, prior to project approval, consistent with the requirements contained in Appendix B. **The project~~, as mitigated,~~ is ~~consistent~~ inconsistent with this provision.**
L-44	The City shall require that all new development be designed to complement the scale and character of existing development.		**Project inconsistent.** Development of the proposed project, while physically transforming a previously undeveloped

Table 4.9-2 Project Consistency with Relevant City of Soledad General Plan Land Use Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Consistency**
	Views of the surrounding hills and mountains shall be preserved through such means as design review, sign control, undergrounding of utilities, grading and tree removal standards.		project site into a new development, would complement the existing residential character of Soledad. As identified in **Section 4.1 Aesthetics,** development of the proposed project would result in a significant unavoidable impact to a scenic vista. Although measures are incorporated to insure that these impacts would be minimized to the extent feasible, project development would substantially alter the existing visual character of the Hillside portion of the project site. Existing views of the project site as perceived from adjacent uses would ~~consistent~~ consist predominately of new urban features, such as roads, structures, and other factors. The proposed project, which includes several General Plan amendments pertaining to development within the hillside area, would still degrade the existing character of the surrounding hills and mountains. Although these amendments would revise a number of policies prohibiting development above the 400' elevation contour, project impacts would still substantially alter the existing character of these resources.
L-45	The City shall require all new development to be planned and designed in a manner which employs design, construction and maintenance techniques that: a. Avoids locating structures along ridgelines and steep slopes. b. Incorporates design and screening measures to minimize the visibility of structures and graded areas. c. Maintains the character and visual quality of the area.		**Project inconsistent.** As previously identified in **Section 4.1 Aesthetics,** project development would substantially alter the existing visual character of the project site such that project impacts would be significant and unavoidable. Moreover, project development, including development above the 400' elevation contour, would also result in a significant unavoidable impact to a scenic vista. Although the proposed project includes several amendments to the General Plan to address potential inconsistencies with development within the Hillside portion of the site, project development would nevertheless conflict with the provisions of this policy as these impacts were identified as significant and unavoidable.
L-46	New development on hillsides shall employ design, construction and maintenance techniques that: a. Ensure that development near or on portions of hillsides do not cause or worsen natural hazards such as erosion, sedimentation, or fire hazards. b. Minimize risk to life and property from slope failure,	4.1.2.12	**Project inconsistent.** Although the proposed Specific Plan contains numerous policies and guidelines to minimize erosion and potential geological hazards within the Hillside portion of the project site, development within the project area would result in a significant and unavoidable impact to the existing visual quality. As a result, the proposed project is considered

Table 4.9-2 Project Consistency with Relevant City of Soledad General Plan Land Use Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Consistency**
	landslides and flooding. c. Include erosion and sediment control measures including temporary vegetation sufficient to stabilize disturbed areas. d. Maintain the character and visual quality of the hillside.		inconsistent with this policy.
L-47	The City may, where appropriate, require new development to provide pedestrian amenities along public sidewalks, such as seating and 'pocket parks'.		Public amenities such as benches will be provided around commercial centers and parks. Pocket parks may be included in the ultimate design of the Village Residential areas. **The project is consistent with this provision.**
L-49	The form, scale and character of new residential development shall emulate the best characteristics of the existing residential neighborhoods, such as single and two-story dwellings with adequate off-street parking, landscaped front yards with trees, and sidewalks.		Figure 2-6 of the Specific Plan summarizes the number of floors for each product type. Local residential streets are required to provide street trees separated by a 5' wide planting strip. Single family units are also required to provide adequate offstreet parking and landscaped front yards. Mitigation has been incorporated into this EIR to ensure that the proposed Specific Plan will comply with the requirements of this policy; please see Mitigation Measure 4.1-11. Please also see the consistency determination for General Plan Policy L-43 above as it relates to the adequacy of the proposed Specific Plan in relationship to existing City requirements. **The project, as mitigated, is consistent with this provision.**
L-50	Multi-family development shall include usable open space for each dwelling and shall be designed to be integrated with the surrounding neighborhood.		**Project consistent.** Multi-family development is proposed within six areas designated as Village Residential. Currently, no formal plans have been submitted for development within these areas. Mitigation measures have been incorporated to ensure that adequate open space and improved parkland are provided within the Village Residential areas consistent with the intent of this policy. Moreover, individual applications for multi-family development within the Miravale III Specific Plan area would be required to adhere to the requirements of this policy.
L-51	All exterior lighting in new development shall be located and designed so as to avoid shining directly onto nearby residential properties, and shall minimize offsite glare. Proponents of commercial or industrial projects on property adjacent to residential areas shall submit a lighting plan to the City for review and approval; said plan shall incorporate features such as		City shall review lighting plan prior to approval of commercial projects. Design guidelines and mitigations have also addressed light glare issues. **The project, as mitigated, is consistent with this provision.**

Table 4.9-2 Project Consistency with Relevant City of Soledad General Plan Land Use Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Consistency**
	low level, downward-directed exterior lights to achieve the intent of this policy.		
L-52	Historically or architecturally significant buildings shall not be demolished or substantially changed in outward appearance in a way that diminishes the historical character, unless doing so is necessary to remove a threat to health and safety and other means to avoid the threat are infeasible.		**Project consistent with mitigation.** As identified in **Section 4.5 Cultural Resources,** the project applicant will be required to relocate the historically significant Lorentzen house in order to ensure project impacts are less-than-significant. Moreover, the relocation of this building would not diminish the historical character of the house.
Housing			
H-1	The City of Soledad shall promote the expansion of its LAFCO Sphere of Influence and annexation of additional land consistent with its General Plan Land Use Element to accommodate long-term demand for residential development.		The project site includes portions of the San Vicente West, Mirrasou, and Northwest Expansion Areas. These expansion areas combine for residential capacity of 9,012 units on 1,488 acres. Development of the proposed project, as described in this EIR, would exceed the development projections contained in the City's General Plan. Mitigation measures identified in this EIR, if adopted, would ensure that future buildout within the General Plan expansion areas would not exceed those development projections. Please refer to the analysis contained in **Section 4.11 Population and Housing** for further discussion. Specifically, please refer to Mitigation Measures 4.11-1 and 4.11-2, as modified in the Final EIR, for more information. **The project, as mitigated, is consistent with this provision.**
H-3	The City of Soledad shall require new residential areas to contain a mix of housing types targeted to very low, low, moderate, and above moderate households in approximately the proportion that each of these income categories represent in the AMBAG Fair Share Housing Allocation.		Approximately 340 very low, 318 low, 569 moderate, and 1,047 workforce housing units are proposed within the Plan Area. Although the proposed project does not provide the required amount of affordable housing units, as described in the EIR, the project proponent will be required to enter a Development Agreement with the City, as stipulated by the City's General Plan. The Development Agreement or other legal instrument will prescribe the parameters of the development of affordable housing units consistent with the City's Housing Element, Inclusionary Housing Ordinance, and the final revised Specific Plan. The City Council (CC) shall

Table 4.9-2 Project Consistency with Relevant City of Soledad General Plan Land Use Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Consistency**
			review the merits of a development agreement (DA) which will demonstrate project's consistency with the city's affordable housing requirements per the housing element and inclusionary housing ordinance~~.~~ As identified in this EIR, the project, as currently proposed, is inconsistent with the Housing Element. As a result, the EIR identified that Mitigation Measure 4.11-3 was necessary. Mitigation measures under the Population and Housing Sections of this EIR also incorporate this policy. **With mitigation and City ~~PC~~ determination on above, the project ~~is~~ will be consistent with this provision.**
Housing – Removal of Development Constraints			
H-9	The City of Soledad shall ensure that city site improvement standards, development review procedures, and development fees do not unreasonably constrain the development, conservation, and rehabilitation of housing.		Housing development shall comply with the Specific Plan and all applicable housing policies and will not unreasonably constrain the development, conservation, and rehabilitation of housing. **The project is consistent with this provision.**
H-10	The City of Soledad shall ensure the availability of adequate public facilities for the expected housing need of the city.		The ~~developer~~ City will prepare a Development Agreement and the applicant will complete a Plan for Services that conforms with the City's adopted Master Plans concurrent with project approval. As identified elsewhere in this EIR, the proposed project, as mitigated, would be adequately served by public facilities. **The project, as mitigated, is consistent with this provision.**
Housing – Energy Conservation			
H-11	The City of Soledad shall support and initiate, where feasible, public and private energy conservation programs which will reduce the energy needs of housing in Soledad and so increase housing affordability.	5.1.4.10	The Specific Plan contains goals to maximize energy conservation. In addition, mitigation measures have been incorporated into this EIR to promote the use of solar energy devise and encourage solar orientation of residential and buildings building to reduce the use of fossil fuels. **The project, as mitigated, is consistent with this provision.**
Circulation – Traffic Management			
C-1	Level of Service "D" or better shall generally be maintained on all streets and intersections. Lower levels of service may be accepted during peak times or as a temporary condition, if improvements to address the problem are programmed to be developed. To identify potential impacts of new development on		According to Hexagon's 2006 Traffic Impact Analysis Report, a Level of Service "D" or better shall be maintained upon project build-out. Mitigation measures have been identified in this EIR to ensure that all project-related transportation impacts would be reduced to the greatest extent feasible. **The project,**

Table 4.9-2 Project Consistency with Relevant City of Soledad General Plan Land Use Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Consistency**
	traffic service levels, the City shall require the preparation of traffic impact analyses generally at the sole expense of the developer for developments determined to be large enough to have potentially significant traffic impacts.		**as mitigated, is consistent with this provision.**
C-2	Streets shall be dedicated, widened, extended and constructed in accordance with City standards. Dedication and improvements of full rights-of-way shall not be required in existing developed areas where the City determines such improvements are infeasible or undesirable. New development shall be responsible for improving a minimum one-half street along the outer-boundaries of each subdivision along subdivision property where street extensions are identified. Other deviations from these standards shall be permitted upon a determination by the City Engineer that safe and adequate public access and circulation are preserved by such deviations.		This policy will be implemented by the pending Vesting Tentative Map and the Developer Agreement. **The project is consistent with this provision.**
C-5	The street system in residential neighborhoods shall provide safe and logical connections to the existing street pattern, and connectivity to the range of complementary land uses within neighborhoods (housing, schools, parks, neighborhood shopping, etc.). The use of multiple collector streets shall be favored over the use of arterials in new residential subdivisions.		Connections to the existing street pattern have been provided via the proposed extension of West Street and San Vicente Road. New circulation alignments within the Plan Area have been designed to effectively connect residential neighborhoods to commercial and recreational areas. Sidewalks adjacent to commercial centers and schools will be wider to accommodate higher levels of pedestrian traffic. **The project is consistent with this provision.**
C-8	The City shall manage the street network so that the standards presented in policies C-1 and C-12. are not exceeded. The City will require new development to mitigate the traffic impacts it causes, or the City will limit development along streets where congestion levels are unacceptable		The project, as proposed, provides mitigation for traffic impacts including payment of traffic impact fees to maintain Level of Service "D" or better upon project build-out. **The project, as mitigated, is consistent with this provision.**
C-9	New local streets shall be developed consistent with the goals, policies and programs of the Land Use Element of the General Plan.		Local streets within the Miravale III Plan Area have been designed per City standards as established by the General Plan with respect to cross-sections; however, project street design is does not comply with General Plan standards regarding maximum street length and the use of cul-de-sacs. Many of the project streets are designed as cul-de-sacs, and many exceed the standard of 520 feet for maximum street length—a number of proposed streets are 1,000 feet or more in length.. **The**

Table 4.9-2 Project Consistency with Relevant City of Soledad General Plan Land Use Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Consistency**
			project is, <u>therefore, inconsistent</u> with this provision.
C-10	Facilities that promote the use of alternate modes of transportation, including bicycle lanes, pedestrian and hiking trails, park-and-ride lots and facilities for public transit shall be incorporated into new development, and shall be encouraged in existing development.		Over 27 miles of trails, sidewalks, and bicycle lanes will be provided to promote alternative modes of transportation. Three transit stops are also planned. **The project is consistent with this provision.**
C-13	The City shall ensure through a combination of traffic impact fees and other funding mechanisms that new development pays its fair share of the costs of circulation improvements required by such development.		Site improvements will be constructed by the developer. Off-site improvements will be addressed through the EIR mitigation requirements. **The project, as mitigated, is consistent with this provision.**
C-14	The City shall prohibit the development of private streets in new residential projects, unless approved on a project specific basis where circumstances support such a use and the streets are privately maintained.		No private streets are proposed. **The project is consistent with this provision.**
C-15	New development shall continue the existing street pattern, where logical.		This has been accomplished with the planned extension of West Street and San Vicente Road. **The project is consistent with this provision.**
C-16	Roundabouts will be considered as an alternative to traditional intersection controls.		One roundabout is proposed at project entry. **The project is consistent with this provision.**
Circulation – Parking			
C-17	The City shall require the provision of adequate off-street parking in conjunction with all new development. Parking shall be located convenient to new development and shall be easily accessible from the street. The adequacy and appropriateness of parking requirements in the Zoning Ordinance shall be periodically evaluated.		Parking requirements are consistent with 17.36.020 of the City of Soledad's Municipal Code. All future applications for development within the Specific Plan area will be required to adhere to the parking requirements identified in Section 17.36.020 per the Specific Plan. **The project is consistent with this provision.**
Circulation – Bicycle Circulation			
C-21	Bicycle routes shall emphasize paths separate from vehicle traffic to the maximum extent feasible, but shall also include bicycle lanes within public streets.		Bike lanes are proposed on collector streets. **The project is consistent with this provision.**
C-22	Bike lanes and paths shall be designed and maintained to improve bicycling safety, and convenience, and encourage people to use bicycles to commute to work or school.		Over 4 miles of Class II bike lanes are planned. Bicycles will also be permitted on the Hillside Trail and Linear Park Trail. **The project is consistent with this provision.**
C-25	New development shall provide bike lanes and paths, secure bicycle storage and parking facilities.	Section 2.11 policy j	**Project consistent.** As proposed, the project includes over 4 miles of Class II bike lanes within the project area. Future

Table 4.9-2 Project Consistency with Relevant City of Soledad General Plan Land Use Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Consistency**
			development within the commercial and village residential areas will be required to provide additional bike facilities, including storage racks, consistent with this requirement
Circulation – Pedestrian Circulation			
C-27	The City shall complete a continuous network of sidewalks and separated pedestrian paths connecting housing areas with major activity centers and with trails leading into City and county open space areas.		Over 15 miles of separated sidewalks are planned. These sidewalks will connect housing areas to major activity centers such as parks, open space, commercial, and civic uses. **The project is consistent with this provision.**
C-28	New commercial development and development in Specific Plan areas shall provide sidewalks and pedestrian paths consistent with applicable State, federal and local plans, programs and standards.		Figure 2-7 of the Miravale III Specific Plan illustrates the location of pedestrian amenities such as sidewalks and pedestrian paths. The Gateway Commercial Center is intended to provide the same. **The project is consistent with this provision.**
Parks & Recreation – Parks			
PR-1	The City will acquire future park and recreation land and facilities by: a. Requiring park dedications from future residential subdivisions at the rate of one acre per 1,000 population anticipated in the project; b. Requiring payment of a park impact fee, or requiring the dedication of land and improvements in-lieu of fees, from all new development; c. Cooperating with Monterey County to acquire land for a new regional park in the Soledad planning area; d. Acquiring parkland near existing or potential public park or recreation sites, or near quasi- public or private sites that have a good opportunity for a joint use agreement. Acquired parkland should be contiguous to proposed or existing park and recreation facilities or provide a logical connection. e. Pursuing joint use agreements with public and private schools, other public government agencies, private park and recreation providers, and institutions with potential parkland to make existing or proposed park and recreation facilities available to the community on an extended basis.	4.1.2 policy 3	**The project, as mitigated, is consistent with this policy.** The proposed project, consistent with the requirements of this policy, provides park and recreational areas within the project area. a. As currently proposed, the project includes approximately 45.60 acres of parkland, including 24.27 acres of parkland to be provided in conjunction with the development of the multi-family Village Residential areas. In addition, the proposed project also includes an approximately 159 acre golf course and approximately 62 acres of open space. Mitigation 4.12-6, as revised herein, requires the dedication of improved parkland at the ratio of 5 acres/1,000 new residents. b. The proposed project will be required to provide improvements or pay park impact fees, in addition to the dedication of land. c. Not applicable. d. Parks and recreational facilities are located throughout the proposed development and several facilities are planned adjacent to educational facilities. e. A joint use agreement may be established between the

Table 4.9-2 Project Consistency with Relevant City of Soledad General Plan Land Use Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Consistency**
			City and the School District for shared use of school recreational facilities.
Parks & Recreation – Trails			
PR-10	The City should provide a pedestrian network within the City Limits. The system should: a. Accommodate pedestrians and bicycles. b. Connect residential neighborhoods with: 1) Soledad's downtown, 2) schools, 3) City park and recreation facilities, and 4) regional trails.		The Specific Plan provides both bike lanes and pedestrian sidewalks. All parks within the Plan Area have pedestrian accesses logically located in key areas. Signage may be provided throughout the Plan area to guide bicyclist toward trails, parks and other points of interest. **The project is consistent with this provision.**
Parks & Recreation – Acquisition & Development			
PR-16	Parks shall be designed to be compatible with the neighborhoods in which they are located, and shall provide security and privacy to adjoining properties. Where necessary, buffers shall be provided between park and recreation lands and adjacent development to provide privacy and a physical separation between uses.[4]		Village 1 Park and Z Street Park are planned to be joint use facilities with the adjacent elementary schools. These parks will be lit to ensure security. I Loop Park and Crest St. Park are surrounded by residences which will provide "eyes on the park." Lighting will be provided at parks. **The project is consistent with this provision.**
Parks & Recreation – Management			
PR-24	New development shall be required to add to proposed or existing park and recreation projects where legally feasible. Public or private development shall provide, as appropriate and legally feasible: 1) a buffer between proposed development and existing park, recreation and/or open space parcels to minimize conflicts between development and existing facilities; and 2) gates, fences, or other deterrents when such facilities are deemed necessary to discourage prohibited or non-compatible uses from entering park, recreation or open space lands.	4.1.2 policy 12	The plan area is not adjacent to existing park and recreation facilities. Where new parks are proposed fencing will be provided as a component of the residential development. A 100' foot buffer will be provided between structures and the hillside open space area. **The project is consistent with this provision.**
PR-25	New development shall not adversely impact adjacent park, recreation or open space lands.	4.1.2 policy 12	There are no park or recreation lands adjacent to the Plan Area. A 100' foot buffer will be provided between structures and the hillside open space area. **The project is consistent with this provision.**

[4] Buffers may include setbacks, landscaping, fencing, and/or dramatic breaks or changes in topography.

Table 4.9-2 Project Consistency with Relevant City of Soledad General Plan Land Use Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Consistency**
Parks & Recreation – Funding			
PR-33	New development shall be required where legally feasible to provide its fair share of public park and recreation opportunities. New development within the City shall be required to provide park and recreation lands or facilities consistent with this Element. Conditions placed on new development shall be reasonable and consistent with the nature and extent of such development plans. The City shall require the dedication and improvement of park land even in circumstances where the total cost to improve such parkland exceeds the value of the corresponding development impact fee.	4.1.2 policy 2	**Project consistent with mitigation.** As identified in **Section 4.12 Public Services,** the proposed project, as mitigated, will provide approximately 78 ~~45.60~~ acres of improved parkland consistent with existing General Plan policies; see Mitigation 4.12-6, as revised in this FEIR. ~~as well as related provisions contained in the Miravale III Specific Plan~~. In addition, the proposed project also includes approximately 62 acres of open space and a 159 acre golf course.
Public Services & Facilities – Services & Facilities			
S-1	The City shall ensure through the development review process that adequate public facilities and services are available to serve new development. New development shall not be allowed until adequate public services and facilities to serve such development are provided. Where existing facilities are inadequate, new development may only be approved when the following conditions are met: a. The developer and/or City can demonstrate that all necessary public facilities will be adequately financed and installed in time (through fees or other means); and b. The facilities improvements are consistent with applicable facility plans approved by the City or other agencies in which the City is a participant.		Improvements for the project infrastructure must be in compliance with the adopted City wide Urban Water Management Plan, Water Master Plan, project Water Supply Assessment and Written Verification of Supply, Long-Term Wastewater Management Plan, and other facility related planning documents. As proposed and with mitigation, adequate public services are available to serve the proposed project. Final design of project infrastructure will be required prior to the recordation of the final map and the City of Soledad will be responsible for insuring that project infrastructure is consistent with applicable City Standards. **The project is consistent with this provision.**
S-2	The City shall plan for the expansion of needed water and sewer infrastructure including, but not limited to, the expansion of water production, storage and distribution facilities, the expansion of wastewater collection and treatment capacity, and storm drainage facility expansion.		Adequate public services are available to meet project generated demands assuming project mitigation. Final infrastructure plans will be reviewed by the City of Soledad prior to the recordation of the final map to insure that infrastructure sizing adheres to City requirements. For more information regarding project specifics, please refer to **Section 4.14 Utilities and Service Systems.**
S-3	Public facilities, such as wells, pumps, tanks, and yards shall be located and designed so that noise, light, odors, and appearances		**Project consistent.** Future development of project infrastructure, including wells, pumps, tanks, and similar

Table 4.9-2 Project Consistency with Relevant City of Soledad General Plan Land Use Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Consistency**
	do not adversely affect nearby land uses.		public facilities would be required to be built in conformance with this policy.
Public Services & Facilities – Funding			
S-4	Where new development requires the construction of new public facilities, the new development shall pay its fair share of the construction. Where necessary, the City shall require the dedication of land within newly developing areas for public facilities.		**Project consistent <u>with mitigation</u>.** The proposed project, as mitigated, would provide adequate public facilities in order to accommodate project demand. More specifically, a site for fire and police facilities has been integrated into the plan area <u>although it may need to be enlarged to meet facility needs</u>. School sites have also been integrated and coordinated with the School District; <u>however, additional sites are required to serve the projected student population.</u> Park sites, open space trails, roads, and the golf course will be developed as a part of this plan.
S-5	The City shall require that new development pay its fair share of the cost of all existing facilities it uses based on the demand for these facilities attributable to the new development; exceptions may be made when new development provides alternative sources of funding or equipment to offset any shortfall in revenues.		**Project consistent.** Development of the proposed project would be required to submit payment of all impact fees consistent with current adopted City provision. Fore more information, please refer to **Section 4.12 Public Services** and **Section 4.14 Utilities and Service Systems.**
Public Services & Facilities – Water			
S-8	The City shall promote the efficient use of water and reduced water demand by: a. Requiring water-conserving design and equipment in new construction; b. Encouraging water-conserving landscaping and other conservation measures; c. Encouraging the retrofitting of existing fixtures with water-conserving fixtures.		**Project consistent.** All project wastewater would be treated at a wastewater treatment plant located on the southwest corner of the project area. Recycled wastewater would subsequently be used for irrigation purposes, including open spaces area, front yards, and golf course areas. Final infrastructure plans will be reviewed by the City of Soledad prior to the recordation of the final map to insure that infrastructure sizing adheres to City requirements. For more information regarding project specifics, please refer to **Section 4.14 Utilities and Service Systems.**
S-10	The City will manage the increase in water demand from new development to help insure groundwater resources are not overdrafted. The City will work with Monterey County and public and private water entities to plan for the efficient, long term management of groundwater resources.		**Project consistent.** As identified in the City Water Master Plan and the Urban Water Management Plan adequate water is available to serve the proposed development. Moreover, the WSA further identifies that adequate water exists to serve the proposed development

Table 4.9-2 Project Consistency with Relevant City of Soledad General Plan Land Use Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Consistency**
S-11	Gravity flow for sewer and water service shall be employed wherever feasible.		**Project consistent.** Gravity flow for sewer and water services will be employed where feasible. Final design of project infrastructure will be required prior to the recordation of the final map and will be subject to the review and approval of the City.
Public Services & Facilities – Drainage			
S-14	The City shall strive to improve the quality of urban stormwater runoff and quality of groundwater recharge through the use of appropriate mitigation measures including, but not limited to, infiltration/sedimentation basins, oil/grit separators, and other management practices, including storm water retention.		~~**Project consistent.**~~ **The project, as mitigated, is consistent with this policy.** As identified in **Section 4. Hydrology and Water Quality** mitigation measures have been incorporated to ensure that project-impacts would be reduced to a less-than-significant level. These measures have been incorporated to ensure that project development is consistent with the City's adopted Storm Drain Master Plan.
S-15	The City shall require new development to adequately mitigate increases in stormwater peak flows and/or volume. Mitigation measures shall take into consideration impacts on adjoining properties and impacts on groundwater recharge related to existing and proposed water wells.		~~**Project consistent.**~~ **The project, as mitigated, is consistent with this policy.** As identified in **Section 4. Hydrology and Water Quality** mitigation measures have been incorporated to ensure that project-impacts would be reduced to a less-than-significant level. These measures have been incorporated to ensure that project development is consistent with the City's adopted Storm Drain Master Plan.
S-16	The City shall encourage project designs that minimize drainage concentrations and impervious coverage and maintain, to the extent feasible, natural site drainage conditions. Drainage onto adjacent properties shall be restricted to pre-project levels minus any runoff from the area to be developed.		~~**Project consistent.**~~ **The project, as mitigated, is consistent with this requirement.** As identified in **Section 4.8 Hydrology and Water Quality** project-specific mitigation measures have been incorporated to ensure that project development is consistent with the City's adopted Storm Drain Master Plan and other relevant facility planning documents.
S-17	The City shall require projects to allocate land as necessary for the purpose of retaining flows and/or for the incorporation of mitigation measures for water quality and supply impacts related to urban runoff.		~~**Project consistent.**~~ **The project, as mitigated, is consistent with this requirement.** Mitigation measures have been incorporated to address water quality and urban runoff concerns. For more information please refer to **Section 4.8 Hydrology and Water Quality.**
S-19	Engineered drainage plans shall be required for all development projects. Engineered drainage plans shall incorporate a collection and treatment system for stormwater runoff consistent with applicable federal and State laws.		**Project consistent.** As a standard condition of approval the project applicant will be required to submit an engineered drainage plan consistent with the City's adopted Stormwater Drainage Master Plan.

Table 4.9-2 Project Consistency with Relevant City of Soledad General Plan Land Use Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Consistency**
Public Services & Facilities – Schools			
S-20	The City will work cooperatively with the Soledad Unified School District to monitor housing, population and school enrollment trends and in planning for future school facility needs. The City shall assist the District in locating new school sites.		**Project consistent.** The City of Soledad is currently working with the School District to identify a future high school site within the City of Soledad. Per the School District's comment letter, a second high school will be needed to serve the project's projected student population. For more information, please see **Section 4.12 Public Services**.
S-21	The siting of new schools shall be coordinated with the City's Circulation Element to ensure that traffic conflicts are avoided, the safety of students is addressed and roadway function is not reduced, including provisions for off street student drop-off/pick up.		The two elementary schools have been located along collector and local streets in order to provide safe student drop-off/pick up locations. All new school facilities provided in conjunction with the proposed project would be required to adhere to this policy. **The project is consistent with this provision.**
S-22	The City will work closely with the school district to secure adequate funding for new school facilities, and where legally feasible, shall provide a mechanism which requires development projects to mitigate the cost of providing school facilities needed to serve such development, consistent with relevant provisions of State law.		**Project consistent.** As identified in **Section 4.12 Public Services** the project applicant/developer will be required to submit payment of a school impact fee for each type of development within the project area.
S-23	The City, to the extent feasible, shall ensure that new school facilities are constructed and operating prior to the occupation of residences which the schools are intended to serve.		**The project, as mitigated, is consistent with this policy.** The City is currently in the process of coordinating with the School District regarding the timing of new school facilities. In addition, all new facilities provided as part of the proposed project would be required to adhere to this policy.
Public Services & Facilities – Solid Waste			
S-27	The City shall require that all new development complies with applicable provisions of the Monterey County Integrated Waste Management Plan.		**Project consistent with mitigation.** As requested by the Salinas Valley Solid Waste Authority, project-specific mitigation measures have been identified in order to insure that construction generated waste is recycled to the greatest extent possible. For more information, please see **Section 4.14 Utilities and Service Systems.**
Public Services & Facilities – Police Protection			
S-29	The City shall strive to achieve and maintain a ratio of a minimum of 1 police officer per 1,000 residents.		**Project consistent with mitigation.** In order to maintain the desired ratio of police officers, development of the proposed project will be required to fund a fully operational police sub-station within the project site through the payment of

Table 4.9-2 Project Consistency with Relevant City of Soledad General Plan Land Use Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Consistency**
			development impact fees. <u>This sub-station, as required pursuant to Mitigation Measure 4.12-1, must be operational prior to the construction of Phase 2.</u> Please see **Section 4.12 Public Services** for further information.
S-30	The City shall strive to achieve and maintain emergency response time to a maximum of 5 minutes for police emergencies.		**Project consistent.** As identified above, the proposed project includes a site for the future location of a police substation, which the applicant/developer will be responsible for funding. The construction of a substation in this location will insure that response times will be within this timeframe.
S-32	The City shall require new development to pay its fair share of providing or funding facilities that, at a minimum, achieve and maintain the above police protection standards.		**Project consistent.** As identified in **Section 4.12 Public Services** the project applicant/developer will be required to submit payment of all applicable fees in order to maintain the police protection standards enumerated above.
Public Services & Facilities – Fire Protection			
S-36	The City shall strive to achieve and maintain an emergency response time of 5 minutes or less for fire emergencies over 90% of the City.		**Project consistent <u>as mitigated.</u>** The proposed project, as mitigated, contains measures to in order that adequate public facilities are provided to ensure that emergency response time are within the established target range. More specifically, project development would result in the construction of both a police and fire substation within the project area.
S-37	The City shall require new development to pay its fair share of providing or funding facilities that, at a minimum, achieve and maintain the fire protection standards identified in Policies S-35 and S-36.		**Project consistent.** The project applicant/developer will be required to submit payment of fees in order to insure that facilities are adequately funded. For more information, please refer to **Section 4.12 Public Services.**
S-38	The City shall ensure that all proposed developments are reviewed for compliance with fire safety standards per the Uniform Fire Code and other City standards and ordinances.		**Project consistent.** All new development will be reviewed by the City for consistency with fire safety standards contained in the Uniform Building Code, as well as, other City standards and ordinances.
S-39	New non-residential development and non-residential additions of over 100 square feet of habitable space shall provide fire sprinklers in accordance with City standards, and as determined by the Fire Marshal. New residential development shall be provided with fire sprinklers unless the developer provides studies that prove the standard identified in Policy S-35 is not negatively affected.		**Project consistent.** Future buildout of the project site will be required to adhere to these standards.

Table 4.9-2 Project Consistency with Relevant City of Soledad General Plan Land Use Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Consistency**
Conservation / Open Space – Agricultural Resources			
C/OS-1	The City shall discourage "leapfrog" development and development in peninsulas extending into agricultural lands to avoid adverse effects on agricultural operations.		The project site is located directly north of existing city limits and the proposed project will not adversely affect surrounding agricultural operations. Project site includes Williamson Act property which will remain in open space/ag use per the contract until cancellation date (approximately ~~18 years~~ 2026), unless an earlier contract termination date is approved by the County and State.. **The project is consistent with this provision.**
C/OS-2	The City shall retain the agricultural land use designation on lands within its planning area until the land is needed for urban development.		**Project consistent.** The project site is currently located within the County of Monterey and is zoned for agricultural use. The subject site, however, is designated within the City of Soledad General Plan as a future expansion area to accommodate projected growth as envisioned under the 2005 General Plan. Upon annexation, the subject site would be appropriately zoned for commercial and residential uses consistent with the Miravale III Specific Plan except for the Williamson Act parcel which would be zoned Urban Reserve..
C/OS-3	The City shall ensure that new development and public infrastructure projects do not encourage expansion of urban uses outside the general plan area into areas designated *Agriculture* by the Monterey County General Plan.		The project site is located within expansion areas as designated in the Land Use Diagram of the General Plan. Williamson Act property will remain in open space/ag use per the contract until cancellation date. **The project is consistent with this provision.**
C/OS-4	The City shall support the agricultural economy by encouraging the location of agricultural support industries in the City, establishing and promoting marketing of local farm products, and providing its regional fair share of adequate housing to meet the needs of agricultural labor.		According to the Specific Plan, the proposed project will provide ~~2,276~~ 1,229 units of affordable ~~and workforce~~ housing. ~~which will exceed City's regional fair share of adequate housing units (799 units) to meet the needs of agricultural labor.~~ Based on the analysis contained in this EIR, the proposed project would not provide the required amount of affordable housing units as stipulated in the City's Housing Element. Mitigation, however, has been identified in the EIR to ensure that the proposed project would provide the required number of affordable units; please see Mitigation Measures 4.11-3 and 4.11-4. **The project, as mitigated, is consistent with this provision.**

Table 4.9-2 Project Consistency with Relevant City of Soledad General Plan Land Use Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Consistency**
C/OS-5	The City shall require a right-to-farm condition to all future subdivision maps adjacent to farmlands.		**Project consistent <u>as mitigated</u>.** The proposed project, as mitigated, contains right-to-farm measures. Please see **Section 4.2 Agricultural Resources** for further discussion.
C/OS-6	The City shall require development within or adjacent to designated agricultural areas to minimize conflicts with adjacent agricultural uses.		<u>The\proposed project, with mitigation as provided in this FEIR, will provide a minimum</u> 100' wide ~~linear parkway~~ <u>agricultural buffer, with physical barriers,</u> on the western border of the Plan Area <u>and 50 foot buffers on the project's northerly and easterly boundaries</u> **The project, <u>as mitigated</u>, is consistent with this provision.**
Conservation / Open Space – Scenic Resources			
C/OS-7	The City shall require new public and private development to protect scenic resources by: a. Prohibiting structures along ridgelines, steep slopes (above the 400 foot elevation contour), or in other highly visible locations unless no practical alternative is available, or such a location is necessary to protect public health and safety; b. Utilizing natural landforms and vegetation for screening structures, access roads, building foundations, and cut and fill slopes; c. Requiring landscaping which provides a landscape transition between developed areas and adjacent open space or undeveloped areas; and is compatible with the scenic resource being protected; d. Incorporating sound Soil Conservation Service practices and minimizing land alterations. Land alterations shall be minimized by: keeping cuts and fills to a minimum; limiting grading to the smallest practical area of land; limiting land exposure to the shortest practical amount of time; replanting graded areas to insure establishment of plant cover before the next rainy season; and creating grading contours that blend with the natural contours on site or look like contours that would naturally occur; e. Designing roads, parking, and utilities to minimize visual impacts. If possible, utilities shall be underground. Roadways and parking shall fit the natural terrain; and	4.1.2 policy 12	**Project inconsistent.** Although the proposed project includes several General Plan amendments to facilitate project development, the project, as currently proposed, would result in significant and unavoidable visual impacts due to development above the 400' elevation contour. Therefore, the proposed project is considered to be inconsistent with the provisions of this policy. It is important to note, however, that despite the inconsistencies, the Miravale III Specific Plan identifies specific measures and guidelines for development within areas of visual sensitivity.

Table 4.9-2 Project Consistency with Relevant City of Soledad General Plan Land Use Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Consistency**
	f. Designing projects to fit the site's scale and character. Structures shall be designed and located so: they do not silhouette against ridgelines, or hilltops; roof lines and vertical architectural features blend with and do not detract from the natural background or ridge outline; residential density and massing is decreased with increased elevation where it would mar the scenic quality of the scenic resource; they fit the natural terrain, and they utilize building materials, colors, and textures that blend with the natural landscape and avoid the creation of high-contrast situations.		
Conservation / Open Space – Hillside Protection			
C/OS-8	The City shall require public or private development to: a. The City shall designate hillside areas above the 400 foot elevation contour as *Open Space/Grazing, Public Facility* (parkland) or *Agricultur*e. b. Locate primary structures, accessory structures, paving, and grading at the base of a hill (generally that are below the 400 foot contour or 15 percent slope) unless: (1) no practicable alternative is available, (2) the location on a greater slope or at a greater elevation provides more aesthetic quality, or (3) the location is necessary to protect public health and safety. c. Utilize design, construction, and maintenance techniques that: (1) preserve and enhance the hillsides; (2) ensure that development near or on portions of a hill do not cause, or make worse natural hazards (such as erosion, sedimentation, fire, or water quality concerns); (3) include erosion and sediment control practices including temporary vegetation sufficient to stabilize disturbed areas; (4) minimize risk to life and property from slope failure, landslides, and flooding; (5) maintain the character and visual quality of the adjacent hillside. d. Incorporate recreation and public access on or near hillsides consistent with this Element.		**Project inconsistent.** As identified above, the project, as proposed, consists of several General Plan amendments pertaining to the development above the 400' elevation contour. Despite the incorporation of General Plan amendments to facilitate development within the project area, the proposed project would nevertheless conflict with this policy as significant and unavoidable visual impacts would occur due to project development. Moreover, as discussed previously, this policy was adopted in order to mitigate potential adverse impacts associated with buildout of the General Plan.
C/OS-9	The City shall support the preservation and enhancement of		~~**Project Consistent.**~~ The Hillside Development Standards

Table 4.9-2 Project Consistency with Relevant City of Soledad General Plan Land Use Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Consistency**
	natural land forms, natural vegetation, and natural resources to the maximum extent feasible.		Section II in Appendix A of the Miravale III Specific Plan states that the project development will: • Maintain the existing open rural character, • Be in harmony with the natural setting, • Conserve land forms and other features of the natural landscape, • Preserve wildlife habitat and movement corridors, • Protect and preserve viewsheds of the mountains, and • Promote the establishment of native trees and shrubs. the project, as proposed, is inconsistent with this policy: grading for roads on steeper slopes and ridgeline development in the project area would not conserve landforms, nor protect the viewshed, and would significantly impact wildlife habitat; Although mitigation measures identified in this EIR would reduce a number of related impacts, the proposed Specific Plan would nevertheless conflict with this policy as significant and unavoidable visual and biological impacts would occur as a result of hillside and ridgeline development. **The proposed project is therefore inconsistent with this provision.**
Conservation / Open Space – Plant, Animal & Related Habitat Protection			
C/OS-10	The City shall support State and federal laws and policies to preserve populations of rare, threatened, and endangered species by ensuring development does not adversely affect such species in a significant way or by fully mitigating adverse effects.		**Project consistent.** As identified in **Section 4.14 Biological Resources** the project will provide mitigation to limit adverse impacts to rare, threatened, and endangered species. In addition, project development will be required to adhere to all applicable State and Federal requirements pertaining to biological resources within the project area. Compliance with existing laws, in addition to the incorporation of project specific mitigation insures that the proposed project is consistent with this provision.
C/OS-11	The City shall require that significant natural, open space, and cultural resources be identified in advance of development and incorporated into site-specific development project design to the		**The project, as mitigated, is consistent with this policy.** In addition to providing ~~45.60 acres of~~ improved parkland at the rate of 5 acres per 1,000 residents per Mitigation Measure

Table 4.9-2 Project Consistency with Relevant City of Soledad General Plan Land Use Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Consistency**
	extent feasible.		4.12-6 as revised by this FEIR, the proposed project also ~~entails~~ includes 62 acres of natural open space. The project, as mitigated, also includes provisions to insure that impacts to historically significant structures within the project area are minimized to the extent feasible. For more information, please refer to **Section 45 Cultural Resources** and **Section 4.12 Public Services.**
C/OS-12	The City shall require developers to use native and compatible non-native species, especially drought-tolerant species, to the extent possible in fulfilling landscaping requirements imposed as conditions of project approvals or project mitigations.		The proposed project will be required to comply with this policy. The analysis contained in this EIR is a programmatic level review of the proposed Specific Plan. Future applications for physical construction within the Specific Plan will be required to comply with this requirement. In addition, mitigation identified in this EIR requires that landscaping utilize native plant materials wherever possible. All future landscaping and replanting plans will be required to comply with the requirements of this measure. Plant palettes will be developed in conjunction with the vesting tentative map and subsequent development applications. **The project as mitigated is consistent with this provision.**
Conservation / Open Space – Air Quality			
C/OS-13	The City will encourage the improvement of air quality in Soledad and in the region by implementing the measures described in the Monterey County Air Quality Management Plan. Such measures include, but are not limited to, measures to reduce dependence on the automobile and encourage the use of alternate modes of transportation such as buses, bicycles and walking.		The Specific Plan Area contributes to improving air quality by providing non motorized amenities such as pedestrian and bicycle trails, bicycle lanes, and transit stops. **The project is consistent with this provision.**
C/OS-14	The City shall, to the extent feasible, separate sensitive land uses from significant sources of air pollution.		No significant sources of air pollution are proposed as part of this project or in the project vicinity. **The project is consistent with this provision.**
C/OS-16	The City shall promote and encourage the use of alternate modes of transportation by incorporating public transit, bicycle, and pedestrian modes in City transportation planning and by requiring new development to provide adequate pedestrian and bikeway facilities.		The Miravale III Specific Plan provides 3 transit stops, 4 + miles of bicycle lanes, and over 20 miles of pedestrian amenities such as separated sidewalks and trails. **The project is consistent with this provision.**
Conservation / Open Space – Tree Preservation/Landscaping			

Table 4.9-2 Project Consistency with Relevant City of Soledad General Plan Land Use Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Consistency**
C/OS-17	When considering the approval of activities that result in the removal of mature trees, the following factors shall be considered: a. The size, age, health and species of tree(s) to be removed. b. Whether or not the removal of the tree(s) is necessary for the reasonable development and use of the site. c. Whether the tree(s) to be removed is (are) a native or introduced species.		**The project, as mitigated, is consistent with this policy.** As identified in **Section 4.4 Biological Resources** development of the proposed project would result in the removal of existing mature trees in order to accommodate project development. Mitigation has been incorporated in order to ensure consistency with this policy, in addition to minimizing potential impacts associated with tree removal.
C/OS-18	The City shall institute and promote a vigorous program of tree planting in new development areas and in older portions of the City to increase the number and density of tree cover.	See Section 2.13 Landscaping.	**Project consistent.** Final landscaping plans will be required for development within the specific plan area. As identified in the Specific Plan, numerous policies have been identified regarding the use of street trees and accent trees.
C/OS-19	When mature trees are removed to accommodate new development, they shall be replaced at a ratio of at least two new trees for every one tree removed, or such additional number and size of trees as considered appropriate by the reviewing body at the time of approval of such development.	See Section 2.13 Landscaping.	**The project, as mitigated, is consistent with this policy.** Development of the proposed project would result in the removal of several mature trees. As identified in **Section 4.4 Biological Resources,** the project applicant/developer will be responsible for preparing a Forest Management Plan that identifies replanting ratios consistent with the requires identified in this policy.
C/OS-21	Landscaping plans for new development incorporate water conservation methods and shall employ native varieties of plants that are drought tolerant.	See Section 2.13 Landscaping.	**Project consistent.** To the extent feasible all front yards and landscaped areas will be irrigated using recycled water.
Conservation / Open Space – Archaeological & Cultural Resources			
C/OS-23	If development of a site uncovers cultural resources, the recommendations of Appendix K of the Guidelines for Implementation of the California Environmental Quality Act (Public Resources Code Section 15000 et seq.) shall be followed for identification, documentation, and preservation of the resource.		This policy is included as mitigation during project construction. **The project, as mitigated, is consistent with this provision.**
C/OS-24	The City shall document and record data or information relevant to prehistoric and historic cultural resources which may be impacted by proposed development. The accumulation of such data shall act as a tool to assist decision-makers in determinations of the potential development effects to prehistoric		A single historic structure is located on the site and mitigation measures are identified in the EIR. The historic structure will be relocated from its current location. **The project, as mitigated, is consistent with this provision.**

Table 4.9-2 Project Consistency with Relevant City of Soledad General Plan Land Use Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Consistency**
	and historical resources located within the City.		
Conservation / Open Space – Mineral Resources			
C/OS-26	The City and County shall discourage urban uses adjacent to State-designated regional resource deposits if such uses would be incompatible with mining operations, or would restrict future extraction of significant mineral resources.		The project site is not located adjacent to State-designated regional resource deposits. **The project is consistent with this provision.**
Safety – Flood Hazards			
HZ-2	The City shall prohibit the construction of facilities essential for emergencies and large public assembly in the 100-year floodplain, unless the structure and access to the structure are free from flood inundation.		**Project consistent.** No emergency facilities are located within the 100-year floodplain.
HZ-4	The City shall manage flood prone areas consistent with the requirements of the Federal Emergency Management Agency (FEMA) and the Monterey County Water Resources Agency.		**Project consistent.** The proposed project is not located with an area that is prone to flooding as defined by the Federal Emergency Management Agency of the Monterey County Water Resources Agency.
Safety – Seismic Safety			
HZ-5	All new development shall satisfy the applicable requirements of the Uniform Building Code.		**Project consistent.** All new development within the Specific Plan will be required to adhere to all applicable requirements contained in the Uniform Building Code.
HZ-6	The City shall require the preparation of a soils engineering and geologic-seismic analysis prior to permitting development in areas prone to geologic or seismic hazards (ie, groundshaking, landslides, liquefaction, expansive soils).		**The project, as mitigated, is consistent with this policy.** A soils engineering and geological/seismic analysis was prepared for the project. Specific geological and geotechnical constraints were identified in these reports and incorporated as part of this EIR. In addition, mitigation has been incorporated requiring that final-design level plans be developed in accordance with individual project-specific geotechnical evaluations.
HZ-7	The City shall limit development in areas of steep or unstable slopes to minimize hazards by landslides or liquefaction.		**Project consistent.** The proposed project includes development above the 400 foot elevation contour. Due to the underlying geological unit, these areas have been identified as not being prone to liquefaction and/or landslide potential. Nevertheless, the proposed project includes specific Hillside Development Standards to insure that development within these areas would not be prone to geological hazards.
HZ-8	In landslide hazard areas, the City shall prohibit alteration of land in a manner that could increase the hazard, including		**Project consistent.** See response above.

Table 4.9-2 Project Consistency with Relevant City of Soledad General Plan Land Use Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Consistency**
	concentration of water through drainage or irrigation systems; removal of vegetative cover; and steepening of slopes and undercutting the bases of slopes.		
Safety – Emergency Preparedness			
HZ-9	New development shall provide fire flow, emergency access and hydrants consistent with Fire Department requirements	Policy 5.2 - 7	All new development shall provide fire flow, emergency access and hydrants consistent with Fire Department Requirements. . **The project is consistent with this provision.**
HZ-12	The City will encourage site planning which helps reduce crime potential through appropriate lighting, access, ease of surveillance, and other features such as alarms and security systems as may be required by the police department.	Policy 5.2 - 8	All new development shall help to reduce crime potential through appropriate lighting, access, ease of surveillance, and other features such as alarms and security systems as may be required by the police department. . **The project is consistent with this provision.**
Noise			
N-1	The City shall not allow development of new noise-sensitive land uses where existing or ambient noise levels exceed those shown on Figure X-1, as measured immediately within the property line of the new development, unless effective noise mitigation measures have been incorporated into the development design to achieve the standards set by Figure X-1.		As identified is **Section 4.10 Noise**, effective noise mitigation measures have been incorporated to achieve standards in Table 4.10-1 of the City's Noise Element.
N-2	Where non-residential land uses are likely to generate noise levels exceeding those shown on Figure X-1 on adjacent or nearby existing or planned noise-sensitive uses, the City shall require preparation of an acoustical analysis as part of the environmental review process so that noise mitigation may be included in the project design.		**The project, as mitigated, is consistent with this policy.** An acoustical analysis has been prepared by Illingworth & Rodkin, Inc. and the mitigation measures identified in their report have been incorporated into this EIR. See **Section 4.10 Noise** for more information.
N-3	New residential development shall comply with State Noise Insulation Standards.		**Project consistent.** Development of the proposed project will be required to comply with all applicable State Noise Insulation Standards.
N-4	New commercial and industrial development shall incorporate design elements to minimize the noise impact when residential neighborhoods are nearby.		A conceptual site plan has been prepared for Village 4. Noise reduction techniques include providing parking lots interior to the center and the provision of a landscaped sound wall where adjacent to residential uses. The City should consider limiting delivery times to mid-day and restrict truck idling times.
N-5	Where noise mitigation measures are required to achieve the standards described in Figure X-2, the emphasis of such		**Project consistent with mitigation.** As identified in **Section 4.10 Noise** mitigation measures have been identified in order to

Table 4.9-2 Project Consistency with Relevant City of Soledad General Plan Land Use Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Consistency**
	measures shall be placed on site planning and project design. The use of noise barriers shall be considered as a means of achieving the noise standards only after all other practical design-related mitigation measures have been integrated into the project.		insure project-related noise impacts are reduced to the extent feasible. While some noise sensitive land uses would be expose to noise in excess of applicable standards, mitigation measures emphasize site planning and project design principles, including the use of building materials to minimize noise related impacts.

***Under Population and Housing, Section 4.11, Pages 4.11-9 through 4.11-10, Mitigation Measure 4.11-2, is revised as follows*:**

"4-11.2 Implement General Plan policies L-2 to L-7 and other applicable policies for phased development and population growth in the project and expansion areas. General Plan policies L-2 to L-7, (below) identify expansion area requirements and applicable policies for annexation of these areas:

L-2 Further annexations to the City may occur when a) a substantial portion of the development capacity within the existing city limits has been developed, b) a substantial public benefit can be realized through the annexation, such as the provision of public open space, additional parkland, or the protection of scenic vistas, or natural resources, or c) a special type of use is proposed that cannot be practically accommodated in the existing city limits, and d) the project can be found to provide a financial benefit to the City or to be fiscally neutral. The Planning Commission shall review the merits of a request for annexation based on these criteria, and make a recommendation to the City Council.

L-3 A specific plan shall be required for all annexations and development of properties designated *Expansion Area*. Specific plans shall be prepared in accordance with the standards provided in Appendix B of the General Plan.

L-4 The City shall promote patterns of development that allow for the efficient and timely extension of infrastructure and services.

L-5 New development shall not be allowed unless adequate public services are available to serve such new development, or that can be provided at the time of development.

L-6 New development shall pay its fair share of providing additional public services needed to accommodate such development.

L-7 Master plans for sewer, water, roads, drainage and other public improvements shall be required for new development on large undeveloped parcels and may be included in the specific plan required by policy L-3, and as determined by the City.

The required fiscal analysis shall be completed by a qualified, independent consultant, utilizing realistic and verifiable assumptions concerning investment earnings, interest rates, property taxes, transient occupancy tax, projected home/property sale prices and sales rates, etc."

***Under Public Services and Recreation, Section 4.12, Page 4.12-12, Mitigation Measure 4.12-1, is revised as follows*:**

"4.12-1 Prior to the initiation of construction for Phase 2 of the proposed development, the proposed fire and police facilities located on West Street shall be constructed and operational. The project applicant shall also be responsible for providing the necessary funding to the City of Soledad or establishing the appropriate funding mechanism to ensure the provision of adequate police and fire staffing to meet the demands of the proposed project, as determined by the City of Soledad. Prior to the issuance of any building permit for new residential and commercial development in Phase 2, the project applicant shall obtain written documentation from the Soledad Fire and Police Departments indicating that the fire and police substations are operational and adequately staffed to meet the needs of the proposed project, subject to the review and approval of the City of Soledad. This mitigation measure shall not be construed as prohibiting

the implementation of infrastructure necessary to serve the proposed facility or the needs of Phase 2 of the proposed project."

Under Public Services and Recreation, Section 4.12, Page 4.14, Mitigation Measure 4.12-4, is revised as follows:

4.12-4 "Prior to project approval, the project applicant shall submit evidence, including a revised Specific Plan and tentative map, demonstrating that an additional two elementary school sites of sufficient size and a 40-acre high school site will be designated within the project boundaries to meet project demands, subject to the review and approval of the City of Soledad and the Soledad Unified School District. The 40-acre high school site shall be operational prior to the issuance of any certificate of occupancy for Phase II of the proposed project, unless otherwise approved by the City of Soledad and the Soledad Unified School District[5] In lieu of providing said high school facilities on-site, the project shall submit payment of its proportionate share of funding towards site acquisition and construction of new school facilities, prior to the recordation of any final map. Pro-rata payment of the cost of providing a second high school shall not be construed as waiver of the previous requirement that adequate high school capacity be available to meet project demands prior to occupancy of any housing constructed in Phase II of the project. Pro-rata payment of the cost of providing a second high school shall not be construed as waiver of the previous requirement that adequate high school capacity be available to meet project demands prior to occupancy of any housing constructed in Phase II of the project."

Under Public Services and Recreation, Section 4.12, Page 4.12-14 through 4.12-15, are revised as follows:

"Parks and Recreation

The project proposes to provide public park lands to serve the recreational needs of the proposed development and surrounding community. As identified in the Miravale III Specific Plan, an array of active and passive recreational opportunities would be provided in conjunction with project development, including an approximately 159-acre golf course, four pocket parks totaling 11.52 acres, 61.90 acres of open space, and approximately 4.22 miles of class II Bike Lanes within the Specific Plan area. Moreover, project development includes 1.90 acres of park connections, 5.96 acres of trails, and a 1.95-acre linear park located along the western boundary of the project site. The proposed linear park also serves as an agricultural buffer.

According to General Plan Policy PR-1, new residential subdivisions are required to provide parkland at a ratio of three (3) acres per 1,000 residents anticipated as part of new subdivision development. Appendix B of the City's General Plan, however, provides a higher park dedication standard for Expansion Areas subject to Specific Plans. As identified in Appendix B, the minimum parkland ratio for a Specific Plan is five (5) acres per 1,000 residents. Buildout of the proposed Specific Plan is anticipated to provide housing for approximately 15,201 new persons within the City of Soledad. As such, project development would be required to provide a minimum of ~~45~~ 76 acres of improved parkland. As proposed, the project consists of 11.52 acres of improved parks, 1.90 acres of park connections, 5.96 acres of trails, and a 1.95 linear park/agricultural buffer totaling 21.33 acres of improved parkland. For the purpose of this analysis, the golf course is not included as parkland because access would be restricted to persons with scheduled

[5] Alternatively, if additional school sites will not be provided in conjunction with project development, the project applicant shall obtain written documentation from the Soledad Unified School District demonstrating that adequate school facilities, including a 40-acre high school and two appropriately sized elementary ~~middle~~ schools, will be available within the City of Soledad to accommodate anticipated project demands. If, however, adequate capacity does not exist, development shall be restricted until such time that additional capacity is available to accommodate subsequent phases of development.

tee times and, therefore, would not be immediately available to area residents. Figure 4.12-2 provides a graphical representation of open space and parkland to be provided as part of project development.

According to the projected population figure identified in **4.11 Population and Housing**, which includes estimates for the buildout of the six Village areas, project development does not meet the minimum required parkland contribution. More specifically, the Specific Plan identifies that future park sites would be provided in conjunction with the development of the six Village areas. As no formal plans have been submitted for these areas, no formal park sites have been officially delineated within these areas of the project site. Therefore, additional park sites would be required as part of development of the Village areas consistent with the requirements of the Specific Plan. As these additional sites have not been officially designated at this time, the project does not meet the minimum required parkland contribution pursuant to the General Plan. This is considered a significant impact. ~~As identified in Table 4.12-3 above, it is estimated that~~ A minimum ~~24.27~~ 54.67 acres of parkland would be necessary in order to achieve the minimum required parkland contribution pursuant to General Plan requirements for future development within its Specific Plan areas. Implementation of project-specific mitigation identified below would ensure that future residents have adequate access to parkland consistent with City standards. Because all of the parks and recreation facilities necessitated by the project would be provided on the project site, the environmental impacts of constructing the parks and recreation facilities (e.g., dust and noise emitted during grading) are addressed in the relevant chapters of this EIR. Implementation of the following mitigation measure would not result in any new environmental impact beyond those identified elsewhere in this EIR.

Impact **As proposed, the project does not meet the minimum required parkland ratio of ~~three~~ five acres per 1,000 residents.** ***This would represent a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation measure.***

Mitigation

4.12-6 In order to ensure adequate improved parkland is provided as part of project development, the applicant shall submit detailed plans, including a revised Specific Plan and Tentative Map, demonstrating that adequate parkland ~~(3~~ 5 acres/1,000 residents) is designated within the project boundaries consistent with the requirements of Appendix B of the General Plan ~~and Miravale III Specific Plan dated June 2007~~, prior to project approval, subject to the review and approval of the City of Soledad. Prior to the recordation of each final map, the project applicant shall submit a comprehensive Park Master Plan to the City of Soledad for review and approval. This plan shall address park design and development consistent with the City's adopted Parks and Recreation Master Plan, along with maintenance, operation and financing components for each dedicated recreation parcel in that phase of development This plan shall also identify the appropriate types of improvements within each park parcel to meet the recreational needs of all age groups within that phase of the project."

Under Traffic and Circulation, Section 4.13, Page 4.13-11, "Freeway Ramp Analysis" is revised as follows by adding the following new paragraph:

" A more recent freeway ramp analysis was completed by OmniMeans for the City of Soledad in October of 2008 in connection with a Project Study Report for planned interchange improvements to the North Front Street ramps. The Omni Means analysis indicates that all freeway ramps analyzed currently operate at LOS C or better."

Under Traffic and Circulation, Section 4.13, Page 4.13-12 , Table 4.13-6, is revised as follows:

Note correction: Existing ramp operations for northbound Highway 101 from Moranda Road are operating at a Level of Service (LOS) "C" during a.m. peak hour, revised from LOS B as stated in the Draft EIR

Under Traffic and Circulation, Section 4.13, Page 4.13-14, is revised as follows:

"Traffic Impact Fees. The City's traffic impact fee (TIF) program was adopted in October 2007 by the City Council. The City TIF identifies fees per single-family unit and multi-family unit to be collected from proposed development and used towards identified improvements to the roadway system within and serving the City of Soledad.

Regional improvements cannot be completely funded by a single development. In lieu of one single project absorbing the total cost of freeway widening, a regional development impact fee program has been established for state highways and regional roads within Monterey County. The Transportation Agency for Monterey County (TAMC) implements the fee program based on the 2004 TAMC "Nexus Study for Regional Development Impact Fee." The TAMC fee is levied against new developments within local member jurisdictions of TAMC, including the City of Soledad. ~~At this time, however, the City of Soledad has not committed to collecting the TAMC fee. In order to address regional improvement, the City of Soledad has incorporated local TAMC improvements projects into their adopted TIF program. Therefore, the collection of impact fees as part of the City's TIF program will include regional improvements and will be in lieu of payment of an independent TAMC fees.~~ The City of Soledad adopted the TAMC Regional Development Impact Fee Program on June 4, 2008, thereby subjecting all new development in the City of Soledad to the regional impact fee. As a result, the proposed project will be subject to the TAMC Regional Development Impact Fee in order to mitigate project impacts to regional facilities such as Highway 101."

Under Traffic and Circulation, Section 4.13, beginning on Page 4.13-30, Mitigation Measure 4.13-1, Mitigation Measure 4.13-3 and Mitigation Measure 4.13-4 are revised as follows:

"4.13-1 Due to large traffic volumes and vehicle speeds, at-grade golf cart crossings shall not be permitted along streets classified as collectors or arterials unless at a traffic light. Prior to the issuance of any building and/or grading permit for development associated with the golf course facility, the project applicant shall submit detailed design-level plans demonstrating compliance with this measure, subject to the review and approval of the Director of Public Works. Improvements shall be constructed in accordance with this measure prior to the issuance of any certificate of occupancy or final permit for development associated with the golf course."

4.13-3 *San Vicente Road and Front Street:* Widen NB Front Street to two lanes, NB San Vicente Road to three lanes, add two EB left-turn lanes ~~lands~~ and a SB free-right-turn lane. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance in order to mitigate the impact at this location. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad. Alternatively the project can contribute its fair share towards the construction of the extension of Gabilan Drive to US 101. If this alternative is chosen local roadways shall be monitored annually to ensure that LOS levels are maintained in accordance with the City of Soledad's adopted standards until the extension is complete. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works.

4.13-4 *San Vicente and Gabilan Drive:* Signalize this intersection and add a second westbound left-turn lane ~~land~~, exclusive northbound right-turn lane, and southbound left-turn lane ~~land~~. SB San Vicente Road will need to be widened to accommodate the dual left-turn lanes from Gabilan. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance in order to mitigate the impact at this location. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad. Alternatively the project can contribute its fair share towards the construction of the extension of Gabilan Drive to US 101. If this alternative is chosen local roadways shall be monitored annually to ensure that LOS levels are maintained in accordance with the City of Soledad's adopted standards until the extension is complete. If this alternative is selected the project applicant shall submit payment of the projects fair share towards the construction of this improvement in accordance with the traffic impact fee in effect at the time of building permit issuance for each phase of the project. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works.

Under Traffic and Circulation, Section 4.13, Pages 4.13-35 through 4.13-36, are revised as follows:

"The identified freeway segment and interchange ramp improvements described below cannot be completely funded by a single development. In lieu of one single project absorbing the total cost of freeway widening, a regional development impact fee program has been established for state highways and regional roads within Monterey County. The Transportation Agency for Monterey County (TAMC) implements the fee program based on the 2004 TAMC "Nexus Study for Regional Development Impact Fee." The payment of fees is considered mitigation for impacts to freeway facilities by TAMC and the California Department of Transportation. ~~At this time, however, the City of Soledad has not committed to collecting the TAMC fee. In order to address regional improvement, the City of Soledad has incorporated local regional improvement projects into their adopted TIF program. Therefore, the collection of impact fees as part of the City's TIF program will include regional improvements and will be in lieu of payment of an independent TAMC fees.~~ The City of Soledad adopted the TAMC Regional Development Impact Fee Program on June 4, 2008, thereby subjecting all new development in the City of Soledad to the regional impact fee. As a result, the proposed project will be subject to the TAMC Regional Development Impact Fee in order to mitigate project impacts to regional facilities. Should the widening of the freeway and improvement of interchanges be deemed infeasible or not included as part of the fee program, the impact would be considered significant and unavoidable.

Regional Impacts

Impact **Based on the significance impact criteria, the project will have a significant impact on two freeway ramps and four freeway segments. Therefore, the project will have a significant impact on regional roadways.** ***With implementation of the mitigation identified below these significant impacts will be reduced to a less-than-significant level. However, should the proposed improvements be deemed infeasible or not part of the TAMC fee program, the impacts will be considered significant and unavoidable.***

4.13-10 Moranda Road and US 101 NB Ramps: Signalize the intersection and widen the NB US 101 on ramp to add a second NB left-turn lane. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact fees in effect at the time of building permit issuance, including the TAMC Regional Development Impact Fees pursuant to Chapter 3.56 of the Soledad Municipal Code, in order to

mitigate the impact at this location. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad. ~~Alternatively, the project can contribute its fair share towards the construction of the extension of Gabilan Drive to U.S. 101. If this alternative is chosen,~~ If the aforementioned interchange improvements are not implemented by the time required, the project could instead contribute its fair share towards the construction of the extension of Gabilan Drive to U.S. 101. Under this approach to mitigation, local roadways shall be monitored to ensure that LOS levels are maintained in accordance with the City of Soledad's adopted standards until the extension is complete. In addition, the US 101 interchange at Moranda Road/Front Street will require reconfiguration/reconstruction to provide more efficient access to the project site and north Soledad in general. ~~As this is a regional improvement, funding of at least part of the mitigation should be the responsibility of TAMC, and TAMC should include the improvement within its traffic impact fee. In this case, the project's payment of the City's adopted TIF fee, which includes regional improvements, would mitigate the project's regional impact at this location.~~ However, should the widening of the freeway and improvement of interchanges be deemed infeasible or not part of the fee program, the impact should be considered significant and unavoidable. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works.

4.13-11 *North Front Street and US 101 SB Ramps:* Signalize this intersection, widen southbound Front Street to two lanes and add a second lane on the off-ramp. In addition, the volume of vehicles exiting southbound US 101 at Front Street indicate the need for widening of Front Street, between US 101 and Moranda Road, to two lanes southbound and/or reconfiguration/reconstruction of the US 101 interchange at Moranda Road/Front Street to provide more efficient access to the project site and north Soledad in general. As this is a regional improvement, ~~funding of at least part of the mitigation should be the responsibility of TAMC, and TAMC should include the improvement within its traffic impact fee. In this case, the project's payment of the City's adopted TIF fee would mitigate the project's impact at this location~~ the project applicant shall contribute funding towards its implementation by submitting payment of the TAMC Regional Development Impact Fees, pursuant to Chapter 3.56 of the Soledad Municipal Code. However, should the widening of the freeway and improvement of interchanges be deemed infeasible or not part of the TAMC fee program, the impact should be considered significant and unavoidable. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the ~~City of Soledad~~ traffic impact fees in effect at the time of building permit issuance, including the Regional Development Transportation Impact Fees, in order to mitigate the impact at this location. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works.

4.13-12 The project applicant shall be required to pay towards the City's TIF program, which includes regional improvements, and shall also pay the City's adopted Regional Development Impact Fees established in Chapter 3.56 of the Municipal Code. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the Regional Development Impact Fee and City of Soledad traffic impact fees in effect at the time of building permit issuance in order to mitigate the impacts at identified ~~this~~ locations. The payment of fees is considered mitigation for project impacts to ~~freeway~~ highway and regional facilities. All fees shall be ~~paid prior to the issuance of any building permit for each phase of development and shall be~~ subject to the approval of the Director of Public Works. Should the widening of the freeway and improvement of interchanges be deemed infeasible or not part of the fee program, the impact should be considered significant and unavoidable."

Under Utilities and Service Systems, Section 4.14, Page 4.14-17, Mitigation Measures 4.14-5 and 4.14-7 are revised as follows:

"4.14-5 In order to ensure that the proposed wastewater treatment system is consistent with the applicable requirements of the Soledad Urban Water Management Plan, Long-Term Wastewater Management Plan, and Chapter 13.11 Recycled Water Service, the project applicant shall submit detailed design-level plans in accordance with ~~these~~ City requirements, prior to approval of the first Final Map ~~the issuance of any building and/or grading permit~~, subject to the review and approval of the City of Soledad Public Works Director.

4.14-7 In order to ensure that adequate wastewater treatment is available to accommodate each phase of project development, the treatment capacity for the onsite recycled water facility shall be increased to accommodate each phase of the project prior to the final approval of the first building permit or occupancy permit for each of the respective project phases as appropriate. Subject to the review and approval of the Director of Public Works, excess treatment capacity and related infrastructure shall be added to the plant and disposal facilities, as needed, for each phase of the project, to accommodate future increases in wastewater flow rates, based on estimates of future development. In addition, flows shall be metered and records of the flows shall be provided to the City ~~RWQCB~~ for review and approval. No building permits shall be issued ~~issuance~~ unless sufficient capacity exists to accommodate additional phases of development"

Under Utilities and Service Systems, Section 4.14, Page 4.14-18, Mitigation Measure 4.14-11 is revised as follows:

"4.14-11 The project would be required to construct new infrastructure that is of adequate capacity to serve the project's projected demand ~~in addition to the wastewater provider's existing commitments~~. Prior to the issuance of any building permit, the project applicant shall submit detailed design-level documentation, in addition to written documentation from the City of Soledad, documenting that design-level plans are in accordance with City standards and requirements, as well as documenting that the City has sufficient capacity to accommodate project demands in addition to existing commitments, subject to the approval of the Director of Public Works."

Edit Section 5.2G Air Quality under the heading "Greenhouse Gas and Global Climate Change" that begins on page 5.0-19 as follows:

Add the following new subsection on Page 5.0-22 at the end of the section titled: "Regulatory Framework" and prior to the section titled "Greenhouse Gas Emissions/Global Climate Change Thresholds"

"*City GHG Regulatory Framework*

In addition to the state requirements that are under development and continually evolving, Table 5.2-6 below contains the City of Soledad's relevant programs, policies, codes, and ordinances that would reduce greenhouse gas emissions associated with the proposed project. In the case of the codes and ordinances, the reductions could be applied as a background condition that would occur for all development at the site. Also, if future development on the site is found to be consistent with the programs and policies below, then additional GHG reductions would be considered achieved.

Table 5.2-6

CITY OF SOLEDAD's LOCAL REGULATORY MECHANISMS FOR ACHIEVING REDUCTIONS IN GHG EMISSIONS

Existing Policy or Ordinance	**Requirement**
2009 Housing Element Program 2.1.2	Minimum average density of 7 units per acre for new neighborhoods
2009 Housing Element Policy 6.1 and Program 6.1.1 (Energy Conservation)	Requires City support & initiation of energy & water conservation programs to reduce energy needs of new housing.
General Plan Circulation Policies C-10, C-20, C-25, C-27, C-31 Specific Plan Standards	Policies relating to the provision of alternative modes of transportation, including bicycle, public transit and pedestrian circulation.
General Plan Standards for Specific Plans	Includes requirements to encourage connectivity, walkability and pedestrian use: i.e., shorter streets – no greater than 520 feet long; residential streets "no wider than needed to accommodate parking and two-low speed travel lanes;" minimizing the use of cul-de-sacs; requiring planter strips with canopy trees. Other requirements include designing circulation system to accommodate public transit, concentrating higher intensity uses within one-quarter mile of transit stops and/or commercial centers, and using roundabouts rather than conventional controls at intersections to enhance traffic flows
Zoning Ordinance – Section 17.38.110 (Energy Conservation)	Provides broad authority & discretion to require incorporate passive or natural heating or cooling opportunities and other measures that conserve nonrenewable energy resources in subdivision design, thereby reducing GHG emissions
Chapter 13.05 of the SMC- Deconstruction, Demolition and Construction Material Recovery and Diversion from Landfills	Requires 100 percent diversion (i.e., reuse/ recycling)of inert solids (e.g., concrete, asphalt, brick) and a minimum diversion of 50% (by weight of non-inert materials). Applies to all new residential and commercial construction over a certain dollar value
Chapter 13.09 of the SMC – Mandatory Water Conservation Regulations	For new construction, 13.09 requires ultra low-flow toilets, low-flow shower fixtures, water recirculating systems and

	xeriscape landscaping.
Chapter 13.52 of the SMC – Stormwater Quality	Provides the authority for the City to require storm water permits and related Storm Water Quality Plan.

"

On Page 5.0-22, edit the first sentence under "Greenhouse Gas Emissions/Global Climate Change Thresholds" as follows:

"At the time of the Draft EIR preparation, n~~N~~o air districts had~~ve~~ established significance thresholds for greenhouse gas (GHG) emissions or a methodology for analyzing air quality impacts related to greenhouse gas emissions. Since then, the Bay Area Air Quality Management District's (BAAQMD) has adopted thresholds for GHG emissions, including a plan-level efficiency threshold of 6.6 metric ton (MT) CO2e per service population per year (BAAQMD, CEQA Guidelines, June 2010). Because this project is within the MBUAPCD, this threshold would not necessarily apply to this project or even future projects within the MBUAPCD; however, the substantial evidence generated by the BAAQMD in developing and approving the threshold could be used to support a project-specific, City-wide, or regional threshold given the global nature of the issue. ~~With the adoption of AB 32, the state has set a goal of reducing GHG emissions to 1990 levels by 2020. It has been acknowledged by previous EIRs addressing this issue that it may be considered speculative to determine if a project would be consistent with the AB 32 goals.~~ CO_2 emissions do not directly create environmental effects; rather it is the cumulative increased concentration of CO_2 in the atmosphere that results in global climate change and associated consequences. While it is possible to estimate the project's CO_2 emissions, it is typically not possible to determine whether those emissions (however small) would manifest into significant environmental impacts. The complexity of global and regional-scale physical, chemical, atmospheric, terrestrial, and aquatic systems preclude a meaningful determination of whether the CO_2 emitted by a single project (or in this case adoption of a Specific Plan) would result in a measurable or even, non-negligible change in climate. A quantitative standard of significance is not used in this EIR because of the global nature of the analysis required, instead a project's contribution to the cumulative significant impact of global climate change would be considered significant if, due to the size or nature of the project, it would generate a substantial increase in GHG emissions relative to existing conditions. In addition, the discussion considers whether or not the project would result in greenhouse gas emissions that would hinder or delay the State's ability to meet the reduction targets contained in AB 32. If a quantitative threshold (such as the recently adopted BAAQMD plan efficiency threshold of 6.6 MT CO_2e /service population/year) had been applied to this project, the conclusions would not change for the purposes of this EIR . However, in the case of future projects developed consistent with the Specific Plan it is possible to conduct analysis demonstrating that project-level impacts related to GHG emissions could be reduced to a less-than-significant level based upon the size and design of the project, including details on GHG reduction measures proposed, such that one could quantitatively demonstrate that emissions would be reduced below an applicable threshold."

On Page 5.0-25, edit the impact statement paragraph at the top of the page as follows:

Impact **Implementation of the Miravale III Project may increase global greenhouse gas (GHG) emissions resulting in a potentially cumulatively considerable incremental contribution to significant cumulative global climate change impacts and the project may hinder or delay the State's ability to meet GHG reduction targets in AB 32.** ***This is considered a significant and unavoidable cumulative impact that can be reduced by implementation of Mitigation Measures # 4.3-3(as revised in this Final EIR), new Mitigation Measures 4.3.4, 4.3-5, 4.3-6, and 4.13-1, however, not to a less-than-significant level.***

Add to Section 6.0 Alternatives, Alternatives Selected, Page 6-1:

"Alternatives Selected, The following section discusses the alternatives evaluated in this EIR and the comparative environmental effects of each. The alternatives considered in this analysis are as follows:

- *No Project Alternative – No Development*
- *Buildout Consistent with General Plan Alternative*
- *Reduced Project Alternative*
- *No Golf Course Alternative*
- *Alternative Design: Increased Senior Housing Alternative*

For the FEIR, a sub-alternative (Buildout Consistent with General Plan and No Golf Course) is also considered. This alternative would reduce the golf course and keep the former golf course area as open space, provide the allowed level of development per the Alternative Consistent with the General Plan and also avoid development above the 400 foot contour.

The alternatives chosen for this analysis, beyond those mandated by CEQA, were developed specifically to avoid or substantially reduce the significant impacts of the project. A comparison of the impacts for each alternative is presented in Table 6-1. A substantive discussion is provided for each issue area where a proposed alternative would lessen the significance of an impact. For an alternative that would result in approximately the same level of impact (i.e. less-than-significant, less-than-significant with mitigation) as the proposed project, a discussion of that issue area is not necessarily provided. It is important to note, however, that certain aspects of a given alternative may minimize the extent of impact, but may not necessarily affect the level of significance relative to the proposed project.

Table 6-1 Comparison of Impacts – Project Alternatives					
Impact	**6.3 No Project - No Build**	**6.4 Buildout Consistent w/ General Plan***	**6.5 Reduced Project**	**6.6 No Golf Course**	**Alternative Design: Increased Senior Housing**
Aesthetics/Visual	<	<	<	=	=
Agricultural Resources	<	<	<	<	=
Air Quality	<	<	<	=	=
Biological Resources	<	<	<	<	=
Cultural Resources	<	=	=	<	=
Geology/Soils/Mineral Resources	<	~~=~~ <	=	=	=
Hazards & Hazardous Materials	<	=	=	<	=
Hydrology & Water Quality	<	<	<	=	=
Land Use and Planning	<	<	<	=	=
Noise	<	<	<	=	=
Public Services	<	<	<	<	<
Utilities and Service Systems	<	<	<	=	=
Traffic	<	<	<	<	<

> Impact Greater than Project
= Impact Comparable to Project
< Impact Less than Project

***Alternative 6.4-A For the FEIR, a sub-alternative (Buildout Consistent with General Plan and No Golf Course) is also considered. This alternative would reduce the golf course and keep the former golf course area as open space, provide the allowed level of development per the Alternative Consistent with the General Plan and also avoid development above the 400 foot contour. This Alternative results in essentially the same impact category above" < Impact Less than Project" as the General Plan Consistent alternative with the exception that impacts to Biological Resources and Soils would be further reduced due to the greater amount of land retained in its natural state and the associated reduction in grading and land disturbance."**

Revise Section 6.4 Alternatives, Buildout Consistent with General Plan, Page 6-4, as follows:

"6.4 BUILDOUT CONSISTENT WITH GENERAL PLAN

Description

Development under this scenario would assume buildout of the project site consistent with existing policies contained within the General Plan. Under this scenario, a Specific Plan would be prepared, as required by the General Plan. Single family residential uses would be prohibited above the 400 foot elevation contour and the project would consist of the construction of approximately 2,680 units. Additional units identified in other expansion areas would not be applied to this alternative and no General Plan amendments would be required. This alternative would consist of an array of residential uses, including low, medium, and high density land uses, as well as commercial, and public uses.

Development under this alternative is assumed to result in approximately the same impacts in regard to cultural resources, ~~geology and soils,~~ and hazards and hazardous materials as the proposed project and less than significant impacts in comparison to the proposed project in the impact areas of aesthetics,

agricultural resources, aesthetics, biological resources, noise, traffic, air quality, agricultural resources, public utilities, public services, land use, population and housing and hydrology/water quality. ~~Although development of the proposed alternative would substantially lessen the extent of project-related impacts, the proposed alternative would not reduce the overall level of significance (i.e. less than significant, less than significant with mitigation) for each of these respective issues.~~ The following discussion addresses ~~only~~ those issues areas where significant project-related impacts would be minimized and/or avoided.

Impacts

Aesthetics. This alternative would result in less intensive urban development of the project site. More specifically, significant unavoidable impacts associated with development above the 400 foot elevation contour would be eliminated and the proposed alternative would not result in significant impacts to the existing Gabilan Range, which is considered a scenic vista. The area above the 400 foot contour would remain as open space, consistent with the requirements of the General Plan and views of the project site as perceived from adjacent public vantage points would be significantly lessened. Moreover, significant grading and changes in topography would not be necessary within the hillside portion of the project site as development would be eliminated within the visually sensitive areas on the Gabilan Range. Development of this alternative would still substantially alter the visual character of the project site by introducing urban development onto a previously undeveloped site. The effects from new light/glare sources would be reduced in comparison ~~comparable~~ to the proposed project due to the reduction of development proposed.

Agricultural Resources. Development of this alternative, while not changing the level of significance determination (i.e. significant unavoidable), would require less development of the project site and, therefore, potentially less prime farmland would be converted to a non-agricultural use. Despite the reduction in units and the corresponding reduction in developable space, the project site would still be converted to a non-agricultural land use. ~~Furthermore,~~ The majority of the project area is identified in the General Plan as an area of future urban development. The effects of loss of agricultural resources would likely be reduced in comparison to the proposed project due to the reduction of development proposed, provided that a portion of the agricultural land area is conserved for agricultural purposes in the long-term.

Air Quality. Development of this alternative would reduce the level of emissions associated with buildout of the project site. More specifically, due to the reduction in units, project-generated traffic is anticipated to decline significantly in comparison to the proposed project. This reduction in traffic trips would reduce project emissions associated with the project. In addition, less area would be developed under this scenario, therefore, requiring less grading and project construction. While the duration of construction impacts are anticipated to be approximately the same as the proposed project, the amount of construction would be significantly less. The effects the project on air quality would be reduced in comparison to the proposed project due to the reduction of overall development and comparable reduction in grading, infrastructure, roads, housing and traffic proposed.

Biological Resources. Development of the proposed alternative would substantially lessen potential impacts to biological resources located within the project area. More specifically, as identified in the General Plan portions of the Gabilan Range are identified as Open Space. As development would not occur above the 400 foot elevation contour, these areas would remain as natural Open Space. As identified in the biological resources section of this EIR, impacts associated with the loss of Open Space was identified as a potentially significant impact that would affect a number of federally listed species. Although development of this scenario would still result in the introduction of urban features within the project site, the extent to which the site would be disturbed would be substantially less. Specifically, this alternative would substantially lessen potential impacts to biological resources located within the project area by eliminating development within the foothill portions of the project site. In particular, as this

alternative is consistent with the General Plan, it reduces and limits development to below the 400-foot elevation contour. The General Plan Consistent Alternative will thus reduce impacts to the San Joaquin kit fox to a less-than-significant level by avoidance of the upland habitat area and reduction of potential fragmentation of the wildlife corridor identified in the General Plan. As identified in the biological resources section of this EIR, impacts associated with the loss of Open Space was identified as a potentially significant impact that would affect a number of federally listed species. The proposed alternative would eliminate potential impacts to badgers, borrowing owl, Salinas pocket mouse, kit fox, and other species identified as special status. The grassland habitat located in the foothill portion of the Gabilan Range is considered a biologically sensitive area of the project site. Development of this alternative would avoid this upland area and, therefore, substantially lessen project impacts. While specific mitigation would still be warranted, as identified in this Final EIR, impacts would be reduced to a less-than-significant level. The effects of the project on biological resources would be significantly reduced in comparison to the proposed project due to the reduction of overall development and comparable reduction in grading, infrastructure, roads and housing proposed.

Hydrology/Water Quality. Development of this alternative would substantially reduce impervious surfaces due to the overall reduction of development. Although this alternative would reduce impervious surface areas, as well as off-site related impacts, this alternative would not reduce the overall level of significant (i.e. less-than-significant with mitigation) as compared to the proposed project. Moreover, development of this alternative would also be required to adhere to the requirements of the City of Soledad Storm Drainage Master Plan. The environmental effects of the project in this category would be reduced in comparison to the proposed project due to the reduction of overall development and comparable reduction in grading, infrastructure, roads and housing proposed and overall reduction in impervious surfaces.

Land Use. As identified in this EIR, development of the proposed project would conflict with adopted General Plan policies that are intended to either avoid and/or mitigated a potential environmental impact. Development of this alternative would, however, be required to comply with existing General Plan policies, including the preservation of areas above the 400 foot elevation contour. The prohibition of development above this contour was identified as a mitigating factor for a number of issue areas. By complying with existing adopted General Plan policies this alternative would not result in any conflicts with policies intended to avoid and/or mitigate a potential adverse environmental impact. As such, this alternative would lessen the impact determination to a level considered less-than-significant and reduce associated impacts in comparison to the proposed project as described herein.

Noise. Due to the overall reduction of units, the proposed project is anticipated to result in less project generated noise. Moreover, due to the reduction of units and the corresponding reduction in vehicular traffic associated with project development, the proposed alternative would also result in substantially less construction noise. Development would also be less intensive and therefore impacts to adjacent sensitive land uses could potentially be minimized and/or avoided through site planning and project design. Due to the above rationale, this alternative would reduce impacts in comparison to the proposed project.

Population and Housing. This alternative would result in substantial growth-inducing impacts. As compared to the proposed project, however, this alternative would generate less housing and population within the project area and would not require revisions to the General Plan in order to accommodate increased housing and density beyond what has been identified for this area by the adopted Plan. The alternative would also be required to comply with the City's adopted Inclusionary Housing Ordinance and would provide a variety of residential land use types. As the project would result in less units, this alternative would also allow the City to maintain a jobs/housing ratio that is more balanced in nature and reduce impacts in comparison to the proposed project.

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Public Services. Although all project impacts can be reduced to a less-than-significant level through the incorporation of mitigation for public services, the proposed alternative would substantially lessen the

demand for public services (i.e. fire, police, schools, parks, etc.). Moreover, preliminary estimates indicate that this alternative would generate approximately 550 high school aged children. The existing high school would have sufficient capacity to accommodate the additional demands generated by this alternative. Future buildout of the General Plan, however, would still require that the City and School District identify a future high school site within the City. Additionally, as development would predominantly be located outside of the hillside areas, the proposed alternative would not be subject to potential wildland fires. This alternative would still require additional public services, including police and fire substations, but the demand for these services would be less due to the reduction in units and developable area. Development consistent with the General Plan would also provide additional parkland and open space as the hillside areas would be designated as Open Space areas. This alternative would reduce public service impacts in comparison to the proposed project.

Utilities and Service Systems. While the City of Soledad has adequate capacity to provide utilities to the project site, the proposed alternative would substantially lessen the demand for water and energy. Additionally, due to the reduction of units, the proposed alternative would generate less wastewater, solid waste, and water demand. As such, the overall demand for utilities would be reduced. While all project impacts would be mitigated to a less-than-significant level, the overall reduction of population associated with the proposed alternative would substantially lessen impacts to City services and infrastructure and reduce impacts in comparison to the proposed project.

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Traffic. Development of the proposed alternative is anticipated to significantly reduce the amount of project-generated traffic due to the overall reduction in the number of proposed units. While the level of significance (i.e. less-than-significant with mitigation) is not anticipated to change, this alternative would likely require less mitigation. This alternative would reduce impacts in comparison to the proposed project.

Summary

Buildout consistent with the City of Soledad's General Plan would substantially lessen potential impacts in terms of aesthetics, agricultural resources, air quality, biological resources, land use and planning, noise, population and housing, public services, utilities, and traffic. As identified in Table 6-1, development of this alternative would result in substantially the same impacts in regard to cultural resources, ~~geology and soils~~, and hazards and hazardous materials and a reduction of impacts to all other impact areas in comparison to the proposed project. ~~While this alternative would not change the level of significance determination for many of the impact areas,~~ This alternative would still require the implementation of the mitigation measures identified in this EIR. The proposed alternative, due to the reduction in project site, would lessen the extent to which the project would impact ~~these~~ identified resources and effects would be reduced in comparison to the proposed project on aesthetics, biological resources, noise, traffic, air quality, agricultural resources, public utilities, public services, land use, population and housing and hydrology, water quality."

Revise Section 6.4 Alternatives, Buildout Consistent with General Plan, to add the description of Sub-Alternative 6.4-A to follow the "Summary," Page 6-6, as follows:

"SubAlternative 6.4-A Buildout Consistent with General Plan/No Golf Course

This alternative would reduce the golf course and keep the former golf course area as open space, provide the allowed level of development per the Alternative Consistent with the General Plan and also avoid development above the 400 foot contour. This Alternative results in the same reduction of impacts as the General Plan consistency alternative although it further reduces impacts to Biological Resources and Soils due to the reduction in grading and land disturbance and retention of greater area as natural open space."

Revise Section 6.5 Alternatives, Reduced Project, Page 6-6, as follows:

"6.5 REDUCED PROJECT

Description

This alternative consists of reducing development on the project site to avoid significant impacts. More specifically, development of this alternative would result in the reduction of residential uses on the project site by 50 percent. As a result, this alternative would result in the construction of 2,100 residential units. The Reduced Project alternative would also result in a 50% reduction of commercial uses on the project site as well. More specifically, this alternative would allow approximately 125,000 square feet of commercial space. All development under this scenario would occur within the predominantly level portions of the project site and no development would occur within the foothill areas. Development would primarily be concentrated adjacent to existing residential areas within the City of Soledad and avoid the area above the 400 foot contour, similar to Alternative 6.4". As with the preceding Alternative 6.4, the Reduced Project alternative could be implemented with or without a golf course.

Development under this alternative is assumed to result in approximately the same impacts in regard to cultural resources, ~~geology and soils,~~ and hazards and hazardous materials as the proposed project and less than significant impacts in comparison to the proposed project in the impact areas of geology/soils, aesthetics, agricultural resources, aesthetics, biological resources, noise, traffic, air quality, agricultural resources, public utilities, public services, land use, population and housing and hydrology/water quality. ~~Although development of the proposed alternative would substantially lessen the extent of project-related impacts, the proposed alternative would not reduce the overall level of significance (i.e. less-than-significant, less-than-significant with mitigation) for each of these respective issues.~~ The following discussion addresses ~~only~~ those issues areas where significant project-related impacts would be minimized and/or avoided.

Impacts

Aesthetic. This alternative would result in less intensive urban development of the project site. Consistent with the General Plan Consistency Alternative, development of this alternative would eliminate potential impacts to the Gabilan Range, which is considered a scenic vista. Grading would no longer be necessary within the foothill areas and changes to topography would be minimal. Additionally, due to the overall reduction of units, this alternative would also reduce the extent of visual impacts associated with development of this alternative. More specifically, the development of 2,100 residential units would be less visible from adjacent public vantage points due to the reduction in developable area. Additionally, less commercial area would be developed and potential aesthetic impacts associated with the development of commercial uses adjacent to residential areas would also be minimized. To the extent that the project

would reduce the amount of units, the proposed alternative would still result in the conversion of a previously undeveloped site into urban uses and would therefore transform the visual character of the site permanently. The effects from new light/glare sources would be reduced in comparison comparable to the proposed project due to the reduction of development proposed.

Agricultural Resources. Development of this alternative, while not changing the level of significance determination (i.e. significant unavoidable), would require less development of the project site and, therefore, potentially less prime farmland would be converted to a non-agricultural use. Regardless, this alternative would require the conversion of significant prime farmland into an urban use. The effects of loss of agricultural resources would likely be reduced in comparison to the proposed project due to the reduction of development proposed, provided that a portion of the agricultural land area is retained for agricultural uses.

Air Quality. Air quality impacts associated with this alternative would be substantially less than the proposed project due to the reduction in commercial and residential land uses. Similar short-term construction activities would occur under this alternative. However, long-term emissions associated with vehicle trips and stationary sources (i.e., non-residential uses) would be incrementally decreased under this alternative. In the long-term, at project buildout, the Miravale III Project would exceed criteria pollutant emission thresholds (e.g., PM10, CO, NOx) resulting in a significant and unavoidable impact to air quality. A decrease in development intensity by 50 percent under the Reduced Project Alternative would reduce air quality impacts. Despite the reduction in units, the Reduced Project Alternative would not reduce project impacts to a level considered less-than-significant. However, since the Reduced Project Alternative would generate less air quality emissions, this alternative is considered to have less effect on air quality in relation to the proposed project. The effects of the Reduced Project Alternative on air quality would be reduced in comparison to the proposed project due to the reduction of overall development and comparable reduction in grading, infrastructure, roads and housing proposed.

Biological Resources. Development of the proposed alternative would substantially lessen potential impacts to biological resources located within the project area. By eliminating development within the foothill portions of the project site, the proposed project would not result in the loss of an area of significant biological value. Specifically, this alternative would substantially lessen potential impacts to biological resources located within the project area by eliminating development within the foothill portions of the project site. In particular, this alternative is consistent with the General Plan, reduces development to below the 400-foot elevation contour and will reduce impacts to San Joaquin kit fox to a less-than-significant level by avoidance of the upland habitat area and reduction of potential fragmentation of the wildlife corridor identified in the General Plan. This area would remain as Open Space consistent with the City's General Plan and would retain its natural features. As identified in the biological resources section of this EIR, impacts associated with the loss of Open Space was identified as a potentially significant impact that would affect a number of federally listed species. The proposed alternative would eliminate potential impacts to badgers, borrowing owl, Salinas pocket mouse, kit fox, and other species identified as special status. The grassland habitat located in the foothill portion of the Gabilan Range is considered a biologically sensitive area of the project site. Development of this alternative would substantially lessen project impacts. While specific mitigation would still be warranted, ~~impacts could potentially be reduced to a less-than-significant level~~ as identified in this Final EIR, impacts would be reduced to a less-than-significant level. The effects the project on biological resources would be reduced in comparison to the proposed project due to the reduction of overall development and comparable reduction in grading, infrastructure, roads and housing proposed and avoidance of habitat areas.

Hydrology/Water Quality. Development of this alternative would substantially reduce impervious surfaces due to the reduction of development. Although this alternative would reduce impervious surface areas, as well as off-site related impacts, this alternative would not reduce the overall level of significant (i.e. less-than-significant with mitigation) as compared to the proposed project. Moreover, development of this alternative would also be required to adhere to the requirements of the City of Soledad Storm Drainage Master Plan. The effects the project in this category would be reduced in comparison to the proposed project due to the reduction of overall development and comparable reduction in grading, infrastructure, roads and housing proposed and overall reduction in impervious surfaces.

Land Use. As identified in this EIR, development of the proposed project would conflict with adopted General Plan policies that are intended to either avoid and/or mitigated a potential environmental impact. This alternative would not conflict with any plans or policies intended to minimize and/or avoid an adverse environmental impact. This alternative would not require any General Plan amendments to insure consistency with adopted plans and policies pertaining to development within the project area. This alternative would reduce impacts in comparison to the proposed project.

Noise. In comparison to the proposed project, construction-related noise is anticipated to be similar due to the extent and duration of development. Consistent with the proposed project, mitigation measures would be applicable to reduce potential noise-related impacts. Project-related long-term noise impacts associated with vehicle trips and stationary sources (i.e. mechanical equipment), however, would be significantly less. Due to the reduction in vehicle trips and the decrease in commercial square footage, the Reduced Project Alternative would result in less noise impacts. The final configuration of land uses may warrant mitigation to assure that impacts do not exceed established thresholds. Development would also be less intensive and therefore impacts to adjacent sensitive land uses could potentially be minimized and/or avoided through site planning and project design. This alternative would reduce impacts in comparison to the proposed project.

Population and Housing. This alternative would result in substantial growth-inducing impacts. As compared to the proposed project, however, this alternative would generate less population within the project area and would not require revisions to the General Plan in order to accommodate increased density. The alternative would be required to comply with the City's adopted Inclusionary Housing Ordinance and would provide a variety of residential land use types. As the project would result in less units, this alternative would also allow the City to maintain a jobs/housing ratio that is more balanced in nature. This alternative would reduce impacts in comparison to the proposed project.

Public Services. Although all project impacts can be reduced to a less-than-significant level through the incorporation of mitigation for public services, the proposed alternative would substantially lessen the demand for public services (i.e. fire, police, schools, parks, etc.). This alternative would still require additional public services, including police and fire substations, but the demand for these services would be substantial less due to the reduction in units and developable area. This alternative would reduce public services impacts in comparison to the proposed project.

Utilities and Service Systems. The Reduced Project alternative would require upgrades and/or extensions of utilities such as water and wastewater facilities. As compared to the proposed project, this alternative would result in an incremental decrease in the demand for services. However, as identified in Section 4.14 Utilities and Service Systems, impacts would be mitigated to a level considered less-than-significant. Since the project would not generate as much demand for utilities, this alternative is considered to have fewer impacts on utilities as compared to the proposed project. This alternative would reduce impacts in comparison to the proposed project.

Traffic. Development of the proposed alternative is anticipated to significantly reduce the amount of project-generated traffic due to the overall reduction in the number of proposed units. While the level of significance (i.e. less-than-significant with mitigation) is not anticipated to change, this alternative would

likely require less mitigation. This alternative would reduce traffic impacts in comparison to the proposed project.

Summary

This alternative would result in approximately the same impacts as the proposed project in the areas of cultural resources, geology, and hazardous materials. By decreasing the extent of development, however, the Reduced Project alternative would reduce the overall site disturbance and construction-related impacts, including grading, construction noise, and short-term air quality impacts. Furthermore, this alternative would substantially reduce the impact of the project on sensitive biological resources and would reduce aesthetic, agricultural, air quality, biological, land use, noise, population and housing, public services, utilities, and traffic impacts. This alternative would reduce impacts in comparison to the proposed project."

Revise Section 6.8, Environmentally Superior Alternative, as follows:

"6.8 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

A comparison of the impacts of each alternative relative to the proposed project is presented in Table 6-1. CEQA requires that an environmentally superior alternative to the proposed project be specified. In general, the environmentally superior alternative is that which minimizes the adverse impacts of the project to the greatest extent, while achieving the basic objectives of the project.

The No Project – No Development alternative could be considered the environmentally superior alternative because all adverse impacts associated with project construction and operation would be avoided. However, the No Project – No Development alternative does not satisfy the primary project objective to provide a range of housing types for future Soledad residents. In addition, CEQA Guidelines section 15126.6(e)(2) states: "If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.

Among the remaining alternatives, the Reduced Project alternative would represent the environmentally superior alternative, since it avoids or reduces many of the project's impacts associated with more intense development on the site. While this alternative would result in ~~less~~ fewer units than the "Buildout Consistent with the General Plan" Alternative (i.e., 2,100 units), the General Plan alternative assumes buildout according to the maximum allowable density on the site (i.e., 2,680 units). The Reduced Project alternative would allow the City to meet its objectives, while insuring that adverse environmental impacts are reduced to the extent feasible. This alternative would reduce impacts in other impact areas in accordance with the decrease in development. The next environmentally superior alternative is the General Plan Consistency Alternative, with Sub-Alternative of No Golf Course. This alternative reduces development area consistent with General Plan policies, including no development on the area above the 400' contour, and reduces development due to the elimination of the golf course on the site and retention of a substantial portion of this area for open space uses.

CHANGES/ERRATA TO DRAFT EIR TECHNICAL APPENDICES,

Appendix L- CESA Information and Background is added to the Appendices and is attached, located after the Revised Summary Section.

CHANGES/ERRATA TO DRAFT EIR TECHNICAL APPENDICES, VOLUME 2

Revise the Text of **Appendix T-3 Biological Assessment, Page 23,**, *as follows to correct reporting error in Biological Assessment Report*:

"Species potential presence within project boundaries:
The CNDDB reports several occurrences of San Joaquin kit fox approximately 10 km east of the project site (Figure 3). In addition, the CNDDB reports the presence of SJKF critical habitat within 10 km of the Miravale III site. DD&A and BioSearch biologists mapped the presence of California ground squirrel burrow "clusters" throughout the mixed grassland potions of the site and in portions of the fallow and active agricultural portions of the site; many of the burrows observed were of appropriate size to support this species. ~~In addition, one active "natal den" was mapped and recorded by the Biosearch biologists."~~

REVISED SUMMARY TABLE 2-1 FINAL EIR

The following pages provide the Revised Summary Table which replaces Table 2-1 in the Draft EIR.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact		**Mitigation**	**Level of Significance After Mitigation**
4.1 Aesthetics			
The project would permanently alter a scenic vista, consisting of a portion of the Gabilan Mountain Range foothills, by causing changes to topography, removing vegetation, and adding roads, buildings, pavement, and lighting.	4.1-1	Building heights of all new structures shall adhere to the limits set forth in the Miravale III Specific Plan dated June 2007. Additionally, all new structures shall adhere to the applicable Development Standards as established in Section 2.0 of the Specific Plan. Prior to the issuance of any building permit for development within the Specific Plan area, the project applicant shall submit detailed plans, including elevations, site plans, and/or other documentation detailing compliance with applicable development standards, subject to the review and approval of the City of Soledad.	Significant and unavoidable.
	4.1-2	In order to minimize potential adverse visual impacts associated with development within the hillside portions of the project site, the project applicant shall submit and have approved, prior to the recordation of the final map for Phases three and four, building envelopes for each new residential lot proposed above the 400 foot elevation contour. The proposed building envelopes shall be located in the least visually sensitive area of each lot. No new structures shall be constructed outside of the approved building envelopes, unless otherwise approved by the City of Soledad.	
	4.1-3	In order to minimize aesthetic-related impacts due to development within the hillside portion of the site, the project applicant, prior to project approval, shall submit a revised Specific Plan that includes the following policy in Section 2.6 Low Density Residential (LDR & LDR-H/M3-R-1): All new residential units proposed within areas of the project site above the 400 foot elevation contour shall be subject to a Design Review approval process or similar. As part of the design review process, vertical building envelopes shall be identified and staking and flagging shall be required to demonstrate the extent of proposed development. All new structures shall be designed to minimize visual impacts to the greatest extent feasible.	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	4.1-4 Final design plans for proposed development shall utilize natural landforms and vegetation for screening structures, access roads, building foundations, cut and fill slopes, and exterior lighting. Roads, parking, and utilities shall be designed to minimize visual impacts. Prior to the issuance of any grading and/or building permit, the project applicant shall submit design-level drawings demonstrating compliance with this measure, subject to the review and approval of the City of Soledad. If an alternative design would minimize impacts, the applicant shall submit evidence demonstrating that the alternative design is infeasible. 4.1-5 The applicant shall provide landscape screening appropriate to the surrounding area in order to integrate the development with the existing natural landscape. Landscaping plans shall be submitted to the City of Soledad for review and approval prior to the issuance of any building or grading permit. 4.1-6 All buildings shall be designed with colors and materials that effectively blend the structures with the surrounding landscape. Building applications for new structures shall include color and material sample photo sheets and shall be approved by the City of Soledad, prior to the issuance of any building permit. 4.1-7 A site-specific geotechnical report shall be prepared for new development on hillsides in order to ensure that the development will not cause or worsen natural hazards, such as erosion and sedimentation, and will minimize risk to life and property from slope failure, landslides, and flooding. The report shall include erosion and sediment control measures, such as temporary vegetation sufficient to stabilize disturbed areas. Prior to the issuance of any grading and/or building permit for new development within the hillside portions of the project site, the project applicant shall submit a geotechnical report prepared by a qualified professional to the City of Soledad Department of Public Works for review and approval. The site-specific geotechnical report shall identify feasible recommendations and	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	avoidance measures to minimize potential impacts. 4.1-8 Land alterations within areas above the 400 foot elevation shall be minimized by keeping cuts and fills to a minimum, limiting grading to the smallest practical area of land, limiting land exposure to the shortest practical amount of time, replanting graded areas to insure establishment of plant cover before the next rainy season, and creating grading contours that blend with the natural contours on site or look like contours that would naturally occur. Prior to the issuance of any grading permit, the project applicant shall submitted detailed grading plans consistent with the intent of this mitigation, subject to the review and approval of the City of Soledad.	
Development of the proposed project may impact scenic resources within view of a State Scenic Highway.	No Mitigation Measures identified.	Less-than-significant
The project would permanently alter the existing visual character of the site by causing changes to topography, removing vegetation, and adding roads, buildings, pavement, parking areas, and lighting.	4.1-9 In order to minimize tree removal and associated visual impacts, final design-level improvements plans shall retain existing mature eucalyptus and other tree species to the greatest extent possible. Final design-level plans shall be prepared in consultation with a registered arborist/forester to minimize tree removal and ensure the health of remaining trees. Prior to the issuance of any grading and/or building permits, final plans shall be subject to the review and approval of the City of Soledad Director of Public Works. If the removal of existing mature eucalyptus is required the applicant shall submit evidence demonstrating that there are no feasible design alternatives to avoid tree removal. In the event that tree removal is required, the project proponent shall prepare a tree removal and replacement plan for each phase of construction, subject to the review and approval of the City of Soledad Community Development Director. The tree removal and replacement plan shall identify specific grading limits that minimize tree removal, as well as appropriate tree replacement ratios and replanting locations. 4.1-10 Final design plans for the proposed gateways shall include elements, such as signage, landscaping and landscaped center medians, and	Significant and unavoidable.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact		**Mitigation**	**Level of Significance After Mitigation**
		appropriate architectural detailing consistent with the Miravale III Specific Plan. Prior to issuance of any permit for the construction of any of the four gateways, the project applicant shall submit detailed plans that include the above referenced elements, subject to the review and approval of the City of Soledad.	
	4.1-11	Final design plans for proposed residential development shall include form, scale, and character elements which emulate the best characteristics of the existing residential neighborhoods, such as single and two-story dwellings with adequate off-street parking, landscaped front yards with trees, and sidewalks. Prior to the issuance of any building permit for residential development within the Specific Plan area, the project applicant shall submit design-level drawings consistent with the intent of this measure, subject to the review and approval of the City of Soledad. <u>All residential development within the Specific Plan area shall be subject to a conditional use or design review process as administered by the City of Soledad.</u>	
	4.1-12	Final design plans for proposed multi-family development shall include useable open space for each dwelling and shall be designed to be integrated with the surrounding neighborhood. Prior to the issuance of any building permit for multi-family development within the Specific Plan area, the project applicant shall submit design-level drawings consistent with the intent of this measure, subject to the review and approval of the City of Soledad.	
	4.1-13	Final design plans for proposed development shall include a tree planting plan in order to increase the number and density of tree cover within new development areas. Prior to the issuance of any grading and/or building permit, the project applicant shall submit a detailed tree planting plan, subject to the review and approval of the City of Soledad.	
The project would create a new source of light or glare that would adversely affect day or nighttime views in the area.	4.1-14	All buildings shall be designed so that exterior lighting is down-lit and illuminates the intended area only. Building applications for new structures shall include an exterior lighting plan subject to approval of	Less-than-significant.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	the Soledad Planning Department that includes the following requirements: 1) exterior lighting shall be directional; 2) glare from exterior lighting shall be adequately minimized; 3) the source of directional lighting shall not be directly visible; and 4) vegetative screening shall be considered, where appropriate, as a means of reducing development-related light and glare. The project applicant shall submit an exterior lighting plan to the City of Soledad Planning Department prior to the issuance of any building permit. 4.1-15 Ornamental lighting use for streets, parks, public open spaces, trails, bike paths, parking lots, and walkways shall utilize fixtures consisting of metal halide with <u>full</u> cut-off luminaries <u>other form of similar fixtures</u> in order to control light and glare. Prior to the issuance of any building permit, the project applicant shall provide documentation as part of the exterior lighting plan described in Mitigation Measure 4.1-12 demonstrating that these measures are incorporated into site lighting, subject to the review and approval of the Soledad Planning Department. 4.1-16 Light reduction and screening measures shall be required in order to reduce nighttime ambient light increases in the area. Lighting levels in commercial areas shall be kept as low as feasible and controlled to minimize operating time. Light sources shall be installed, so there is no light radiation above the horizontal plane (i.e., dark sky). Lighting shall be focused downward to prevent the splay of ambient light to other areas. Prior to the issuance of any building permit, the project applicant shall provide documentation as part of the exterior lighting plan described in Mitigation Measure 4.1-12 demonstrating that these measures are incorporated into site lighting, subject to the review and approval of the Soledad Planning Department	
4.2 Agricultural Resources		
The proposed project would include the conversion of prime agricultural land.	No feasible mitigation.	Significant and unavoidable.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact	**Mitigation**		**Level of Significance After Mitigation**
Development of land designated for urban development as part of Phase 4 of the Specific Plan will require the cancellation of Land Conservation Act Contract 73-25 within the project site.	No feasible mitigation.		Significant and unavoidable.
The proposed project will be sited adjacent to existing agricultural uses located on the boundary of the project footprint. This has the potential to cause an increase in land use compatibility problems and nuisance complaints due to urban uses being sited adjacent to agricultural uses. In order to minimize these potential land use conflicts, the project has been designed with a minimum 60' buffer zone between the residential and agricultural uses along the western boundary of the project site. Additional buffers, however, are warranted along the northern and eastern project boundaries. Moreover, as currently proposed, the 60' buffer does not meet the minimum buffer distance recommended by the Monterey County Agricultural Commissioner. To ensure that residential uses are adequately buffered from agricultural uses, additional measures are necessary to protect human health and the environment resulting from potential conflicts between agricultural and urban uses.	4.2-1	Adequate buffer areas between urban and agricultural uses, including a minimum 50 foot buffer along the northern and eastern boundary of the project site and a 200 foot buffer along the western boundary, shall be incorporated into the proposed project. These buffers shall also be supplemented with physical barriers in areas where residential and commercial structures are to be located, as recommended by the Agricultural Resources Report contained in Appendix T-1. The 200 foot buffer along the project's western boundary may be reduced upon demonstration to the satisfaction of the City that other measures, including those recommended in Mitigation Measure 4.2-2, will adequately protect human health and safety and minimize potential conflicts, and provided that any such reduction shall not result in a buffer width of less than 100 feet. The County of Monterey Agricultural Commissioner shall be consulted regarding the adequacy of the proposed buffers and physical barriers and evidence of said consultation and recommendation shall be submitted to the City prior to approval of the tentative map. Prior to the recordation of any final map, the project applicant shall submit evidence in the form of agricultural setbacks delineating buffer locations consistent with the recommendations contained in the Agricultural Resources Report, subject to the review and approval of the City of Soledad. All agricultural buffers, excluding public right-of-ways, shall be maintained by the Project Proponent and/or his/her successor(s) in interest through easements dedicated to the City or other entity until such time that the adjoining agricultural operation and use no longer exists.	Less-than-significant
	4.2-2	In order to ensure the adequacy of the proposed ~~60'~~ agricultural buffer located along the western boundary of the project site, as required by Mitigation 4.2-1, the project applicant shall submit a detailed landscape plan that includes vegetative screening in addition to	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	physical barriers, such as fences, walls, or similar structures to protect human health and safety. One or more of the following options may also be used in combination with landscaping requirements to create an adequate ~~average 60 foot~~ buffer between the agricultural parcel property line and habitable structures within the Plan area: a. Public or private road right-of-ways; b. Landscaped islands and planting areas; c. Recreational trail corridors; and/or d. Placing dwellings in the rear portion of lots. Prior to the recordation of any final map along the western project boundary, the ~~an~~ agricultural buffer ~~setback~~ and any related easement shall be delineated on the final map, subject to the review and approval of the City of Soledad. 4.2-3 Prior to the issuance of any certificate of occupancy for residences adjacent or in close proximity to the agricultural buffer along ~~to on-going agricultural uses on~~ the western project boundary, the project applicant shall provide documentation demonstrating that adequate screening, landscaping and structural ~~and landscaped~~ improvements have been installed and/or constructed within the ~~60' agricultural~~ buffer, subject to the review and approval of the City of Soledad.	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact	**Mitigation**		**Level of Significance After Mitigation**
The proposed project has the potential to impact routine and on-going agricultural activities on the areas adjacent to the northern, eastern, and western boundaries of the project site.	4.2-4	Access for agricultural equipment and vehicles to the adjoining row crop land on the western boundary shall continue to be provided from the ramp to Highway 101 North (see Figure 2 in Technical Appendix T-1, Agricultural Report). The current access road to the Braga property should remain at the current width to allow for passing and ensure adequate turnaround space for field equipment. Implementation of this measure would reduce impacts to routine and on-going agricultural operations on lands west of the proposed project site.	Significant and unavoidable.
	4.2-5	Prior to the issuance of any permit, the project applicant shall have recorded a right-to-farm notice on parcels adjacent to existing and on-going agricultural uses consistent with the requirements of the City of Soledad General Plan, subject to the review and approval of the City of Soledad.	
4.3 Air Quality			
Construction activities, such as clearing, excavation and grading operations, construction vehicles traffic on unpaved ground, and wind blowing over exposed earth would generate dust and particulate matter.	4.3-1	Prior to start of construction, the project applicant or contractor shall submit to the City of Soledad Public Works Department a construction dust mitigation plan. This plan shall specify the methods of dust control that would be utilized, demonstrate the availability of needed equipment and personnel, use reclaimed water for dust control, and identify a responsible individual who, if needed, can authorize implementation of additional measures. The construction dust mitigation plan shall, at a minimum, include the following measures: • Limit grading activity to a maximum of 2.5 acres daily. As more detailed construction information becomes available, emissions from grading activities could be reassessed to determine if the area of grading could be increased. Such an assessment would have to be conducted using appropriate assumptions and mitigation measures. • Water all active construction areas at least twice daily and more often during windy periods. Active areas adjacent to existing businesses should be kept damp at all times. If necessary, during windy periods, watering is to occur on all days of the week regardless of onsite activities.	Significant and unavoidable.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact		**Mitigation**	**Level of Significance After Mitigation**
		• Cover all trucks hauling dirt, sand, or loose materials. ~~trucks or maintain at least two feet of freeboard.~~ • Haul trucks shall maintain at least 2'0" of freeboard. • Plant tree windbreaks on the windward perimeter of construction project if adjacent to open land. • Install wheel washers at the entrance to construction sites for all exiting trucks. • Pave all roads at construction sites. • Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites. • Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites. • Sweep streets daily (with water sweepers) if visible soil material is deposited onto the adjacent roads. • Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more). • Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles. • Limit traffic speeds on unpaved roads to 15 mph. • Replant vegetation in disturbed areas as quickly as possible. • Suspend excavation and grading activity when hourly-average winds exceed 15 mph and visible dust clouds cannot be contained within the site.	
Construction activities would involve use of the heavy-duty off-road equipment and large trucks that use diesel fuel resulting in emissions of diesel particulate matter and NOx.	4.3- 2	Projects developed under the specific plan shall ~~should~~ be evaluated for individual construction period air quality impacts. Project-specific mitigation measures shall ~~would~~ be identified at that time to reduce impacts to a less-than-significant level, if feasible. However, the following ~~mitigation~~ measures shall ~~should~~ be implemented for all projects to reduce diesel particulate emissions from on-site construction equipment: • The following equipment may be used without control devices or additional mitigation measures without causing acute adverse health	Less-than-significant

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	effects: o No engineers greater than 750HP are used; and o Engines between 501 HP and 750 HP are model years 2002 and newer; and o Engines between 251 HP and 500 HP are model years 1996 or newer; and o Engines between 175 HP and 250 HP are model years 1985 or newer. • The following equipment may be used without causing acute adverse health effects, if retrofitted with a catalyzed diesel particulate filter (CDPF): o Engines greater than 750 HP; if model year 2006 and newer; and o All engines less than 749HP, regardless of model year. • If construction equipment uses B99 biodiesel, no acute adverse health effect would be expected in the following: o Engines between 501 HP and 750 HP, if model years 2002 or newer; and o Engines between 250 HP and 500 HP, if model years 1996 and newer; and o Any engine less than 250 HP. ~~• Use off-road construction equipment, manufactured during or after 1996 that meets the NOx emissions standard of 6.9 grams per brake-horsepower-hour or use of alternative fuels (such as biodiesel) that result in lower particulate emissions.~~ ~~• The contractor shall install temporary electrical service whenever possible to avoid the need for independently powered equipment (e.g. compressors).~~ ~~• Diesel equipment standing idle for more than two minutes shall be turned off. This would include trucks waiting to deliver or receive soil, aggregate, or other bulk materials. Rotating drum concrete trucks could keep their engines running continuously as long as they were onsite and staged away from residential areas.~~ ~~• Properly tune and maintain equipment for low emissions.~~ ~~• Stage large diesel powered equipment (i.e. wheeled tractor, wheeled loader, roller by using gasoline-powered equipment to reduce NOx emissions.~~ ~~• Limit the hours of operation for heavy-duty equipment.~~	
Implementation of the proposed specific plan would result in increases in long-term operational	4.3-3. In order to reduce greenhouse gas (GHG) and regional air pollutants and precursors (criteria air pollutants or CAPs)	Significant and unavoidable.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
emissions of ozone precursor pollutants. These emissions would exceed significance thresholds established by the MBUAPCD.	emissions to the extent feasible, the applicant/project proponent shall prepare and submit a GHG and CAP Reduction Plan (GCRP) concurrent with submittal of any revised Tentative Map under the Specific Plan or any Site Plan that differs from the Specific Plan as described in this EIR. The GCRP shall include a description of the measures that are proposed to be implemented by that phase of the project, including one or more of the measures contained in Appendix __ of this Final EIR. The plan shall be approved by the City prior to construction of structures and site improvements, including but not limited to, determination of substantial conformance, building permits, and grading permits. For each of the measures not included, the applicant shall describe why the measure was not included. The GCRP shall present estimated reductions in GHGs and CAPs based on available information source. No certificate of occupancy for any phase, or portion thereof, of the project shall be granted until all of the feasible, applicable measures have been implemented by the applicant/project proponent. The proponent shall demonstrate that measures that must be implemented throughout the life of the project are included in all applicable CC&Rs, property deeds, commercial center rules and regulations, and draft tenant lease agreements. 4.3-4 Fireplaces and stoves shall be gas-fired and meet U.S. Environmental Protection Agency certification requirements. The installation or operation of a wood-burning fireplace or a wood-burning stove shall be prohibited in perpetuity on all residential properties in the Miravale III Specific Plan Development. This restrictive covenant shall be recorded on the title of all parcels in the Miravale III Specific Plan area and shall run with the land.	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	4.3-5 Projects developed under the Specific Plan shall facilitate transit service to the plan area by providing the necessary bus shelters and turn-outs to serve each development phase as recommended by the Monterey-Salinas Transit District, subject to approval by the City. Any tentative map or development plan and related improvement plans submitted pursuant to the adopted Specific Plan shall clearly denote the locations and design specifications for such facilities. ~~The project shall apply the following measure to the extent appropriate for the specific land uses proposed:~~ ~~• Develop a Transportation Demand Management Program with the intent of reducing vehicle trips and vehicle miles traveled associated with build out of the specific plan. Components of this plan may include:~~ ~~o Develop parking strategies for commercial and retail uses that reduce single occupant vehicle trips.~~ ~~o Provide bicycle storage/parking facilities.~~ ~~o Provide shower/locker facilities in light industries and office uses.~~ ~~o Provide onsite or near site child care centers for large employment centers.~~ ~~o Develop park-and-ride lots.~~ ~~o Provide opportunities to include or increase transit service to plan area.~~ ~~• Include plans to incorporate safe and efficient modes of bicycle and pedestrian transportation. Bicycle routes and pedestrian paths should include amenities such as signs and traffic signal activation (e.g., loop activators).~~ ~~• Identify energy efficiency goals for new developments that would conserve energy beyond requirements of the State Title 24 building code.~~ ~~• Provide exterior electrical outlets on new buildings that encourage use of electrical landscape equipment.~~	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	• ~~Prohibit open wood burning fireplaces in new residences unless they are natural gas fired or EPA certified wood heaters that meet EPA's particulates emission standard of 7.5 grams per hour.~~	
Development of residential uses adjacent to agricultural uses has the potential to result in nuisances and odors due to ongoing agricultural operations.	Please refer to Mitigation Measures 4.2-1 through 4.2-3.	Less-than-significant.
4.4 Biological Resources		
The proposed project would represent temporary and permanent impacts to all habitats and the vast majority of vegetation within project boundaries, and will result in the removal of 3 or more oak trees plus all Eucalyptus and/or Tamarisk trees lining San Vicente Road. Temporary impacts to vegetation included grubbing and grading associated with development of the site; permanent impacts include the conversion of open vegetated areas to urban housing through placement of structures, homes, roads, driveways, etc.	4.4-1 A Forest Management Plan shall be prepared for the project due to proposed tree removals. <u>The Forest Management Plan shall include a map that indicates all of the trees within the project site and denotes which trees are to be removed. The map shall also include notes which clearly state protection procedures for trees that are to be preserved. In addition, the Forest Management Plan shall include, but is not limited to, a description of each tree by species and its condition.</u> The City approved Forest Management Plan (and associated replanting plan) shall be incorporated as a condition of project approval to satisfy General Plan Conditions C/OS 17-19. Prior to the issuance of any grading and/or building permit, the project applicant shall submit a Forest Management Plan, subject to the review and approval of the City of Soledad. 4.4-2 <u>Prior to the onset of construction,</u> ~~T~~trees and vegetation not planned for removal shall be protected during construction to the maximum extent feasible. This shall include the use of exclusionary fencing of herbaceous and shrubby vegetation, such as hay bales and protective wood barriers for trees. Only certified weed-free straw shall be used to avoid the introduction of non-native, invasive species. <u>A qualified biological monitor shall verify that adequate protective measures are in place prior to construction and remain intact throughout the construction phase.</u>	Less-than-significant

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	4.4-3 Following construction, the disturbed areas that are proposed as parks and landscaping areas shall be restored to pre-project contours and revegetated using locally-occurring native species and native erosion control seed mix to the maximum extent feasible. Landscape plans for all such areas adjoining natural open space, including landscaped strips within right-of-ways, shall be reviewed by a qualified biologist to ensure that only native and non-invasive species are included in the planting palette and shall include a supplemental note and/or report by said biologist documenting compliance with this requirement. Landscape plans for other disturbed areas or for designated parks shall utilize native species to the extent feasible and avoid the use of all invasive species; such plans shall include a note from the licensed professional who prepared the plan(s) or from a qualified biologist documenting compliance with this requirement. Prior to the issuance of any grading and/or building permit, the project applicant shall submit landscape plans prepared by a licensed landscape architect for review and approval by the City of Soledad. 4.4-4 Prior to the onset of construction, ~~P~~protective fencing shall be placed so as to keep construction vehicles and personnel from impacting vegetation adjacent to the project site outside of work limits. A qualified biological monitor shall verify protection is in place prior to construction and remains intact throughout the construction phase. 4.4-5 Grading, excavating, and other activities that involve substantial soil disturbance shall be planned and carried out in consultation with a qualified hydrologist, engineer, or erosion control specialist, and shall utilize standard erosion control techniques to minimize erosion and sedimentation to native vegetation. 4.4-6 No construction equipment shall be serviced or fueled outside of designated staging areas. A qualified biological monitor shall verify that this measure is being implemented throughout the construction phase.	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact		**Mitigation**	**Level of Significance After Mitigation**
The presence/absence of jewelflower has not been determined at this time, but appropriate habitat is present within project boundaries. This species could be permanently impacted by proposed grading, excavation, and other activities that may result in the permanent loss or disturbance of individual jewelflowers and/or jewelflower habitat.	4.4-7	A qualified botanist shall be retained to conduct preconstruction surveys for Lemmon's jewelflower during the typical flowering season of this species (March-May), to determine the presence/absence of this species. If no Lemmon's jewelflower is present, no additional mitigation is required. If Lemmon's jewelflower is present, a qualified biologist shall prepare a mitigation plan to be approved by CDFG prior to initiation of construction.. The mitigation plan shall include a description of the special-status plant population(s), map depicting the location(s), and size of the population(s). If feasible, disturbance of the population(s) of Lemmon's jewelflower shall be avoided and its habitat protected utilizing methods developed in coordination with the CNPS and CDFG. Avoidance shall be confirmed by the City prior to the time of tentative map approval for this phase of the project. If impacts to the Lemmon's jewelflower population(s) cannot be avoided, mitigation shall include preservation on- or off-site at a minimum 1:1 ratio (one plant preserved for each plant impacted), or restoration on- or off-site at a minimum 3:1 ratio (three plants planted for each plant impacted). The CNPS and CDFG shall be consulted to evaluate the suitability for transplanting the impacted species to suitable habitat within the identified and established preserve/restoration area. These details shall be described and included in the mitigation plan. Restoration and preservation strategies shall be developed in coordination with the CNPS and CDFG. The City of Soledad Planning Department shall be provided verification of CDFG concurrence and satisfaction prior to issuance of grading permits.	Less-than-significant.
Project development would fragment (i.e., divide and disrupt) the vast majority of the existing wildlife habitat on the site, and would represent an urban encroachment into the foothills of the Gabilan Range (an important wildlife corridor). The ongoing presence of homes, roads, cars, people, firearms, pets, etc. would adversely impact any wildlife currently utilizing the site, particularly in the grassland portions of the site (i.e. deer, coyote,	4.4-8	Prior to approval of each final map, the applicant shall prepare and submit draft Covenant, Conditions, and Restrictions (CC&Rs) applicable to that phase that shall include the following: a) restrict installation fencing to the immediate vicinity of residences, and where fencing is placed adjacent to open space areas and areas of natural, undisturbed habitat, fences shall be installed such that a six inch space is left between the bottom of the fence and the surface of the ground; b) prohibit off-road vehicle use;	Significant and unavoidable.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact		**Mitigation**	**Level of Significance After Mitigation**
fox, jackrabbits, squirrels, and raptors). Comparable development is present immediately south of the proposed project, but does not extend into the grassland/foothill portions of the site.		c) prohibit illegal discharge of firearms; d) prohibit the installation of road medians throughout the development. These CC&Rs shall be reviewed and approved by the City of Soledad prior to approval of each final map.	
Suitable foraging/dispersal habitat for San Joaquin kit fox is present throughout project boundaries, with potential denning habitat present in the annual grassland, rocky outcrop, and fallow agricultural portions of the site (see Early Evaluation Report in Appendix C). The vast majority of the habitats present within project boundaries would be directly impacted by the proposed project <u>. The project may result in direct and indirect "take" of individual kit fox (i.e., entombment, increased traffic, mortality/predation due to exposure, loss of habitat, reduced habitat connectivity, attraction of predators, placement of structures and roads, etc.)</u> ~~(grubbing and grading, construction phase impacts, permanent placement of structures and impermeable surfaces, etc.).~~ Impacts proposed in the grassland portions of the site will likely result in kit fox abandonment of the property due to ongoing disturbance, if present at the site<u>. Based on USFWS Ventura Office review of the early evaluation report prepared by Biosearch, protocol-level SJKF northern-range protocol-level surveys were recommended (pers. comm. Roger Root, USFWS). The USFWS and CDFG have stated that a determination of SJKF absence from the proposed project site and a finding of "no take" of the species could only be supported by completing the protocol for this species and having a negative finding. Since protocol-level surveys for this species have</u>	4.4-9 4.4-10	The applicants shall enter into consultation with USFWS and CDFG and shall provide evidence of their compliance with applicable requirements of the federal Endangered Species Act and California Endangered Species Act <u>to the City</u> prior to the issuance of building permits. Pre-construction surveys for kit fox dens shall be required for all development phases of the future project. Pre-construction surveys shall be conducted by a qualified biologist no less than 14 days and no more than 30 days prior to the start of any ground disturbing activities to locate kit fox den sites. <u>The preconstruction surveys shall be conducted per Standardized Recommendations for the Protection of the San Joaquin Kt Fox Prior to or During Ground Disturbance (USFWS 1999b), as updated. Potential dens (including man-made structures) and known dens shall be protected by minimum buffers of 50 feet and 100 feet, respectively. If an occupied or unoccupied natal den is detected, no construction shall occur for the Phase until the USFWS and CDFG have been contacted and authorization to proceed has been obtained by the applicant.</u> Pre-construction surveys shall be conducted by a qualified biologist no less than 14 days and no more than 30 days prior to the start of any ground disturbing activities to locate kit fox den sites. In addition to pre-construction surveys, a qualified biologist, meeting the required qualifications described in the *U.S. Fish and Wildlife Service Standardized Recommendations for the Protection of the San Joaquin Kit Fox Prior to Ground Disturbance*, June 1999 (USFWS Recommendations for SJKF), shall be on-site to monitor construction activities for the San Joaquin kit fox. In the event that an active kit fox den is found, then the standard mitigation actions outlined in the	Significant and unavoidable.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
not yet been conducted, the Draft EIR assumes kit fox presence within the project site. ~~For this reason,~~ Therefore, the project is assumed to have a significant and unavoidable adverse affect on San Joaquin kit fox (i.e. direct mortality, loss of habitat, loss of dens, etc.). *This impact may be reduced by implementation of the following mitigation measures; however, the impact will not be reduced to a less-than-significant level without completion of the required protocol surveys in coordination with the USFWS and CDFG ~~consultation~~ (Federal Endangered Species Act and California Endangered Species Act, respectively) and implementation of appropriate avoidance measures or redesign, per the CDFG letter of comment on the Draft EIR.*	USFWS Recommendations for SJKF, are recommended to avoid possible take of kit fox during future construction activities. These actions are general in nature; therefore, site specific strategies for the project site shall be based upon consultation with USFWS and CDFG, as stated above in Mitigation Measure #4.4-9. To reduce the risk of impacts during construction, the applicant shall, at a minimum, implement the following measures, unless directed otherwise through consultation with the USFWS and CDFG: a) Restrict project-related vehicle speed to 20 mph on project roads. b) Cover all excavated, steep-walled holes or construction trenches more than 2 feet deep at the close of each working day by plywood or similar materials or provide such holes or trenches with one or more escape ramps constructed of earth fill or wooden planks, inspect such holes or trenches for trapped San Joaquin kit fox prior to filling. c) Inspect all construction pipes, culverts, or similar structures with a diameter of 4 inches or greater that are stored at a construction site for one or more overnight periods for kit foxes before the pipe is subsequently buried, capped, or otherwise used or moved in any way. d) Contain all food-related trash items in closed containers and remove food related trash at least once a week from the project site. e) No firearms shall be allowed on the project site. f) No pets shall be permitted on the project site. g) Use of rodenticides and herbicides on the project site shall be restricted to the use of zinc phosphide, in cases where it is necessary to protect public health and safety. h) A representative shall be appointed by the project proponent who will be the contact source for any employee or contractor who might inadvertently kill or injure a kit fox or who finds a dead, injured or entrapped individual. The representative will be identified during the employee education program. The representative's name and telephone number shall be provided to the Service.	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	i) An employee education program shall be conducted and shall consist of a brief presentation by persons knowledgeable in kit fox biology and legislative protection to explain endangered species concerns to contractors, their employees, and agency personnel involved in the project. The program shall include the following: a description of the San Joaquin kit fox and its habitat needs; a report of the occurrence of kit fox in the project area; an explanation of the status of the species and its protection under the Endangered Species Act; and a list of measures being taken to reduce impacts to the species during project construction and implementation. A fact sheet conveying this information shall be prepared for distribution to the above-mentioned people and anyone else who may enter the project site. j) In the case of trapped animals, escape ramps or structures shall be installed immediately to allow the animal(s) to escape, or the Service shall be contacted for advice. k) To the extent feasible, nighttime construction shall be avoided. l) Include kit fox mitigation measures on project plans If active kit fox den sites are found and/or kit fox individuals are observed during the survey, the applicant will be required to comply with all mitigation actions required by USFWS and CDFG and the City shall monitor implementation of those actions. Examples of mitigation actions that may be required by the regulatory agencies may include, but are not limited to: • To the extent feasible, lot placement shall be situated to create wildlife corridors in protected open space to allow for kit fox and other wildlife movement through the site. • Fencing shall surround the site to restrict kit fox movement into the development area; types of fencing (e.g. exclusionary or kit fox friendly) shall depend on the density of the development area. • Speed bumps, rolls, or reduced speed limits shall be employed	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact		**Mitigation**	**Level of Significance After Mitigation**
		along project roads in or near open space areas to reduced likelihood of kit fox mortality by vehicle strikes. • Street lighting shall be situated as to not spill into adjacent open space areas. The height and intensity of street lighting shall be designed to minimize indirect impacts to open space. Outdoor lighting for residential uses adjacent to open space and large lots shall also be restricted to CC&Rs to be low wattage (150 watts or less) and directed toward the residences to reduce effects on kit fox nocturnal activities.	
Multiple badger dens and badger diggings were observed in the vicinity of the onsite reservoir and within other portions of the annual grassland habitat. An adult badger was observed emerging from an onsite den by Biosearch biologists. Badger diggings were also observed in fallow agricultural portions of the site, demonstrating badger utilization of these areas as foraging habitat. Therefore, construction activities in grassland portions of the site have the potential to impact badger dens, and construction within fallow agricultural portion of the site will impact badger foraging habitat. Project-related construction activities (i.e. grading, excavation, development, etc.) may result in a permanent loss or disturbance of American badgers and their habitat.	4.4-11	The applicant shall retain a qualified biologist to conduct focused preconstruction surveys for potential American badger dens. These surveys shall be conducted no sooner than 2 weeks prior to the start of construction. Surveys for badger dens may be conducted at the same time as burrowing owl surveys. The results of the survey shall be submitted to the City prior to issuance of grading permit or initiation of grading for that phase of development on the site. Based on the results of these surveys, one or more of the following additional measures shall be implemented: ▪ If the qualified biologist determines that potential dens are inactive, the biologist shall excavate these dens by hand with a shovel to prevent badgers from re-using them during construction. If hand excavation is not practical, careful excavation with an excavator may occur provided that the biologist is onsite to monitor these activities. ▪ If the qualified biologist determines the presence of active dens, the location of these dens shall be documented and reported to CDFG. Avoidance of active dens, particularly natal dens, is the preferred approach; Impacts to active badger dens shall be avoided by establishing a 100-meter exclusion zones around all active badger dens, within which construction related activities shall be prohibited until denning is complete and/or the den is	Significant and unavoidable.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact		**Mitigation**	**Level of Significance After Mitigation**
		abandoned. A qualified biologist shall monitor each den once per week in order to track the status and inform the project sponsor of when a den area has been abandoned. ▪ If avoidance of an active badger den is not feasible, the biologist shall coordinate with CDFG on the appropriate way to evict/exclude badgers from their dens. Please note that special consideration of natal dens is required given the low likelihood that excluded young would survive; a CDFG depredation permit would be required to disrupt a natal den. For non-natal dens, CDFG has permitted badgers to be gradually excluded from their dens by placement of soil, sticks, and debris at den entrances, incrementally increasing the degree of blockage over a period of three to five days (please note that blockage cannot trap/entomb badgers). After the monitoring biologist determines that badgers have stopped using active dens within the project boundary, the dens shall be hand-excavated with a shovel to prevent re-use during construction. If hand excavation is not practical, careful excavation with an excavator may occur provided that the biologist is onsite to monitor these activities. Please note that eviction of onsite badgers will reduce construction phase impacts to this species, but given the large home ranges and territoriality of this species, emigration to alternative habitats may not be feasible without inter/intra specific competition (energetic stress possibly resulting in mortality). CDFG may require that appropriate onsite or adjacent habitat be conserved to allow relocation of excluded animals within their home range.	
Two special-status bat species may be present onsite (pallid bat and Townsend's big-eared bat); several other bat species may also be present. Removal of onsite trees, removal of onsite buildings, and development of the site (including encroachment/disruption of rocky outcrops) may	4.4-12	A qualified bat specialist shall conduct site surveys to characterize bat utilization of the site and species composition present (techniques utilized to be determined by the biologist). ~~Please refer to the mitigation measures in the Preliminary BA (June 2008) for measures that may be implemented based on the results of these surveys~~. The results of the survey shall be submitted to the City prior	Less-than-significant.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
result in direct impacts to bats and/or bat roosts (day, night, foraging, and maternity) and would remove the vast majority of onsite foraging habitat for these species.	to issuance of grading permit or initiation of grading for that phase of development on the site. Based on the results of these surveys, one or more of the following additional measures shall be implemented: ▪ If it is determined that bats are not present at the site, no additional mitigation is required. ▪ If it is determined that bats are utilizing the site and would likely be impacted by the proposed project, preconstruction surveys shall be conducted no more than 30 days prior to modification, demolition, or removal of onsite buildings and/or any other occupied habitat. If no bat or bat sign are observed in the course of preconstruction surveys, then demolition/removal of buildings and/or construction initiation may proceed. If bat and/or bat sign are observed during the preconstruction surveys, the biologists shall determine if disturbance will jeopardize a maternity roost, or another type of roost (foraging, day, night). ▪ If a single bat and/or only adult bats are roosting, demolition or removal of the structure can proceed after the bats have been safely excluded from the roost. Exclusion techniques shall be determined by the biologist and depend on the type utilization; the biologist shall prepare a mitigation plan for provision of alternative habitat to be approved by CDFG and the City. ▪ If an active maternity roost is detected, work in the vicinity of the roost (and/or demolition of the structure) shall be postponed until the qualified biologist monitoring the roost(s) determines that the young have fledged and are no longer dependent on the roost. The monitor shall ensure that all bats have left the building and or area of disturbance prior to initiation of construction and/or demolition activities. *If disruption of a maternity roost cannot be avoided, a depredation permit would be required.*	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact	**Mitigation**		**Level of Significance After Mitigation**
Salinas pocket mouse is known to occur onsite; presence was confirmed in September 2006. As the vast majority of the onsite grassland habitat will be converted to residential usage and the remaining portions will be fragmented from surrounding habitat and subject to ongoing disturbance (cars, lights, noise, sound, vibration, etc.), significant impacts to this species are anticipated (direct and indirect mortality).	4.4-13	The applicant shall contract a qualified biologist to coordinate with CDFG and prepare a mitigation and monitoring plan for Salinas pocket mouse. The mitigation and monitoring plan shall include a description of the population and locations of known and potential habitat within the project site, mitigation to avoid and reduce impacts to the species, monitoring actions, success criteria, and adaptive management measures if success criteria are not met. Verification of CDFG concurrence/approval shall be submitted to the City of Soledad prior to issuance of a grading permit for that phase of development of the site. ~~initial grubbing and grading of the site~~.	Significant and unavoidable.
Tree removal (i.e., Eucalyptus and Tamarisk trees lining San Vicente Road and oaks present in the northeast corner of the site) and disturbance associated with construction of the proposed project would likely impact any nesting birds and/or raptors present within project boundaries (harassment, stress, brood-less, nest abandonment, injury, mortality). Per the CDFG Guidelines, impacts to burrowing owls are defined as disturbance or harassment within 160 feet of occupied burrows, destruction of burrows and burrow entrances, and degradation of foraging habitat adjacent to occupied burrows. In addition, the project would require grading, grubbing, tree removal, excavation, and other activities that may result in a permanent loss or disturbance of raptors and migratory birds and their habitat.	4.4-14	Burrowing owls are known to occupy burrows in mixed grassland, active agricultural, and fallow agricultural portions of the Miravale site during the non-breeding season (breeding season utilization not observed in the course of protocol-level surveys). A qualified biologist shall conduct preconstruction surveys to locate active breeding and/or wintering burrowing owls (depending on season) no more than 30 days prior to the start of construction. If ground disturbing activities are delayed or suspended for more than 30 days after the preconstruction survey, the site shall be resurveyed. The survey shall conform to the CDFG 1995 Staff Report protocol. Wherever burrows are identified, impact avoidance and mitigation measures shall be implemented (previously mapped burrow locations may not be occupied and/or new burrows may be occupied). Please refer to the mitigation measures regarding burrowing owl in the Preliminary BA (June, 2008) for avoidance and mitigation measures that may be implemented based on the results of these surveys.	Less-than-significant.
	4.4-15	If project activities will initiate during the typical avian nesting season (February 15– August 1), a qualified biologist shall conduct focused preconstruction surveys no more than 14 days prior to initiation of construction activities for nesting birds, including (but not limited to) white-tailed kite, northern harrier, loggerhead shrike, and horned lark, in all areas that may provide suitable nesting habitat within 300 feet of the construction area. If active nests are found, a suitable construction buffer shall be established by a qualified biologist, and no work shall	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	occur within that buffer until August 1 when young are assumed fledged. Alternatively, a qualified biologist can conduct weekly nest checks to gauge nestling/fledgling status, and construction may proceed once fledglings have dispersed from the nest provided written concurrence from CDFG. No active nest shall be impacted or removed without a depredation permit from CDFG, and a depredation permit will not be issued for impacts to Fully Protected Species such as the white-tailed kite. For activities that occur outside of the nesting season (generally September 1 through February 14), preconstruction surveys are not required. If construction is initiated outside of the nesting season and continues into the nesting season, preconstruction surveys are required if construction will occur in areas not previously accessed and/or disturbed (>300 feet from previous construction activities). 4.4-16 A preconstruction survey shall be conducted no more than 14 days prior to modification, demolition, or removal of onsite buildings. If no owls or other nesting birds are observed, then demolition or removal may proceed. If barn owls (or any other nesting birds) are observed during the preconstruction survey, a determination shall be made on whether birds are roosting or nesting. If a single owl is roosting, demolition or removal of the structure can proceed after the owl has been persuaded to move from the roost area. Non-invasive techniques include light shining into the roost space for one or two nights and days. If barn owls (or other nesting avian species) are found to be actively nesting in the barn, work on or demolition of the structure shall be postponed until one of the following conditions have been met: 1) a qualified biologist monitoring the nest determines that the owls have abandoned the nest without any outside interference or 2) a qualified biologist monitoring the nest has determined that the young have fledged and are capable of relocating and using another roost site. Once the young have fledged, non-invasive techniques may be used to encourage the owls to leave the barn. Under either scenario, the monitor shall ensure that all owls have left the building prior to construction or demolition activities. The barn owl nesting period is typically between February 15 and July 15.	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact	**Mitigation**		**Level of Significance After Mitigation**
Although extensive aquatic surveys have been conducted, ~~T~~the presence of California red-legged frog and/or Western spadefoot has not been determined at this time. The project as currently designed would fill the onsite reservoir to establish home-sites, removing a potential breeding resource for these species. Pond 3 would likewise be permanently filled as a result of the proposed project. If CRLF or spadefoot are present, proposed impacts to onsite agricultural basins (particularly the reservoir) would result in direct impacts to these species including "take~~.~~" of CRLF under ESA (i.e. loss of individuals and habitat, loss of a breeding resource, direct mortality, etc.). In addition, grading and other earthmoving activities proposed would represent an adverse affect on upland estivation habitat for these species, if present. *Therefore, the proposed project would represent a significant and unavoidable impact to a federally Threatened Species and State Species of Special Concern ~~and state regulated wildlife species~~ (if present,) as currently designed. However, implementation of the mitigation measures identified below will reduce these impacts as much as feasible but not to a less-than-significant level without completion of the protocol-level surveys in coordination with the USFWS and CDFG to comply with ESA and Fish and Game Code, and implementation of appropriate avoidance measures or redesign.*	4.4-17	Protocol-level CRLF surveys (USFWS, August 2005) shall be completed at each aquatic resource present within project boundaries. Protocol-level CRLF surveys would likely detect Western spadefoot, if present (Western spadefoot toad surveys are also conducted at night during winter months, preferably January through March, and therefore, overlap CRLF survey protocol requirements). The results of the survey shall be submitted for the review and approval of the City, USFWS, and CDFG. If it is determined that CRLF are present, the applicant shall coordinate with the USFWS to determine the appropriate course of action per the requirements of the federal ESA (e.g., applying for an Incidental Take Permit [Section ~~7 and/or~~ 10 ~~depending on lead agency~~]) and implementing the permit requirements prior to issuance of a grading permit. Any mitigation and avoidance measures required by USFWS for potential impacts to CRLF (if applicable) would likewise reduce impacts to Western spadefoot given their overlapping habitat characteristics. If CRLF is not found on-site and USFWS concurs with a negative finding, no further mitigation is required. If it is determined that spadefoot are present, but CRLF are not, coordination with CDFG regarding appropriate mitigation to reduce impacts to this species shall be required prior to issuance of a grading permit. If the Western spadefoot toad is not found on-site, no further mitigation is required.	Significant and unavoidable.
Proposed development of the majority of the onsite grassland habitat and fragmentation of remaining grassland habitat represents a significant impact to coast horned lizards and black-legless lizards (and	4.4-18	The applicant shall retain a qualified biologist to conduct a construction monitoring program for black legless lizards, coast horned lizards, and San Joaquin coachwip which shall include procedures for capture and release. The biologist shall remain on-site	Significant and unavoidable.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
other wildlife species).	during initial grading activities to salvage and relocate these species that may be uncovered during earthmoving activities. Recovered individuals shall be placed in appropriate habitat outside of the project site in accordance with the MOU with CDFG. The biologist shall walk alongside the grading equipment in each new area of disturbance and shall have the authority to halt construction temporarily if necessary to capture and relocate an individual. Any individual captured in the grading zone shall be relocated as soon as possible to adjacent suitable habitat outside of the area of impact, pursuant to the MOU. 4.4-19 The applicant shall conduct an employee education program for construction crew and City staff prior to construction activities. A biological monitor shall meet with the construction crew at the onset of construction to educate the construction crew on the following: 1) the appropriate access route in and out of the construction area; 2) how biological monitor will examine the area and agree upon a method which will ensure the safety of the monitor during such activities, 3) the special-status species that may be present; 4) the specific mitigation measures that will be incorporated into the construction effort; and 5) the proper procedures if a special-status animal or any other animal is encountered within the project site. 4.4-20 A representative shall be appointed by the City who will be the contact source for any employee or contractor who may inadvertently kill or injure a special-status species or find one dead, injured, or trapped. The representative shall be legally responsible to notify USFWS and CDFG immediately in the event that "take" of any special-status wildlife species occurs. The representative shall be identified during the Employee Education Program and his/her contact information shall be provided to USFWS and CDFG. It is imperative that this individual will be present onsite every day and will be accessible to regulatory agency personnel. 4.4-21 All food-related and other trash shall be disposed of in closed containers and removed from the project area at least once a week	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact		**Mitigation**	**Level of Significance After Mitigation**
		during the construction period or more often if trash is attracting avian or mammalian predators. Construction personnel shall not feed or otherwise attract wildlife to the area. These instructions to the construction crew shall be reiterated during the employee education program and during update meetings with construction crews. The instructions shall also be posted conspicuously on the site.	
Implementation of the proposed project would result in impacts to wildlife movement and nursery sites.	See above.		Significant and unavoidable.
4.5 Cultural Resources			
Development of the project and the resulting move of the historical resource to another location would cause a substantial, adverse change to a historical structure eligible for listing in the California Register on the site.	4.5-1	Relocation of House. The project proponent shall ensure that the design and implementation of the relocation project is consistent with the *Secretary of the Interior's Standards for* Rehabilitation *and Illustrated Guidelines for Rehabilitating Historic Buildings (U.S. Department of the Interior, National Park Service, 1992),* the California Historical Building Code, and the Mitigation Monitoring and Reporting Plan (MMRP) for the project. Prior to recordation of the final map, the project applicant shall submit a relocation plan prepared by a qualified professional in accordance with the general recommendations of *Moving Historic Buildings*, a publication of the National Park Service, to the City of Soledad for review and approval. The relocation plan shall discusses planning, research, and recording prior to the move. In addition, the relocation plan shall identify siting, foundation construction, building reassembly, and restoration work after a successful move. See John Obed Curtis, *Moving Historic Buildings*, Heritage Conservation and Recreation Service, Publication No. 9, US Department of Interior (1979) for further details. Prior to the relocation, the applicant shall provide verification of compliance with related mitigations to the City of Soledad Community Development Department Director for review and approval. In addition, the structure shall be relocated prior to the issuance of any building and/or grading permit for development within the Specific Plan area.	Less-than-significant.
	4.5-2	Protective Measures. The project proponent shall develop and implement measures to protect the character-defining features of the Lorentzen House building from damage by the relocation project. The	

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	features include, but are not limited to scale, massing, and layout of the house, as well as siding and wood frame fenestration. Protective measures shall be prepared by a qualified professional in accordance with the *Secretary of the Interior's Standards for Rehabilitation and Illustrated Guidelines for Rehabilitating Historic Buildings* (U.S. Department of the Interior, National Park Service, 1992), the California Historical Building Code, *Moving Historic Buildings*, and the MMRP for the project. Prior to the recordation of the final map, the project applicant shall submit a relocation plan, consistent with Mitigation Measure 4.5-1, which incorporates protective measures consistent with the intent of this measure. Prior to the relocation of the structure, the applicant shall submit evidence from a qualified professional demonstrating that protective measures have been implemented, subject to the review and approval of the City of Soledad. 4.5-3 Repair of Inadvertent Damage. The project proponent shall ensure that any inadvertent damage to the character-defining features of the Morris Lorentzen House resulting from the rehabilitation project is repaired in accordance with the *Secretary of the Interior's Standards for Rehabilitation and Illustrated Guidelines for Rehabilitating Historic Buildings* (U.S. Department of the Interior, National Park Service, 1992) and California Historical Building Code. A qualified professional shall be consulted prior to any repairs. The condition of the building shall be photographed as part of the proposed recordation document and/or video documentation, prior to the start of the relocation, and this will help to establish the baseline condition for assessing inadvertent damage. The project applicant shall submit detailed documentation prepared by a qualified professional demonstrating that all repairs have been completed in accordance with applicable standards prior to the issuance of any building and/or grading permit. 4.5-4 Professional Standards. All activities regarding historical architectural resources and historic preservation carried out as part of this project shall be carried out by or under the direct supervision of persons	

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	meeting, at a minimum, the Secretary of the Interior's professional qualifications standards (48 FR 44738-9) in these disciplines. Prior to the relocation of the Lorentzen House, the applicant shall submit evidence to the City of Soledad demonstrating compliance with this measure. 4.5-5 Monitoring. The mitigation measures applying to the relocation of the Lorentzen House shall be set forth in a Mitigation Monitoring and Reporting Program (MMRP) for the project. The MMRP will guide project-specific mitigation, monitoring, and/or reporting programs for various aspects of mitigation monitoring, reporting, and enforcement in order to ensure full compliance with the conditions of project approval. 4.5-6 Coordination. The project proponent shall coordinate with and inform interested parties, including, but not limited to the Soledad Historical Society and the Monterey County Historical Society, regarding the status of its compliance with the mitigation measures set forth in the MMRP, as necessary. 4.5-7 Recordation to Historic American Building Survey standards. Prior to the start of any project work, the project proponent shall ensure that the Lorentzen House property is recorded and documented in accordance with the Level II recordation standards of the Historic American Building Survey/Historic American Engineering Record (HABS/HAER) program. This level of recordation would include: ▪ Archival reproduction of any existing historic images of the property and grounds; ▪ Archival reproduction of any existing maps, sketches, or drawings of the house; ▪ Production of measured architectural plans and drawings; ▪ Production of large-format photographs of exterior and interior views of the house, and exterior views of the house and current setting, including relationship to non-eligible outbuildings; and ▪ Narrative history and description of the property (based on	

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		the narrative provided in the Seavey (2006) evaluation of the property, and the Monterey County survey(s) of similar properties. The original archival set of recordation documents and photograph prints will be submitted to the Soledad Historical Society (or its designee), and archival quality photocopies of the documentation set will be provided to the following interested parties and local repositories: the Monterey County Historical Society; the Monterey County Libraries (Soledad and Salinas branches), and the UC Santa Cruz Library Special Collections Department. The project proponent would ensure that this recordation documentation was prepared prior to carrying out any other treatment and would make the content of the document available for other mitigation measures, such as the preparation of interpretive material.	
Construction of the project may result in the discovery and disturbance of unknown archaeological resources and/or human remains.	4.5-8	In order to ensure that project-impacts to potentially unknown resources are avoided, the project proponent shall be responsible for on-going monitoring of project construction. Prior to the issuance of any grading permit, the project proponent shall provide the City of Soledad with documentation identifying construction personnel that will be responsible for on-site monitoring. If archaeological resources or human remains are accidentally discovered during construction, work shall be halted within 150 feet (50 meters) of the find until a qualified professional archaeologist can evaluate it. Work shall not recommence until the project archaeologist has submitted documentation to the City indicating that discovered resources have been adequately salvaged and no further resources have been identified within the area of disturbance	Less-than-significant.
	4.5-9	In order to ensure that the proposed project does not impact buried human remains during project construction, the project proponent shall be responsible for on-going monitoring of project construction. Prior to the issuance of any grading permit, the project proponent shall provide the City of Soledad with documentation identifying construction personnel that will be responsible for on-site monitoring.	

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		If buried human remains are encountered during construction, work in that area must halt and the archaeologist and the coroner immediately notified. If the remains are determined to be Native American, then the NAHC must be notified within 24 hours as required by Public Resources Code 5097. The NAHC will notify designated Most Likely Descendants who will provide recommendations for the treatment of the remains within 24 hours. The NAHC will mediate any disputes regarding treatment of remains. Work shall not recommence until the project archaeologist, coroner, and NAHC, submit documentation to the City indicating that buried human remains have been adequately salvaged and no further remains have been identified within the area of disturbance.	
4.6 Geology, Soils and Mineral Resources			
The project would be exposed to potential adverse effects from strong seismic ground shaking that may result in damage to proposed structures.	4.6-1	To minimize the potential effects from strong seismic ground shaking on project components, a project-specific geotechnical analysis shall be performed by a registered professional engineer with geotechnical expertise, and all recommendations shall be incorporated into final design plans. Prior to the issuance of any building and/or grading permit, the project applicant shall submit a project-specific geotechnical analysis to the City of Soledad Public Works Director for review and approval. The project engineer shall develop project-level plans based upon and in response to the observations and recommendations made in the project specific geotechnical analysis.	Less-than-significant.
	4.6-2	In order to minimize potential seismic-related hazards, the project engineer shall incorporate the seismic shaking analysis contained within the Geologic Hazards Investigation Update prepared by Nolan Associates (September 2006) into project design. Prior to the issuance of any building and/or grading permits, the project applicant shall submit design level plans demonstrating that the recommendations of the Geologic Hazards Investigation Update are incorporated into project design, subject to the review and approval of the City of Soledad Public Works Director. In addition, all structures shall be designed to the most current standards of the California Building	

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		Code, at a minimum.	
	4.6-3	In order to minimize seismic-related hazards to new public facilities, a site-specific probabilistic seismic hazards assessment shall be incorporated into the design of any schools, hospitals, fire or police stations, or any other critical facilities planned for the project site. An individual assessment shall be performed for each site by an engineering geologist. Prior to the issuance of any grading and/or building permit for new public facilities, including but not limited to new schools, hospitals, and fire or police stations, a probabilistic seismic hazards assessments shall be prepared and submitted to the City of Soledad Director of Public Works for review and approval.	
Construction of the project could result in substantial soil erosion or loss of topsoil.	4.6-4	In order to reduce wind and water erosion on the project site, an erosion control plan and Storm Water Pollution Prevention Plan (SWPPP) shall be prepared for the site preparation, construction, and post-construction periods. The erosion control plan shall incorporate best management practices consistent with the requirements of the National Pollution Discharge Elimination System (NPDES). The erosion component of the plan must at least meet the requirements of SWPPP required by the California State Water Resources Control Board. If earth disturbing activities are proposed between October 15 and April 15, these activities shall be restricted per the requirements of Soledad Municipal Code Chapter 15.08. Prior to the issuance of any permit, the project proponent shall submit detailed plans to the satisfaction of the City of Soledad Public Works Director. The components of the erosion control plan and SWPPP shall be monitored for effectiveness by City of Soledad Public Works. The following measures shall be implemented, where appropriate, to control erosion: 1) Keep construction machinery off of established vegetation as much as possible, especially the vegetation on the upwind side of the construction site; 2) Establish specific access routes at the planning phase of the project, and limits of grading prior to development, which should be strictly observed;	Less-than-significant.

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Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	3) Utilize mechanical measures (i.e. walls from sand bags and/or wooden slat or fabric fences) to reduce sand movement; 4) Immediate revegetation (plus the use of temporary stabilizing sprays), to keep sand movement to a minimum; and 5) For larger-scale construction, fabric or wooden slat fences should be placed around the construction location to reduce sand movement. 4.6-5 Areas disturbed by grading shall be stabilized with adequate landscaping vegetative cover. A re-vegetation and landscaping plan shall be prepared by a landscape architect with experience in working with the type of soils that are characteristic of the site, subject to the review and approval of the City of Soledad. Prior to the issuance of any certificate of occupancy and concurrent with project construction, disturbed areas shall be re-vegetated consistent with the City approved landscaping plan. All project replanting shall be continually monitored by the landscape architect for a duration of three years. The landscape architect shall submit annual monitoring reports to the City of Soledad after each successive year detailing the success of landscaping. Success shall be based on an 80% survival rate. If it is determined that the replanting has not been successful, additional replanting shall be required by the City of Soledad. 4.6-6 All drainage from improved surfaces shall be captured by closed pipe or lined ditches and carried to neighborhood storm sewers or natural drainages. At no time shall any concentrated discharge be allowed to spill directly onto the ground adjacent to structures or to fall directly onto steep slopes. The control of runoff is essential for erosion control and prevention of water ponding against foundations and other improvements. <u>The project shall implement Low Impact Development (LID) strategies, as determined appropriate by the City of Soledad, consistent with the requirements of Mitigation Measure 4.8-4. LID strategies shall be implemented in connection with the proposed project to the satisfaction of the City of Soledad.</u> Prior to the issuance	

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Environmental Impact	**Mitigation**		**Level of Significance After Mitigation**
		of any grading and/or building permit for each new structure, the project applicant shall submit an erosion control plan and storm water pollution prevention plan consistent with this measure, subject to the review and approval of the City of Soledad Public Works Director	
The project could be exposed to localized liquefaction and collapse.	4.6-7	In order to reduce the risk of localized liquefaction and collapse, and allow for adequate foundation and structural fill support, grading plans shall be consistent with a project-specific geotechnical analysis. The project geotechnical engineer shall prepare a quantitative assessment of liquefaction and seismically-induced settlement potential for the project as part of a comprehensive site geotechnical evaluation, prior to the recordation of each final map. Measures to ensure adequate reduction of risk to standard acceptable levels in accordance with standard geotechnical practice shall be incorporated into project design and specifications, subject to the review and approval of the City of Soledad Public Works Director.	Less-than-significant.
The project could be exposed to potential adverse effects from on- or off-site landslides and lateral spreading that may result in damage to proposed structures.	4.6-8	Portions of the project located within debris flow hazard areas as described in the Geological Hazards Investigation Update prepared by Nolan Associates (September 2006, see pg. 14) shall incorporate design measures to mitigate this hazard to acceptable levels in accordance with standard engineering practices. Suitable measures include: 1) Restricting development to outside these areas; 2) Constructing artificial channels or diversion walls, designed to divert fluidized debris away from habitable structures; or 3) Constructing impact walls, designed to withstand anticipated debris flow volumes and velocities. An engineering geologist shall be retained to provide site-specific geologic design criteria for debris flow hazard areas once the final project plans are available. Diversion or retaining structures shall be designed based on recommendations by a geotechnical engineer, subject to review and approval of the City of Soledad Public Works Director. Prior to the recordation of each final map, the project applicant shall submit evidence demonstrating that adequate design measures are incorporated to mitigate potential hazards to acceptable engineering standards, subject to the review and approval of the City of Soledad.	Less-than-significant.
The project could be exposed to localized soil	4.6-9	In order to minimize potential hazards associated with expansive soils,	Less-than-significant.

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Environmental Impact		**Mitigation**	**Level of Significance After Mitigation**
expansion.		the expansion potential of site soils shall be evaluated as part of a site-specific geotechnical study to ensure hazards are reduced to an acceptable level of geotechnical and Uniform Building Code practices. The recommendations of a geotechnical engineer for mitigating soil shrink-swell hazards shall be incorporated into project design. These measures may include replacement of soil with engineered backfill or treatment of expansive soil with lime. Prior to the recordation of each final map, the project applicant shall submit evidence demonstrating that adequate measures are incorporated to mitigate potential hazards to acceptable engineering standards, subject to the review and approval of the City of Soledad Director of Public Works.	
4.7 Hazards and Hazardous Materials			
The project proposes a variety of uses in an area that may be contaminated with hazardous materials. Release of these contaminants could pose a health risk to construction workers and future users on the site.	4.7-1	Prior to the recordation of any final map, the applicant shall arrange for a Phase II Environmental Site Assessment to be prepared which assesses the localized environmental conditions described in the Phase I Environmental Site Assessment prepared by D&M Consulting Engineers, Inc. (September 2006) and identifies any required remedial actions for the safe handling, removal and special needs for any identified materials. The Phase II Assessment shall include site-specific soil sampling in order to assess the presence of potential soil contamination and to identify special needs for soil handling during construction/grading activities and possible health risks to construction workers and future users consistent with the recommendations contained in the Phase 1 Environmental Site Assessment prepared by D&M Consulting Engineers, Inc. If results indicate the presence of such materials in excess of screening levels for residential, educational, or commercial uses, a Remediation Plan shall be prepared and implemented to reduce contamination to acceptable levels, maintain the safety of construction workers and future site users, and assure proper management of contaminated materials in accordance with state and local regulatory requirements. This plan shall be subject to review and approval by the Monterey County Division of Environmental Health. Prior to the issuance of any building and/or grading permit, the project applicant shall submit	Less-than-significant.

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Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	evidence to the City of Soledad for review and approval demonstrating compliance with this measure. 4.7-2 Prior to commencement of new development, the applicant shall obtain approval of a Soil Management Plan from the Monterey County Division of Environmental Health, which establishes management practices for handling potentially contaminated soil, if encountered, during construction/grading activities. 4.7-3 In order to reduce human health risks to construction personnel and future site occupants, the project proponent shall retain a qualified consultant to survey all buildings to be demolished for asbestos under the National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines prior to demolition activities. If asbestos containing material is documented within existing on-site structures, all potentially friable asbestos shall be removed prior to building demolition in accordance with NESHAP guidelines. Prior to the issuance of a grading permit, the project proponent shall submit written evidence to the City of Soledad Director of Public Work from a qualified consultant demonstrating that all asbestos containing material, if present, has been properly removed and demolition activities may proceed without exposing construction personnel to asbestos related-hazards. 4.7-4 In order to reduce human health risks to construction personnel and future site occupants, the project proponent shall retain a qualified consultant to conduct a lead-based paint survey to evaluate the presence of lead-based paint residues in site soils adjacent to existing structures. If lead contamination is documented on-site, all peeling and flaking lead-based paint shall be removed and properly disposed of separately from building debris, in accordance with current Department of Toxic Substances Control policies. In addition, all existing structures within the Specific Plan area that were constructed prior to 1978 shall be surveyed for lead-based paint prior to any demolition activities. Prior to the issuance of any permit for each phase of development, the project proponent shall submit written evidence	

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Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	from a qualified consultant documenting that all lead-based paint hazards have been appropriately removed and disposed of in accordance with industry standards, subject to the review and approval of the City of Soledad.	
Due to the proximity of the Soledad Sanitary Landfill to the proposed school sites, there is the potential for hazardous emissions and/or other environmental hazards to affect the health and safety of students attending new schools within the project area. More specifically, the existing landfill has the potential to expose several of the proposed school sites to environmental hazards. Although the landfill is listed as "closed" and no known hazardous incidents have been reported, releases of emissions may, nevertheless, adversely affect the health of students.	4.7-5 If, during the course of the Phase II Environmental Site Assessment, it is determined that the existing Soledad Sanitary Landfill would expose the proposed school sites to an environmental hazard that cannot be reduced to an acceptable level through remediation, the project applicant, in conjunction with the Soledad Unified School District and the City of Soledad, shall identify new school sites within the Miravale III project area that would not be exposed to known environmental hazards, prior to the recordation of any final map. If new school locations are necessary, the applicant shall amend the Specific Plan and submit a revised tentative map demonstrating the new school locations, subject to the review and approval of the City of Soledad, prior to the recordation of any final map. Any new school site shall be coordinated with the Soledad Unified School District.	Less-than-significant.
Future development could involve the use/storage of hazardous materials and/or be located in proximity to existing agricultural use/storage of hazardous materials. Accidental release of hazardous materials could result in significant impacts on public health and the environment.	The following mitigation measure is in addition to mitigation previously identified in **Section 4.2 Agricultural Resources** that are intended to reduce potential land use conflicts associated with agricultural operations. 4.7-6 The applicant shall prepare a Chemical Application Management Plan (CHAMP). This plan shall detail the procedures to construct, operate, and maintain the golf course. The CHAMP shall provide technical public disclosure regarding pesticides, fertilizers and other chemicals to be used on the golf course, as well as methods of application and handling. This plan shall be submitted to the Monterey County Environmental Health Division for review and approval. Prior to the issuance of any permit for golf course development, the project applicant shall submit documentation to the City of Soledad demonstrating that a CHAMP has been prepared and approved by the County of Monterey. The following provisions shall be included in the CHAMP: ▪ Drought, pest, and disease resistant grass species shall be selected.	Less-than-significant.

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		▪ Pesticides shall be handled, applied, and disposed of by a licensed (State-certified) spray technician. ▪ Only approved and legal chemicals shall be used. All county, state, and federal guidelines must be strictly adhered to regarding storage, handling, and application of pesticides. ▪ Advanced technology/monitoring equipment shall be used to insure minimal application of pesticides, herbicides, and fertilizers. This equipment shall be maintained and in proper calibration. ▪ A controlled and designated area/facility shall be used for the proper mixing and loading of pesticides into application equipment. The facility shall consist of an impermeable pad with controlled and contained drainage, and should be at least 50 feet from open ditches, ponds, or other water bodies. Rinse water shall be properly stored and hauled for disposal at an approved facility. ▪ Selection of pesticides shall be based on the ability to achieve treatment goals and criteria to minimize off-site movement. Selection of less toxic, less mobile, and less persistent pesticides shall be a priority management criterion. ▪ Pesticide applications shall be carefully timed and combined with other pest management practices; pests shall be accurately identified and pesticide applications made only when necessary, using the least amount required for all seasons. ▪ Pesticides shall not be applied when soil moisture is high during the rainy season. Applications shall be restricted prior to any anticipated late or early season storm events to preclude potential impacts from runoff. ▪ Irrigation applications shall be consistent with turf grass evapotranspiration requirements. Over-watering shall be avoided.	
4.8 Hydrology and Water Quality			
Construction and operation of the project could impact water quality through substantial soil erosion	4.8-1	In order to ensure that impacts are minimized to the greatest extent feasible, the project shall be designed to meet the BMP standards for	Less-than-significant.

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Environmental Impact		**Mitigation**	**Level of Significance After Mitigation**
during grading activities, loss of topsoil, and surface runoff from the proposed development.		operational phase storm water runoff and to maintain the onsite BMPs. The project shall implement BMPs to manage water quality by providing onsite runoff treatment in line with the onsite infiltration system. Prior to the issuance of any grading and/or building permit, the project applicant shall prepare a Construction Management Plan that identifies a designated construction supervisor responsible for the continued implementation of all construction BMPs throughout the duration of project construction. Moreover, the Construction Management Plan shall also identify BMPs to be implemented as part of the project and associated monitoring activities. The Construction Management Plan shall be reviewed by the City of Soledad Public Works Director prior to the issuance of any permit. 4.8-2 In order to prevent excess sediment buildup and ensure that all percolation basins are functioning in accordance with project-level plans, the project applicant and/or his/her successor in interest, shall be responsible for the long-term maintenance of all percolation basins and related private on-site drainage improvements and shall enter into a maintenance agreement with the City to provide for such. Bi-annually a basin maintenance report shall be submitted to the City of Soledad, subject to the review and approval of the Public Works Director, demonstrating that the basins have been properly maintained and cleaned in accordance with City standards. Prior to the issuance of any building and/or grading permit, the project applicant shall enter into a maintenance agreement with the City of Soledad.	
Construction and operation of the project could potentially result in flooding impacts to off-site properties if adequately sized drainage facilities are not provided within the proposed development. Project development could also impact existing drainage as a result of increased impervious surface coverage and modifications to the existing drainage pattern.	4.8-3	In order to ensure that project-induced impacts related to changes in the existing drainage patterns on the project site are minimized, the project applicant shall submit design-level improvement plans for the project's storm drainage collection and retention system. Final design-level plans shall be supported with appropriate soils and hydrologic data in accordance with City standards. All conveyance system and retention basins shall be sized and designed in accordance with applicable City design standards and shall be appropriately sized to accommodate stormwater runoff from a 100-year storm event. Prior to the recordation of any final map, the project applicant shall submit all	Less-than-significant.

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	design-level plans and supporting details to the City of Soledad Director of Public Works for review and approval. The VTM and Specific Plan shall be revised as necessary to reflect final locations of drainage facilities, subject to the review and approval of the City of Soledad. 4.8-4 In order to reduce the extent of impervious surface coverage and potential drainage/flooding impacts, Low Impact Development (LID) strategies shall be implemented, to the maximum extent feasible, in connection with all new development within the Specific Plan area. Prior to the approval of any final map or approval of any permit for all new residential and commercial developments, the project applicant shall submit design-level site and improvement plans to the City of Soledad for review and approval that incorporate the latest approved LID strategies and best practices as applicable, and the City shall ensure that all such measures are included in the final design plans, Examples of various LID strategies and best practices are identified as follows: ▪ Where possible, landscaped or grassy areas shall be substituted for impervious surfaces such as building entrances, traffic medians, etc. ▪ Permeable pavements such as crushed aggregate, turf lock or unit pavers shall be used in place of sidewalks, walkways or overflow parking areas wherever design allows. ▪ Bioretention cells, planter boxes, vegetated swales, and greenbelt buffer zones shall be implemented in landscaped areas, along streets and sidewalks wherever feasible. ▪ Final roadway design and street layout shall convey surface water runoff and storm flows into bioretention cells and swales. ▪ All commercial development shall integrate bioretention into parking lot islands or filter strips distributed throughout the parking area(s) to infiltrate, store and/or convey stormwater flows. In addition, permeable paving materials shall be used in spillover parking that is used only for peak demand periods.	

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	Alternative types of LID strategies and measures may also be approved provided evidence is submitted to the City of Soledad by a qualified engineer demonstrating that said strategies will achieve the intended result of this mitigation measure.	
4.9 Land Use and Planning		
The proposed project would conflict with several policies intended to avoid and/or mitigate environmental impacts.	Mitigation measures have been identified in this EIR to reduce the extent of project-induced impacts, but these impacts cannot be minimized to a less-than-significant level. Measures have been identified in **Section 4.1 Aesthetics** and **4.4 Biological Resources.** No additional measures are feasible.	Significant and unavoidable.
As proposed, the Miravale III Specific Plan has the potential to conflict with adopted planning documents pertaining to public services.	4.9-1 In order to maintain project consistency with adopted City-wide facility planning documents, the project applicant/developer shall revise Section 5.0 of the Specific Plan to incorporate revisions identified by the City of Soledad Director of Public Works, prior to project approval. The following policy revisions have been identified as necessary. Revisions are underlined. Revise Wastewater Policy 2 to read as follows, "Design and construct the wastewater treatment system for Miravale III in accordance with applicable requirements of the Soledad Urban Water Management Plan, Long-Term Wastewater Management Plan, and the Recycle Water Service Ordinance No. 645. Revise Water Policy 1 to read as follows, "Design and construct the water supply and distribution system for Miravale III that expands upon and is integrated with the City's water distribution system and which meets the needs of future project developments of the Specific Plan area consistent with the Urban Water Management Plan and the City's 2005 Water Master Plan." Revise Stormwater Policy 5 to read as follows, "Design and construct a stormwater collection and retention system that adequate retains peak storm flows onsite, avoids aggravating or causing offsite downstream from the project site, and ensures separation of stormwater drainage from Recycled water generated within the Plan area and that is	Less-than-significant.

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		consistent with the 2007 Stormwater Management Plan, Stormwater Master Plan, and Ordinance No. 617" Add a new policy to the Section 5.2.2 Law Enforcement and Fire Protection/Medical Services. The new policy shall read as follows: "9. Police and fire services will be maintained with funding from a public safety benefit assessment district or similar district."	
4.10 Noise			
Future residential uses developed at the project site would be exposed to exterior noise levels greater than 65 dBA CNEL, which exceeds the noise and land use compatibility standards presented in the City of Soledad's General Plan. Interior noise levels would be expected to exceed 45 dBA CNEL without the incorporation of noise insulation features into the project's design.	4.10-1	Maintain a sufficient buffer distance between transportation noise sources and future sensitive land uses, or alternatively, construct noise barriers or create acoustically shielded outdoor use areas utilizing buildings to achieve noise exposures of 65 dBA CNEL or less. The specific determination of necessary mitigation measures will occur during project level environmental review and design. Results of the analysis shall be submitted to the City prior to issuance of a building permit.	Less-than-significant.
	4.10-2	Retain a qualified Acoustical Specialist to prepare for City review and approval a detailed acoustical analysis of interior noise reduction requirements and specifications for all projects proposed within the 60 dBA CNEL contours of area roadways, in accordance with State and City standards. Interior noise levels must be maintained at or below 45 dBA CNEL. Building sound insulation requirements will include forced air mechanical ventilation in noise environments exceeding 60 dBA CNEL. Special building construction techniques (e.g., sound-rated windows and building facade treatments) may be required where exterior noise levels exceed 65 dBA CNEL. These treatments include, but are not limited to, sound rated windows and doors, sound rated exterior wall assemblies, and acoustical caulking. The specific determination of required treatments will be made on a unit-by-unit basis during project design. Results of the analysis, including the description of the necessary noise control treatments, will be submitted to the City along with the building plans prior to issuance of a building permit. Feasible construction techniques such as these would	

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		adequately reduce interior noise levels to 45 L_{dn} or lower.	
	4.10-3	Non-residential development will comply with the noise standards established in the Zoning Code at existing or planned residential properties in the vicinity. Further, efforts will be made to reduce noise impacts through the following planning and equipment requirements: ▪ Development site planning will be utilized in a fashion that reduces noise impacts for nearby sensitive receptors, such as by not locating loading docks near residences. ▪ Equipment screens, fan silencers, and engine mufflers will be used to mitigate noise from mechanical equipment. ▪ Noise barriers will be used to control noise from parking and vehicle circulation. ▪ For recreational uses, proposed development must consider impacts upon the adjacent residential development in terms of the location of active sports areas, their orientation on the site, whether or not lights are included, and speech amplification systems.	
Traffic volume increases from the project would increase traffic noise along the local roadway network. In some locations, there would be a substantial, permanent increase in noise levels at sensitive receptors.	4.10-4	The project shall incorporate noise reduction methods, subject to the review and approval of the City of Soledad. Methods to reduce noise on the project site may include the following measures: ▪ Pave and re-pave streets with "quieter" pavement types, such as Open-Grade Rubberized Asphaltic Concrete, that would reduce noise levels by 2 to 3 dBA depending on the existing pavement type, traffic speed, traffic volumes, and other factors. All new and improved streets within the project area shall use quieter pavement types. ▪ Implement new or larger noise barriers that may reduce noise levels by 5 dBA CNEL in areas that would not impair access requirements. Final design of such barriers, including an assessment of their feasibility and reasonableness, must be approved by the City during project-specific development applications. An increase in barrier height per foot equates to	Significant and unavoidable.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	approximately 1 dBA noise reduction. However, noise barriers must be considered as a last resort to alternative noise reduction methods per the City of Soledad General Plan. ▪ Install traffic calming measures to slow traffic and provide qualitative improvement by smoothing out the rise and fall in noise levels caused by speeding vehicles. For each 5 mph reduction in average speed, noise generation is reduced by approximately 1 dBA. ▪ Provide affected residences with building sound insulation, such as sound rated windows and doors on a case-by-case basis to reduce interior noise levels to below the 45 dBA CNEL noise standard.	
Existing and proposed noise-sensitive land uses would be exposed to construction noise levels in excess of the significance thresholds for a period of more than one construction season.	4.10-5 Noise-generating activities at the construction site or in areas adjacent to the construction site associated with the project in any way should be restricted to the hours of 7:00 a.m. to 7:00 p.m., Monday through Friday, and 8:00 a.m. to 6:00 p.m. on Saturdays, unless otherwise approved by the City. No construction activities should occur on Sundays or holidays, including New Years and 4th of July. 4.10-6 Equip all internal combustion engine driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment. 4.10-7 Locate stationary noise generating equipment (e.g., portable concrete crusher) as far as possible from sensitive receptors. Construct temporary noise barriers to screen stationary noise generating equipment when located near adjoining sensitive land uses. 4.10-8 Utilize "quiet" air compressors and other stationery noise sources where technology exists. 4.10-9 Route all construction traffic to and from the project site via designated truck routes where possible. Prohibit construction related	Significant and unavoidable.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	heavy truck traffic in residential areas where feasible. 4.10-10 Control noise from construction workers' radios to a point that they are not audible at existing residences bordering the project site. 4.10-11 Consider the use of multiple-pile drivers to expedite construction where pile driving is required. (Although noise levels generated by multiple pile drivers would be higher than the noise generated by a single pile driver, the total duration of pile driving activities would be reduced.) 4.10-12 Use temporary noise control blanket barriers to shroud pile drivers or erect in a manner to shield the adjacent land uses. Such noise control blanket barriers can be rented and quickly erected. 4.10-13 Pre-drill foundation pile holes to minimize the number of impacts required to seat the pile. Pre-drilling reduces the number of blows required to seat the pile and is a standard construction noise control technique. 4.10-14 The contractor shall prepare a detailed construction management plan identifying the schedule for major noise-generating construction activities. The construction management plan shall identify a procedure for coordination with the adjacent noise sensitive facilities so that construction activities can be scheduled to minimize noise disturbance. Prior to the issuance of any grading and/or building permit, the project applicant shall submit a detailed construction management plan to the City of Soledad for review and approval. 4.10-15 The project applicant shall designate a "disturbance coordinator" who shall be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall require that reasonable measures warranted to correct the problem are implemented. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	notice sent to neighbors regarding the construction schedule. Prior to the issuance of any grading and/or building permit, the project proponent shall provide the City of Soledad with the contact information for the designated "disturbance coordinator."	
4.11 Population and Housing		
The project would represent an increase in overall residential holding capacity identified in the 2005 General Plan EIR for portions of the Mirassou, San Vincente and Northwest Expansion Areas within the project area and could be considered growth inducing if annexations and development in the remaining expansion areas exceed development potential addressed in the General Plan EIR.	4-11.1 Phase approval of development applications and annexations in the Mirassou, San Vincente and Northwest Expansion Areas to maintain holding capacity and population projections in Table 4.11-5 of the General Plan EIR. Monitor development approvals in these expansion areas to limit overall density and population growth to the holding capacity identified to ensure consistency with projections in approved City planning documents. 4-11.2 Implement General Plan policies L-2 to L-7 and other applicable policies for phased development and population growth in the project and expansion areas. General Plan policies L-2 to L-7, (below) identify expansion area requirements and applicable policies for annexation of these areas: L-2 Further annexations to the City may occur when a) a substantial portion of the development capacity within the existing city limits has been developed, b) a substantial public benefit can be realized through the annexation, such as the provision of public open space, additional parkland, or the protection of scenic vistas, or natural resources, or c) a special type of use is proposed that cannot be practically accommodated in the existing city limits, and d) the project can be found to provide a financial benefit to the City or to be fiscally neutral. The Planning Commission shall review the merits of a request for annexation based on these criteria, and make a recommendation to the City Council. L-3 A specific plan shall be required for all annexations and development of properties designated *Expansion Area*.	Less-than-significant.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	Specific plans shall be prepared in accordance with the standards provided in Appendix B of the General Plan. L-4 The City shall promote patterns of development that allow for the efficient and timely extension of infrastructure and services. L-5 New development shall not be allowed unless adequate public services are available to serve such new development, or that can be provided at the time of development. L-6 New development shall pay its fair share of providing additional public services needed to accommodate such development. L-7 Master plans for sewer, water, roads, drainage and other public improvements shall be required for new development on large undeveloped parcels and may be included in the specific plan required by policy L-3, and as determined by the City. <u>The required fiscal analysis shall be completed by a qualified, independent consultant, utilizing realistic and verifiable assumptions concerning investment earnings, interest rates, property taxes, transient occupancy tax, projected home/property sale prices and sales rates, etc.</u>	
Although the project site is located in an area that has been identified for future population growth in City's General Plan, the project would result in a significant growth-inducing impact through the introduction of new sources of employment and a significant portion of the City's projected population growth, which would result in additional demands on existing facilities.	No Mitigation Measures identified.	Significant and unavoidable.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact	**Mitigation**		**Level of Significance After Mitigation**
The Miravale III Specific Plan is inconsistent with the Housing Element, which requires affordable housing to be fully integrated with market rate housing.	4.11.3	The applicant shall enter into a Development Agreement per Program 4.3 of the City's Housing Element with the City that prescribes the parameters of the development of affordable housing consistent with the City's Housing Element, Inclusionary Housing Ordinance, and the revised Specific Plan. The Development Agreement shall be reviewed and approved by the City of Soledad prior to or concurrent with project approval.	Less-than-significant.
The Miravale III Specific Plan is inconsistent with affordable housing requirements of the City's Inclusionary Housing Ordinance.	4.11.4	Prior to project approval, the Specific Plan shall be revised to provide 20% of the units proposed in each Planned Development area and the Low Density Residential area to be affordable housing units. Alternatively, the project applicant shall dedicate real property for affordable housing or submit payment of in-lieu fees in order to ensure project consistency with the requirements of the City of Soledad's Inclusionary Housing Ordinance, subject to the approval of the City of Soledad. The project's consistency with the City's Inclusionary Housing Ordinance shall be evidenced in the Development Agreement (DA) prepared for the project, subject to the approval of the City of Soledad. The DA shall be reviewed concurrently with the project's General Plan amendments, Specific Plan and the Vesting Tentative Map.	Less-than-significant.
4.12 Public Services and Recreation			
The project would result in an increased demand for police and fire services.	4.12-1	Prior to the initiation of construction for Phase 2 of the proposed development, the proposed fire and police facilities located on West Street shall be constructed and operational. The project applicant shall also be responsible for providing the necessary funding to the City of Soledad or establishing the appropriate funding mechanism to ensure the provision of adequate police and fire staffing to meet the demands of the proposed project, as determined by the City of Soledad. Prior to the issuance of any building permit for new residential and commercial development in Phase 2, the project applicant shall obtain written documentation from the Soledad Fire and Police Departments indicating that the fire and police substations are operational and adequately staffed to meet the needs of the proposed project, subject to the review and approval of the City of Soledad. This mitigation measure shall not be construed as prohibiting the implementation of	Less-than-significant.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact	**Mitigation**		**Level of Significance After Mitigation**
		infrastructure necessary to serve the proposed facility or the needs of Phase 2 of the proposed project."	
	4.12-2	Prior to the issuance of building permits, the applicant/developer shall pay a City Public Facilities Development Impact Fee for each type of new development in accordance with the adjusted impact fee in effect at the time of building permit issuance. All fees shall be subject to the review and approval of the City of Soledad Community Development Director.	
	4.12-3	Prior to the recordation of each final map for development within areas currently designated as "State Responsibility Areas," the applicant shall submit evidence, subject to the review and approval of the City of Soledad Fire Department, demonstrating that a minimum 100-foot defensible space will be provided around any structure constructed within the foothill area. The defensible space shall be cleared of and maintained free of brush and combustible debris, and any landscaping placed within the defensible space shall be irrigated.	
The project would result in an increased demand for educational services.	4.12-4	Prior to project approval, the project applicant shall submit evidence, including a revised Specific Plan and tentative map, demonstrating that an additional two elementary school sites of sufficient size and a 40-acre high school site will be designated within the project boundaries to meet project demands, subject to the review and approval of the City of Soledad and the Soledad Unified School District. The 40-acre high school site shall be operational prior to the issuance of any certificate of occupancy for Phase II of the proposed project, unless otherwise approved by the City of Soledad and the Soledad Unified School District[1] In lieu of providing said high school facilities on-site, the project shall submit payment of its proportionate share of funding	Less-than-significant.

[1] Alternatively, if additional school sites will not be provided in conjunction with project development, the project applicant shall obtain written documentation from the Soledad Unified School District demonstrating that adequate school facilities, including a 40-acre high school and two appropriately sized elementary ~~middle~~ schools, will be available within the City of Soledad to accommodate anticipated project demands. If, however, adequate capacity does not exist, development shall be restricted until such time that additional capacity is available to accommodate subsequent phases of development.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact	**Mitigation**		**Level of Significance After Mitigation**
		towards site acquisition and construction of new school facilities, prior to the recordation of any final map. Pro-rata payment of the cost of providing a second high school shall not be construed as waiver of the previous requirement that adequate high school capacity be available to meet project demands prior to occupancy of any housing constructed in Phase II of the project.	
	4.12-5	The applicant/developer shall pay a school impact fee for each type of development pursuant to the criteria set forth within California Government Code Section 65995. Prior to the issuance of building permits, the applicant shall pay required school mitigation fees. As indicated above, the fees set forth in Government Code Section 65996 constitute the exclusive means of both "considering" and "mitigating" school facilities impacts of projects [Government Code Section 65996(a)]. They are "deemed to provide full and complete school facilities mitigation" [Government Code Section 65996(b)].	
As proposed, the project does not meet the minimum required parkland ratio of five ~~three~~ acres per 1,000 residents.	4.12-6	In order to ensure adequate improved parkland is provided as part of project development, the applicant shall submit detailed plans, including a revised Specific Plan and Tentative Map, demonstrating that adequate parkland (~~3~~ 5 acres/1,000 residents) is designated within the project boundaries consistent with the requirements of Appendix B of the General Plan ~~and Miravale III Specific Plan dated June 2007~~, prior to project approval, subject to the review and approval of the City of Soledad. Prior to the recordation of each final map, the project applicant shall submit a comprehensive Park Master Plan to the City of Soledad for review and approval. This plan shall address park design and development consistent with the City's adopted Parks and Recreation Master Plan, along with maintenance, operation and financing components for each dedicated recreation parcel in that phase of development This plan shall also identify the appropriate types of improvements within each park parcel to meet the recreational needs of all age groups within that phase of the project.."	Less-than-significant.
Population growth anticipated under the Miravale III Specific Plan would create additional demands	4.12-7	Prior to the issuance of any building permit, the applicant/developer shall submit payment of a Park Facilities Impact Fee in accordance	Less-than-significant.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact		**Mitigation**	**Level of Significance After Mitigation**
on park and recreational facilities.		with the adjusted impact fee in effect at the time of building permit issuance, if determined to be applicable. All fees shall be subject to the review and approval of the City of Soledad Community Development Director.	
4.13 Traffic and Circulation			
Based on the significance criteria, the project has the potential to increase hazards due to a design feature or incompatible uses.	4.13-1	Due to large traffic volumes and vehicle speeds, at-grade golf cart crossings shall not be permitted along streets classified as collectors or arterials unless at a traffic light. Prior to the issuance of any building and/or grading permit for development associated with the golf course facility, the project applicant shall submit detailed design-level plans demonstrating compliance with this measure, subject to the review and approval of the Director of Public Works. Improvements shall be constructed in accordance with this measure prior to the issuance of any certificate of occupancy or final permit for development associated with the golf course.	Less-than-significant.
Based on the significance criteria, the project will have a significant impact on eleven study intersections, five roadway segments, and signal warrants would be met on nine intersections under project conditions.	4.13-2	*Moranda Road and Front Street:* Widen NB Front Street to two lanes, add a second NB through lane, EB free-right-turn lane and widen Front Street between Moranda road and San Vicente Road. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance in order to mitigate the impact at this location. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad. Alternatively the project can contribute its fair share towards the construction of the extension of Gabilan Drive to US 101. If this alternative is chosen local roadways shall be monitored annually to ensure that LOS levels are maintained in accordance with the City of Soledad's adopted standards until the extension is complete. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works.	Less-than-significant.
	4.13-3	*San Vicente Road and Front Street:* Widen NB Front Street to two	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	lanes, NB San Vicente Road to three lanes, add two EB left-turn lanes ~~lands~~ and a SB free-right-turn lane. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance in order to mitigate the impact at this location. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad. Alternatively the project can contribute its fair share towards the construction of the extension of Gabilan Drive to US 101. If this alternative is chosen local roadways shall be monitored annually to ensure that LOS levels are maintained in accordance with the City of Soledad's adopted standards until the extension is complete. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works. 4.13-4 *San Vicente and Gabilan Drive:* Signalize this intersection and add a second westbound left-turn lane ~~land~~, exclusive northbound right-turn lane, and southbound left-turn lane ~~land~~. SB San Vicente Road will need to be widened to accommodate the dual left-turn lanes from Gabilan. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance in order to mitigate the impact at this location. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad. Alternatively the project can contribute its fair share towards the construction of the extension of Gabilan Drive to US 101. If this alternative is chosen local roadways shall be monitored annually to ensure that LOS levels are maintained in accordance with the City of Soledad's adopted standards until the extension is complete. If this alternative is selected the project applicant shall submit payment of the projects fair share towards the	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	construction of this improvement in accordance with the traffic impact fee in effect at the time of building permit issuance for each phase of the project. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works. 4.13-5 *West Street and Gabilan Drive:* Signalize the intersection and add exclusive left-turn lanes with protected phasing on all approaches. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance in order to mitigate the impact at this location. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works. 4.13-6 *Main Street and Gabilan Dive:* Signalize the intersection with protected left-turn phasing along Gabilan Drive. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance in order to mitigate the impact at this location No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad. Alternatively the project can contribute its fair share towards the construction of the extension of Gabilan Drive to US 101. If this alternative is chosen local roadways shall be monitored annually to ensure that LOS levels are maintained in accordance with the City of Soledad's adopted standards until the extension is complete. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works.	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	4.13-7 *Andalucia Drive and Gabilan Drive:* Signalize this intersection with protected left-turn phasing along Gabilan Drive. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance in order to mitigate the impact at this location. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad. 4.13-8 *Orchard Land and Metz Road:* Signalize this intersection with protected left-turn phasing on Metz Road and split phasing on Orchard Lane. The project applicant shall submit payment of the City of Soledad traffic impact fee in effect that the time of building permit issuance in order to mitigate the impact at this location. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad. 4.13-9 *Oak Street and Front Street:* Widen Front Street to four lanes between Nestles Road and Oak Street and add a second EB left-turn lane at the intersection of Nestles Road and Oak Street. Alternatively, the construction of the US 101/SR 146 bypass would alleviate impacts at this intersection. The project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance. All fees shall be paid prior to the issuance of any building permits for each phase of development and shall be subject to the approval of the Director of Public Works. No certificate of occupancy shall be issued for new residential or commercial buildings	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact		**Mitigation**	**Level of Significance After Mitigation**
		requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad.	
The project will have a significant impact on two freeway ramps and four freeway segments.	4.13-10	*Moranda Road and US 101 NB Ramps:* Signalize the intersection and widen the NB US 101 on ramp to add a second NB left-turn lane. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact fees in effect at the time of building permit issuance, including the TAMC Regional Development Impact Fees pursuant to Chapter 3.56 of the Soledad Municipal Code, in order to mitigate the impact at this location. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad. ~~Alternatively, the project can contribute its fair share towards the construction of the extension of Gabilan Drive to U.S. 101. If this alternative is chosen,~~ If the aforementioned interchange improvements are not implemented by the time required, the project could instead contribute its fair share towards the construction of the extension of Gabilan Drive to U.S. 101. Under this approach to mitigation, local roadways shall be monitored to ensure that LOS levels are maintained in accordance with the City of Soledad's adopted standards until the extension is complete. In addition, the US 101 interchange at Moranda Road/Front Street will require reconfiguration/reconstruction to provide more efficient access to the project site and north Soledad in general. ~~As this is a regional improvement, funding of at least part of the mitigation should be the responsibility of TAMC, and TAMC should include the improvement within its traffic impact fee. In this case, the project's payment of the City's adopted TIF fee, which includes regional improvements, would mitigate the project's regional impact at this location.~~ However, should the widening of the freeway and improvement of interchanges be deemed infeasible or not part of the fee program, the impact should be considered significant and unavoidable. All fees shall be paid prior to the issuance of any building permit for each phase of development	Less-than-significant with mitigation. However, if these improvements are determined to be infeasible impacts would be significant and unavoidable.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	and shall be subject to the approval of the Director of Public Works. 4.13-11 *North Front Street and US 101 SB Ramps:* Signalize this intersection, widen southbound Front Street to two lanes and add a second lane on the off-ramp. In addition, the volume of vehicles exiting southbound US 101 at Front Street indicate the need for widening of Front Street, between US 101 and Moranda Road, to two lanes southbound and/or reconfiguration/reconstruction of the US 101 interchange at Moranda Road/Front Street to provide more efficient access to the project site and north Soledad in general. As this is a regional improvement, funding of at least part of the mitigation should be the responsibility of TAMC, and TAMC should include the improvement within its traffic impact fee. In this case, the project's payment of the City's adopted TIF fee would mitigate the project's impact at this location the project applicant shall contribute funding towards its implementation by submitting payment of the TAMC Regional Development Impact Fees, pursuant to Chapter 3.56 of the Soledad Municipal Code. However, should the widening of the freeway and improvement of interchanges be deemed infeasible or not part of the TAMC fee program, the impact should be considered significant and unavoidable. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact fees in effect at the time of building permit issuance, including the Regional Development Transportation Impact Fees, in order to mitigate the impact at this location. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works. 4.13-12 The project applicant shall be required to pay towards the City's TIF program, which includes regional improvements, and shall also pay the City's adopted Regional Development Impact Fees established in Chapter 3.56 of the Municipal Code. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the Regional Development Impact Fee and City of Soledad traffic impact fees in effect at the time of building permit issuance in order to mitigate the impacts at identified this	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact	**Mitigation**		**Level of Significance After Mitigation**
		locations. The payment of fees is considered mitigation for project impacts to freeway highway and regional facilities. All fees shall be ~~paid prior to the issuance of any building permit for each phase of development and~~ shall be subject to the approval of the Director of Public Works. Should the widening of the freeway and improvement of interchanges be deemed infeasible or not part of the fee program, the impact should be considered significant and unavoidable."	
The project together with the cumulative developments will have a significant impact on two intersections	4.13-13	*Moranda Road and Front Street:* Addition of an east leg to the intersection to serve the Soledad Plaza project site. In order to mitigate potential impacts at this intersection, the project applicant shall submit payment of the City's adopted traffic impact fee in effect at the time of building permit issuance for each phase of development, subject to the review and approval of the City of Soledad Director of Public Works. All fees shall be paid prior to the issuance of any building permit for each phase of development.	Less-than-significant.
	4.13-14	*San Vicente Road and Gabilan Drive:* Addition of a west leg to the intersection to serve the Soledad Plaza project site. In order to mitigate potential impacts at this intersection, the project applicant shall submit payment of the City's adopted traffic impact fee in effect at the time of building permit issuance for each phase of development, subject to the review and approval of the City of Soledad Director of Public Works. All fees shall be paid prior to the issuance of any building permit for each phase of development.	
4.14 Utilities and Service Systems			
Development of the proposed project would require or result in the construction of new water and recycled water facilities and the expansion of existing facilities. Project development would also require the construction of additional distribution and storage systems, transmission mains and improvements. Potential significant environmental effects could be realized through construction of the	4.14-1	Design and construct the water supply and distribution system for the project that is integrated with the City's water distribution system and consistent with the Urban Water Management Plan and the City's 2005 Water Master Plan. Prior to the issuance of any building permit, the project applicant shall submit detailed design-level infrastructure plans in accordance with this measure, subject to the review and approval of the City of Soledad Director of Public Works.	Less-than-significant.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact		**Mitigation**	**Level of Significance After Mitigation**
facilities if not planned and constructed consistent with Citywide infrastructure improvement plans.	4.14-2	All water and recycled water facilities and infrastructure shall be designed with sufficient capacity to accommodate the project and be required to adhere to all applicable City standards in terms of infrastructure sizing, design and construction. Prior to the issuance of any building permit, the project applicant shall submit detailed design-level infrastructure plans in accordance with this measure, subject to the approval of the Director of Public Works.	
	4.14-3	All water and recycled water pipelines shall be placed underground and in the utilities right-of-way and constructed to comply with all applicable state and local standards. Prior to the issuance of any building permit, the project applicant shall submit detailed design-level infrastructure plans in accordance with this measure, subject to the review and approval of the City of Soledad Director of Public Works.	
	4.14-4	The project shall be required to construct new infrastructure that is of adequate capacity to serve the project's projected water and fire flow demand in addition to the provider's existing commitments. Prior to the issuance of any building permit, the project applicant shall submit detailed design-level infrastructure plans in accordance with this measure, subject to the approval of the Director of Public Works.	
Development of the proposed project would potentially exceed existing and planned wastewater treatment capacity.	4.14-5	In order to ensure that the proposed wastewater treatment system is consistent with the applicable requirements of the Soledad Urban Water Management Plan, Long-Term Wastewater Management Plan, and Chapter 13.11 Recycled Water Service, the project applicant shall submit detailed design-level plans in accordance with these requirements, prior to approval of the first Final Map ~~the issuance of any building and/or grading permit~~, subject to the review and approval of the City of Soledad Public Works Director.	Less-than-significant.
	4.14-6	Prior to the approval of the first final map within the Specific Plan area, all required permits for the on-site recycled water facility, including, but not limited to, a Waste Discharge Permit from the Regional Water Quality Control Board and approval of the system design, shall be obtained. The project applicant shall submit written	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact	**Mitigation**		**Level of Significance After Mitigation**
		evidence to the City of Soledad documenting compliance with this measure.	
	4.14-7	In order to ensure that adequate wastewater treatment is available to accommodate each phase of project development, the treatment capacity for the on-site recycled water facility shall be increased to accommodate each phase of the project prior to the final approval of the first building permit or occupancy permit for each of the respective project phases as appropriate. Subject to the review and approval of the Director of Public Works, excess treatment capacity and related infrastructure shall be added to the plant and disposal facilities, as needed, for each phase of the project, to accommodate future increases in wastewater flow rates, based on estimates of future development. In addition, flows shall be metered and records of the flows shall be provided to the City ~~RWQCB~~ for review and approval. No building permits shall be issued ~~issuance~~ unless sufficient capacity exists to accommodate additional phases of development"	
	4.14-8	Prior to the issuance of any building permit, the applicant/developer shall submit payment of the current City Development Impact Fee for each type of development in accordance with the adjusted impact fee in effect at the time of building permit issuance. Additionally, the applicant/developer shall submit payment of all fees necessary to fund the construction of the expansion of the treatment plant located within the project site, as required by the City of Soledad. All fees shall be subject to the review and approval of the Director of Public Works.	
Development of the proposed project would require or result in the construction of new water or wastewater treatment facilities and expansion of existing facilities, including the construction of water and wastewater facilities, transmission mains and improvements which could cause significant environmental effects through construction of the facilities if not planned and constructed consistent with Citywide infrastructure improvement plans.	4.14-9	All water and wastewater infrastructure shall be designed with sufficient capacity to accommodate the project and be required to adhere to all applicable City standards in terms of infrastructure sizing, design and construction. Prior to the issuance of any building and/or grading plan, the project applicant shall submit detailed evidence, including but not limited to design-level infrastructure plans, consistent with the requirements of this mitigation, subject to the approval of the Director of Public Works.	Less-than-significant.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	4.14-10 All wastewater pipelines shall be placed underground and in the utilities right-of-way. Prior to the issuance of any building permit, the project applicant shall submit detailed design-level infrastructure plans in accordance with this measure, subject to the review and approval of the City of Soledad Director of Public Works. 4.14-11 The project would be required to construct new infrastructure that is of adequate capacity to serve the project's projected demand ~~in addition to the wastewater provider's existing commitments~~. Prior to the issuance of any building permit, the project applicant shall submit detailed design-level documentation, in addition to written documentation from the City of Soledad, documenting that design-level plans are in accordance with City standards and requirements, as well as documenting that the City has sufficient capacity to accommodate project demands in addition to existing commitments, subject to the approval of the Director of Public Works.	
Project construction would result in significant construction-generated waste. The following mitigation has been identified by the Salinas Valley Solid Waste Authority to ensure that all construction-generated waste is recycled to the greatest extent feasible in order to minimize impacts to existing facilities within their jurisdiction.	4.14-12 Prior to the commencement of construction related activities, the applicant/developer shall prepare and submit a Construction and Demolition Diversion Plan consistent with the requirements of the City's adopted Diversion Plan Ordinance, subject to the review and approval of the Salinas Valley Solid Waste Authority and the City of Soledad. This plan shall identify on-going implementation measures for the diversion and separation of construction waste to ensure that all construction-generated solid waste is recycled to the greatest extent possible.	Less-than-significant.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
Development of the proposed project would increase demands for electricity and natural gas consumption.	The following mitigation measure is necessary to reduce project demands for electricity and natural gas and is in addition to other mitigation measures identified **Section 4.3 Air Quality.** 4.14-13 In order to prevent the wasteful use of energy, all new residential, commercial, and hospitality oriented structures shall incorporate the principles of passive solar design to the maximum extent feasible. Typical passive solar design principles may include the following; 1) large south-facing windows; 2) tile, brick, or other thermal mass material used in flooring or walls to absorb natural heat; 3) improved insulation; 4) building orientation that takes advantage of the sun, shade, and wind; and 5) energy efficient building materials. For new structures that are unable to incorporate these principles, the project applicant shall submit detailed evidence, such as site plans, landscape plans, and similar, to the City of Soledad Public Works Director demonstrating that there are no viable design alternatives to accommodate these principles. Prior to the issuance of each individual building permit for new structures, the project applicant shall submit evidence, including but not limited to, site plans, proposed building materials, and landscape plans, to the City of Soledad Public Works Director for review and approval.	Less-than-significant.
5.0 CEQA Considerations		
Development of the proposed project would contribute to a number of potentially significant cumulative impacts.	Implementation of mitigation measure identified above, in addition to adherence to applicable General Plan policies.	Cumulative impacts would be reduced to a less-than-significant level for geology and soils, utilities and service systems. Significant unavoidable cumulative impacts include aesthetics, agricultural resources, air quality, transportation and traffic, and biological resources.

APPENDICES

Appendix L to the Draft EIR for Miravale III

Appendix L- to the Final EIR for Miravale III

Discussion of the State Endangered Species Act (CESA)

In 1984, the State legislated the California Endangered Species Act (CESA) (Fish and Game Code §2050). The basic policy of CESA is to conserve and enhance endangered species and their habitats. State agencies will not approve private or public projects under their jurisdiction that would jeopardize threatened or endangered species if reasonable and prudent alternatives are available.

CESA requires that all State lead agencies (as defined under CEQA) conduct an endangered species consultation with CDFG if their actions could affect a State listed species. The State lead agency and/or project applicants must provide information to CDFG on the project and its likely impacts. CDFG must then prepare written findings on whether the proposed action would jeopardize a listed species would result in the direct take of a listed species. Because CESA does not have a provision for "harm" (see discussion of FESA, above), CDFG considerations pursuant to CESA are limited to those actions that would result in the direct take of a listed species.

If CDFG determines that a proposed project could impact a State listed threatened or endangered species, CDFG will provide recommendations for "reasonable and prudent" project alternatives. The CEQA lead agency can only approve a project if these alternatives are implemented, unless it finds that the project's benefits clearly outweigh the costs, reasonable mitigation measures are adopted, there has been no "irreversible or irretrievable" commitment of resources made in the interim, and the resulting project would not result in the extinction of the species. In addition, if there would be threatened or endangered species impacts, the lead agency typically requires project applicants to demonstrate that they have acquired "incidental take" permits from CDFG and/or USFWS (if it is a Federal listed species) prior to allowing/permitting impacts to such species.

If proposed projects would result in impacts to a State listed species, an "incidental take" permit pursuant to §2081 of the Fish and Game Code would be necessary (versus a Federal incidental take permit for Federal listed species). CDFG will issue an incidental take permit only if:

1) The authorized take is incidental to an otherwise lawful activity;
2) the impacts of the authorized take are minimized and fully mitigated;
3) the measures required to minimize and fully mitigate the impacts of the authorized take:

a) are roughly proportional in extent to the impact of the taking on the species;
b) maintain the project applicant’s objectives to the greatest extent possible; and,
c) capable of successful implementation; and,

4) adequate funding is provided to implement the required minimization and mitigation measures and to monitor compliance with, and the effectiveness of, the measures.

If an applicant is preparing a habitat conservation plan (HCP) as part of the Federal 10(a) permit process, the HCP might be incorporated into the §2081 permit if it meets the substantive criteria of §2081(b). To ensure that an HCP meets the mitigation and monitoring standards in Section 2081(b), an applicant should involve CDFG staff in development of the HCP. If a final Biological Opinion (Federal action) has been issued for the project pursuant to Section 7 of the Federal Endangered Species Act, it might also be incorporated into the §2081 permit if it meets the standards of §2081(b).

No §2081 permit may authorize the take of a species for which the Legislature has imposed strict prohibitions on all forms of “take.” These species are listed in several statutes that identify “fully protected” species and “specified birds.” *See* Fish and Game Code §§ 3505, 3511, 4700, 5050, 5515, and 5517. If a project is planned in an area where a “fully protected” species or a “specified bird”

occurs, an applicant must design the project to avoid all take.

In September 1997, Assembly Bill 21 (Fish and Game Code §2080.1) was passed. This bill allows an applicant who has obtained a “non-jeopardy” Federal Biological Opinion pursuant to Section 7, or who has received a Federal 10(a) permit (Federal incidental take permit), to submit the Federal opinion or permit to CDFG for a determination as to whether the Federal document is “consistent” with CESA. If after 30 days CDFG determines that the Federal incidental take permit is consistent with State law, no further permit or consultation is required under CESA for the project. However, if CDFG determines that the Federal opinion or permit is not consistent with CESA, the applicant must apply for a State permit under section 2081(b).

The process provided in Fish and Game Code §2080.1 (Assembly Bill 21) may be of use when the incidental take would occur to species that are listed under both the Federal and State endangered species acts. Assembly Bill 21 is of no use if an affected species is State-listed, but not Federally listed. Section 2080.1 will automatically be repealed if and when Congress amends Section 7 or Section 10 of the Federal act. Since FESA could be amended at any time, we are recommending that project applicants who are applying for authorization for "incidental take" of a Federal and State listed species, enter into a Section 2081 agreement with CDFG in addition to the Federal permit so that the project is covered under both FESA and CESA in case AB21 is repealed during the life of the project.

State and Federal incidental take permits are issued on a discretionary basis, and are typically only authorized if applicants are able to demonstrate that impacts to the listed species in question are unavoidable, and can be mitigated to an extent that the reviewing agency can conclude that the proposed impacts would not jeopardize the continued existence of the listed species under review. Typically, if there would be impacts to a listed species, mitigation that includes habitat avoidance, preservation, and creation of endangered species habitat is necessary to demonstrate that projects would not threaten the continued existence of a species. In addition, management endowment fees are usually collected as part of the agreement for the incidental take permit(s).

The endowment is used to manage any lands set-aside to protect listed species, and for biological mitigation monitoring of these lands over (typically) a five-year period.

Final EIR
Appendix F-1

Greenhouse Gas and Criteria Air Pollutant Reduction Plan Requirements

APPENDIX F-1 to the Final EIR
GREENHOUSE GAS AND CRITERIA AIR POLLUTANT REDUCTION PLAN REQUIREMENTS AND EXAMPLE MEASURES

In accordance with Mitigation Measure 4.3-3, in order to reduce greenhouse gas (GHG) and regional air pollutants and precursors (criteria air pollutants or CAPs) emissions, the applicant shall prepare and submit a GHG and CAP Reduction Plan (GCRP) prior to approval of the first tentative map that shall include a description of the measures that are proposed to be implemented by the entire Specific Plan project, including one or more of the following Example GHG and CAP Reduction Measures. The plan shall be approved by the City and implemented to the extent feasible prior to approval of all proposed construction of structures and site improvements, including but not limited to, determination of substantial conformance, building permits and grading permits. For each of the measures not included, the applicant shall describe why the measure was not included. The GCRP shall present estimated reductions in GHGs and CAPs based on available information source.

No certificate of occupancy for any phase, or portion thereof, of the project shall be granted until all of the applicable measures have been implemented by the project proponent. The proponent shall demonstrate that measures that must be implemented throughout the life of the project are included in all applicable CC&Rs, commercial center rules and regulations, and draft tenant lease agreements.

The measures below would reduce emissions of GHGs and CAPs; however, the effectiveness and adequacy of these measures for the entire Specific Plan or any future phase is unknown, precluding definitive quantitative analysis of emission reductions. For this reason, the regional air pollutants and precursors and the GHG emissions of the Specific Plan were considered to be significant and unavoidable. Following the example list of mitigation measures is a table from the BAAQMD's CEQA Guidelines showing the range of possible GHG and CAP reductions possible from similar measures.

Besides the on-site measures (or after implementation of all feasible on-site mitigation), another potentially feasible mitigation measure is an offsite mitigation program to assist lead agencies and project applicants in achieving emission reductions. A project applicant would enter into an agreement with the City or Air District and pay into a GHG reduction fund. The City or Air District would commit to reducing the type and amount of emission identified in the agreement. The City or Air District would identify, implement, and manage offsite mitigation projects. For guidance see the following website: http://www.baaqmd.gov/~/media/Files/Planning%20and%20Research/CEQA/baaqmd_offsite_guidance_5_3_10.ashx.

Example GHG and CAP Reduction Measures:

Energy Efficiency and Non-Fossil Fuel Energy Measures

NOTE: The project must comply with the most current State of California Building Code in effect at the time of building permit application submittal (see Mitigation Measure #4.3-6 in the Final EIR) and with the City of Soledad's Zoning Ordinance, Section 17.38.110 (Energy Conservation), that requires passive or natural heating or cooling opportunities and other measures to conserve nonrenewable energy resources in subdivision design.

- Design buildings to be energy efficient. Specifically, require that buildings exceed Title 24 energy efficiency standards. Buildings shall take advantage of shade, prevailing winds, landscaping and sun screens to reduce energy use. Applicant shall consider pursuing Leadership in Energy and Environmental Design (LEED) Building Platinum Certification and LEED-ND certification.[1]

[1] The LEED certification attempts to accomplish a whole building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality. The process ensures that all building

- Install efficient lighting and lighting control systems. Use daylight as an integral part of lighting systems in buildings. A typical LEED requirement is that developments ensure that at least 75% of all regularly occupied spaces receive a minimum daylight illumination of 25 foot-candles.
- Install light colored cool pavements, and strategically placed shade trees. Plant shade trees within 40 feet of the south side or within 60 feet of the west side of buildings.
- Install energy efficient heating and cooling systems, appliances and equipment, and control systems. Including requiring:
    - smart meters and programmable thermostats.
    - tank-less water heaters.
    - Heating, Ventilation, and Air Condition (HVAC) ducts sealing.
    - increased roof/ceiling insulation.
- Install light emitting diodes (LEDs) for traffic, street and other outdoor lighting.
- Limit the hours of operation of outdoor lighting.
- Provide electrically powered landscape equipment and outdoor electrical outlets.
- Provide onsite renewable energy system(s) and solar water heaters. Nonpolluting and renewable energy potential includes solar, wind, geothermal, low-impact hydro, biomass and bio-gas strategies. When applying these strategies, projects may take advantage of net metering with the local utility.
- Project shall orient 75% or more of homes and/or buildings to face either north or south (within 30° of N/S). Building design includes roof overhangs that are sufficient to block the high summer sun, but not the lower winter sun, from penetrating south facing windows. Trees, other landscaping features and other buildings are sited in such a way as to maximize shade in the summer and maximize solar access to walls and windows in the winter.
- Install a vegetated/green roof that covers at least 50% of roof area, or alternatively, a "cool roof." The reduction assumes that a vegetated roof is installed on a least 50% of the roof area or that a combination high albedo and vegetated roof surface is installed that meets the following standard: (Area of SRI Roof/0.75)+(Area of vegetated roof/0.5) $\geq$ Total Roof Area. Design of the green roof shall incorporate water consumption reduction measures.

Water Conservation and Water Use Efficiency Measures [2]

NOTE: The project must comply with the City of Soledad Municipal Code (SMC) Chapter 13.09 requiring ultra-low flow toilets, low-flow shower fixtures, water recirculating systems and xeriscape landscaping.

- Install only high efficiency toilets and water fixtures, such as automatic timed faucets. **NOTE: This is a requirement of the SMC Chapter 13.09.**
- Create water-efficient landscapes by using landscape designs with drought tolerant local native, non-invasive plants only, including trees with low carbon emissions and high carbon sequestration potential.
- Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls. Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff.
- Use reclaimed water for landscape irrigation in new developments and on public property when such reclaimed water is made available. Install the infrastructure to deliver and use reclaimed water as part of required onsite and offsite improvements.
- Design buildings to be water-efficient. Design and install rainwater harvesting and storage systems for at least 50% of the project's roof area for use as landscape irrigation.
- Restrict the use of water for cleaning outdoor surfaces and vehicles.

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systems perform interactively according to the contract documents, the design intent and the owner's operational needs to optimize energy performance. LEED-ND is a similar certification program that applies to districts, areas or neighborhoods.

[2] Water conservation measures reduce energy consumption for production, treatment and conveyance of potable water, and therefore, reduce air pollutant emissions resulting from electricity generation.

- Implement low-impact development practices such as retaining storm water and using it onsite that maintain the existing hydrologic character of the site to manage storm water and protect the environment. **NOTE: This is a requirement of the SMC Chapter 13.52.**
- Coordinate the design of landscaped areas with the project's stormwater management plan to promote biofiltration, infiltration, reduce impervious surfaces and treat stormwater runoff from at least 90% of the average annual rainfall. **NOTE: This is a requirement of the SMC Chapter 13.52.**
- Develop a comprehensive water conservation strategy appropriate for the project and location. The strategy may include many of the specific items listed above, plus other innovative measures that are appropriate to the specific project.

Transportation and Traffic Demand Management Measures

- In compliance with Title 13, California Code of Regulations, Section 2485 (c) (1), all diesel-fueled commercial motor vehicles with gross vehicular weight ratings of greater than 10,000 pounds that are or must be licensed for operation on highways (1) shall not idle the vehicle's primary diesel engine for greater than 5.0 minutes at any location; and (2) shall not operate a diesel-fueled auxiliary power system (APS) to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a sleeper berth for greater than 5.0 minutes at any location when within 100 feet of a restricted area, except as noted in Title 13, California Code of Regulations, Section 2485 (d). **NOTE: This is a State requirement.**
- Provide shuttle service to public transit. The project shall be required to provide a shuttle to/from the airport and the public transit (i.e., train or light rail) stations.
- Provide public transit incentives such as free or low-cost monthly transit passes.
- Include pedestrian and bicycle-only streets and plazas within developments. Create travel routes that ensure that destinations may be reached conveniently by public transportation, bicycling or walking.
- Orient the project and provide access to existing transit, bicycle, or pedestrian corridors. Minimize or eliminate setback between project and existing or planned adjacent uses and sidewalks, and between different buildings on project site. Buildings shall be oriented towards existing or planned street frontage. Primary entrances to buildings shall be located along planned or existing public street frontage.
- Provide safe and convenient bicycle/pedestrian access to transit stop(s) and provide essential transit stop improvements (i.e., shelters, route information, benches, and lighting). **NOTE: This is a requirement of Mitigation Measure 4.3-5 of the Final EIR.**
- Include pedestrian/bicycle safety and traffic calming measures in excess of jurisdiction requirements. Design roadways to reduce motor vehicle speeds and encourage pedestrian and bicycle trips by featuring traffic calming features. Roadways that converge internally within the project shall be routed to avoid "skewed intersections;" which are intersections that meet at acute, rather than right, angles. Intersections internal and adjacent to the project shall feature one or more of the following pedestrian safety/traffic calming design techniques: marked crosswalks, count-down signal timers, curb extensions, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, and roundabouts or mini-circles. Streets internal and adjacent to the project shall feature pedestrian safety/traffic calming measures such as on-street parking, planter strips with street trees, and chicanes/chokers (variations in road width to discourage high-speed travel).
- If available at the time of issuance of the first certificate of occupancy for the project, the applicant shall provide for permanent Transportation Management Association (TMA) membership and funding requirement. Funding to be provided by Community Facilities District or County Service Area or other nonrevocable funding mechanism. Transportation Demand Management Measures (TDMs) have been shown to reduce employee vehicle trips up to 28% with the largest reductions achieved through parking pricing and transit passes. The transportation demand management measures will include one or more of the following:
    - Employee Telecommuting Program

    - Compressed Work Schedule 3/36
    - Compressed Work Schedule 4/40
    - Compressed Work Schedule 9/80
    - Guaranteed Ride Home Program
    - Car-Sharing Services
    - Information Provided on Transportation Alternatives
    - Dedicated Employee Transportation Coordinator
    - Carpool Matching Program
    - Preferential Carpool/Vanpool Parking
- Provide on-site shops and services for employees.
- Provide adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience. For large employers, provide facilities that encourage bicycle commuting, including locked bicycle storage or covered or indoor bicycle parking. (e.g., one bike rack space per 20 vehicle/employee parking spaces).
- Create bicycle lanes and walking paths directed to the location of schools, parks and other destination points.
- Provide "end-of-trip" facilities including showers, lockers, and changing space (e.g., four clothes lockers and one shower provided for every 80 employee parking spaces, separate facilities for each gender for projects with 160 or more employee parking spaces).
- Includes designated bicycle route connecting all units, onsite bicycle parking facilities, offsite bicycle facilities, site entrances, and primary building entrances to existing Class I or Class II bike lane(s) within one half mile. Bicycle route shall connect to all streets contiguous with project site. Bicycle route shall have minimum conflicts with automobile parking and circulation facilities.
- Provide a pedestrian access network that internally links all uses and connects to all existing/planned external streets and pedestrian facilities contiguous with the project site. Project design shall include a designated pedestrian route interconnecting all internal uses, site entrances, primary building entrances, public facilities, and adjacent uses to existing external pedestrian facilities and streets. Pedestrian routes shall have minimal conflict with parking and automobile circulation facilities. Streets (with the exception of alleys) within the project shall have sidewalks on both sides. All sidewalks internal and adjacent to project site shall be a minimum of five feet wide. All sidewalks shall feature vertical curbs. Pedestrian facilities and improvements such as grade separation, wider sidewalks, and traffic calming shall be implemented wherever feasible to minimize pedestrian barriers. All site entrances shall provide pedestrian access.
- Site design and building placement shall minimize barriers to pedestrian access and interconnectivity and shall eliminate physical barriers such as walls, berms, landscaping, and slopes between on- and off-site uses that impede bicycle or pedestrian circulation.
- Establish an employee and/or customer paid parking system, including a permanent and enforceable method of maintaining user fees for all parking facilities. To optimize the effectiveness, the facility shall not provide customer or employee validations, and daily charge for parking must be equal to or greater than the cost of a transit day/monthly pass plus 20%.
- Provide minimum amount of parking required. Once land uses are determined, the trip reduction factor associated with this measure can be determined by utilizing the Institute of Transportation Engineers (ITE) parking generation publication. The reduction in trips can be computed as shown below by the ratio of the difference of minimum parking required by code and ITE peak parking demand to ITE peak parking demand for the land uses multiplied by 50%. Percent Trip Reduction = 50 * [(min parking required by code – ITE peak parking demand)/ (ITE peak parking demand)]
- Provide parking reduction less than code. This measure can be readily implemented through a shared parking strategy, wherein parking is utilized jointly among different land uses, buildings, and facilities in an area that experience peak parking needs at different times of day and day of the week.
- Locate parking facilities away from street frontage.
- Provide parking lot areas with 50% tree cover within 10 years of construction, in particular low emitting, low maintenance, native drought resistant trees. This measure reduces urban heat island

effect and requirement for air conditioning, effective when combined with other measures (e.g., electrical maintenance equipment and reflective paving material).

Waste Diversion and Reduction

NOTE: The project must comply with applicable State of California requirements for waste reduction, diversion, and recycling and with the City of Soledad's Municipal Code Chapter 13.05 that requires 100% diversion (i.e., reuse/ recycling)of inert solids (e.g., concrete, asphalt, brick) and a minimum diversion of 50% (by weight of non-inert materials) for certain projects.

- Provide composting facilities at residential uses.
- Created food waste and green waste curb-side pickup service.
- Require the provision of storage areas for recyclables and green waste in new construction.

Miscellaneous

- The fireplaces and stoves shall be gas-fired and meet U.S. Environmental Protection Agency certification requirements. The installation or operation of a wood-burning fireplace or a wood-burning stove shall be prohibited in perpetuity on all residential properties in the Miravale III Specific Plan Development. This restrictive covenant shall be recorded on the title of all parcels in the Miravale III Specific Plan area and shall run with the land. **NOTE: This measure is required by Mitigation Measure 4.3-4 in the Final EIR.**
- Use only low-volatile organic compound (low-VOC) paints (i.e., paints that contain the lowest feasible VOC content by volume). **NOTE: This measure reduces CAPs only and not GHGs. Specifically, it reduces reactive organic gases (an ozone precursor).**

The following tables are provided from the Bay Area Air Quality Management District's (BAAQMD) CEQA Guidelines (June 2010) in order to provide information regarding anticipated GHG and CAP reduction effectiveness relevant to the above mitigation measures. Measures are categorized as follows:

- **Operational Mobile Source (can be estimated using the Urbemis2007 modeling program)**
- **Area Source (can be estimated using the Urbemis2007 modeling program)**
- **Energy Efficiency**
- **Waste Reduction**

Mitigation Measures for Operational Mobile Source Emissions

Measure	Sector Reductions	Applicable Pollutants	Sector	Notes	Additional Comments
Mix of Uses	-3% to 9%	CAPs, GHGs	Mobile sources	-3 when no housing or employment centers within ½ mile	Residential: % reduction is taken from base trips (9.57) and subtracted from ITE trip generation; Nonresidential: % reduction from ITE trip generation
Local serving retail within ½ mile of project	2%	CAPs, GHGs	Mobile sources	Uses lower end of reported research to avoid double counting with mix of uses measure	
Transit Service	0% to 15%	CAPs, GHGs	Mobile sources		
Bike & Pedestrian	0%-9%	CAPs, GHGs	Mobile sources	Credit is given based on intersection density, sidewalk completeness, and bike network completeness; No reduction if entire area within ½ mile is single use	

Affordable Housing	0% - 4%	CAPs, GHGs	Mobile sources		
Transportation Demand Management Parking, Transit Passes					
Daily Parking Charge	0%-25%	CAPs, GHGs	Only resident/ employee trips, no visitor/ shopper trips		
Parking Cash-Out	0%-12.5%	CAPs, GHGs		Shoup, Donald. 2005. Parking Cash Out. American Planning Association. Chicago, IL.	
Free Transit Passes	25% of Transit Service Reduction	CAPs, GHGs			
Telecommuting					
Employee Telecommuting Program	1%-100%	CAPs, GHGs	Mobile sources, Worker Trips only		
Compressed Work Schedule 3/36	1%-40%	CAPs, GHGs			
Compressed Work Schedule 4/40	1%-20%	CAPs, GHGs			
Compressed Work Schedule 9/80	1%-10%	CAPs, GHGs			

Mitigation Measures for Operational Mobile Source Emissions					
Measure	**Sector Reductions**	**Applicable Pollutants**	**Sector**	**Notes**	**Additional Comments**
Other Transportation Demand Measures					
Secure Bike Parking (at least 1 space per 20 vehicle spaces)	At least 3 elements: 1% reduction, plus 5% of the reduction for transit and pedestrian/bike friendliness; At least 5 elements: 2% reduction, plus 10% of the reduction for transit and pedestrian/bike friendliness	CAPs, GHGs	Mobile sources, Worker Trips only		
Showers/Changing Facilities Provided					
Guaranteed Ride Home Program Provided					
Information Provided on Transportation Alternatives (Bike Schedules, Maps)					
Dedicated Employee Transportation Coordinator					
Carpool Matching Program					
Preferential Carpool/Vanpool Parking					
Parking Supply	0%-50%	CAPs, GHGs	Mobile sources		
On Road Trucks	As input by user in URBEMIS	CAPs, GHGs	Mobile sources		

Mitigation Measures for Operational Area-Source Emissions				
Measure	**Sector Reductions**	**Applicable Pollutants**	**Sector**	**Notes**
Increase Energy Efficiency Beyond Title 24	Same as % improvement over Title 24	Caps, GHGs	Natural gas sector in URBEMIS for applicable land use only	User should specify baseline year for the Title 24 standards
Electrically powered landscape equipment and outdoor electrical outlets	Same as % of landscape equipment emissions	Caps, GHGs	Landscape emissions: residential only	
Low VOC architectural coatings	Same as % VOC reduction in applicable coatings (Interior/Exterior)	ROG Only	Architectural coating	

Energy Efficiency Mitigation Measures					
Measure	**Sector Reductions**	**Applicable Pollutants**	**Sector**	**Notes**	**Additional Comments**
Plant shade trees within 40 feet of the south side or within 60 feet of the west sides of properties	30%	GHGs	R,C A/C Electricity	USDA Forest Service, Pacific Northwest Research Station. "California Study Shows Shade Trees Reduce Summertime Electricity Use." Science Daily 7 January 2009. 20 February 2009 <http://www.sciencedaily. Com/releases/2009/01/ 090105150831.htm>	Electricity-related measures reduce CAPs off-site, but they are not typically quantified as part of a CEQA analysis.
Require cool roof materials (albedo >= 30)	34%	GHGs	C A/C Electricity	U.S. EPA Cool Roof Product Information, Available: <http://www.epa.gov/heatisland/resources/pdf/CoolRoofsCompendium.pdf>	
	69%	GHGs	R A/C Electricity		
Install green roofs	1%	GHGs	R,C A/C Electricity	Reductions are based on the Energy & Atmosphere credits (EA Credit 2) documented in the Leadership in Energy & Environmental Design (LEED), Green Building Rating System for New Constructions and Major Renovations, Version 2.2, October 2005. The reduction assumes that a vegetated roof is installed on a least 50% of the roof area or that a combination high albedo and vegetated roof surface is installed that meets the following standard: (Area of SRI Roof/0.75)+(Area of vegetated roof/0.5) >= Total Roof Area.	
Require smart meters and programmable thermostats	10%	CAPs, GHGs	R, C Electricity and natural gas space heating	U. S. Environmental Protection Agency. 2009. Programmable Thermostat. http://www.energystar.gov/ia/new_homes/features/ProgThermostats1-17-01.pdf	

Energy Efficiency Mitigation Measures (cont.)					
Measure	**Sector Reductions**	**Applicable Pollutants**	**Sector**	**Notes**	**Additional Comments**
Meet GBC standards in all new construction	17%	GHGs	R electricity	California Energy Commission [CEC] 2007. Impact Analysis 2008 Update to the California Energy Efficiency Standards for Residential and Nonresidential Buildings	
	7%	GHGs	C electricity		
	9%	CAPs, GHGs	R natural gas		
	3%	CAPs, GHGs	C natural gas		
Retrofit existing buildings to meet CA GBC standards	38%	GHGs	R electricity	California Energy Commission [CEC] 2003. Impact Analysis 2005 Update to the California Energy Efficiency Standards for Residential and Nonresidential Buildings; California Energy Commission [CEC] 2007. Impact Analysis 2008 Update to the California Energy Efficiency Standards for Residential and Nonresidential Buildings	
	12%	GHGs	C electricity		
	18%	CAPs, GHGs	R natural gas		
	12%	CAPs, GHGs	C natural gas		
Install solar water heaters	70%	CAPs, GHGs	R natural gas water heating	Energy Star. 2009. Solar Water Heater. http://www.energystar.gov/ia/new_homes/features/WaterHtrs_062906.pdf; Department of Energy. California Energy Commission [CEC] 2007. Impact Analysis 2008 Update to the California Energy Efficiency Standards for Residential and Nonresidential Buildings	Cannot take credit for both solar and tank-less water heater measures
	70%	CAPs, GHGs	C natural gas water heating		
Install Tank-less water heaters	35%	CAPs, GHGs	R natural gas water heating	Tankless Water Heater. 2008. Available: <http://www.eere.energy.gov/consumer/your_home/water_heating/index.cfm/mytopic=12820>	
	35%	CAPs, GHGs	C natural gas water heating		
Install solar panels on residential and commercial buildings	100%	GHGs	R, C electricity		

Energy Efficiency Mitigation Measures (cont.)					
Measure	**Sector Reductions**	**Applicable Pollutants**	**Sector**	**Notes**	**Additional Comments**
100% increase in diversity of land use mix	5%	CAPs, GHGs	Mobile sources	Ewing, Reid, et al. 2001. *Travel and the Built Environment: A Synthesis.* Transportation Research Record 1780. Paper No. 01-3515 as cited in Urban Land Institute. 2008. *Growing Cooler*. ISBN: 978-0-87420-082-2. Washington, DC	
Jobs housing balance	Trip reduction = (1 – (ABS (1.5 * HH – E)/(1.5 * HH + E)) – 0.25) / 0.25 * 0.03; where ABS = absolute value; HH = study area households ; E = study area employment	CAPs, GHGs	Mobile sources	*Nelson/Nygaard Consultants. 2005. Crediting Low-Traffic Developments: Adjusting Site-Level Vehicle Trip Generation Using URBEMIS. Pg 12, (adapted from Criterion and Fehr & Peers, 2001)*	
100% increase in design (i.e., presence of design guidelines for transit oriented development, complete streets standards)	3%	CAPs, GHGs	Mobile sources	Ewing, Reid, et al. 2001. *Travel and the Built Environment: A Synthesis.* Transportation Research Record 1780. Paper No. 01-3515 as cited in Urban Land Institute. 2008. *Growing Cooler*. ISBN: 978-0-87420-082-2. Washington, DC	

Energy Efficiency Mitigation Measures (cont.)					
Measure	**Sector Reductions**	**Applicable Pollutants**	**Sector**	**Notes**	**Additional Comments**
100% increase in density	5%	CAPs, GHGs	Mobile Sources	Ewing, Reid, et al. 2001. *Travel and the Built Environment: A Synthesis.* Transportation Research Record 1780. Paper No. 01-3515 as cited in Urban Land Institute. 2008. *Growing Cooler*. ISBN: 978-0-87420-082-2. Washington, DC	
HVAC duct sealing	30%	GHGs	R,C A/C electricity	Sacramento Metropolitan Utilities District. 2008. Duct Sealing. Available: <http://www.pge.com/myhome/saveenergymoney/rebates/coolheat/duct/index.shtml>.	
Provide necessary infrastructure and treatment to allow use of 50% greywater/ recycled water in residential and commercial uses for outdoor irrigation	SFR: 74%*50% =37.5% MFR: 58% * 50% = 29% Commercial: 12% * 50% = 6%	GHGs	R electricity (water consumption) C electricity (water consumption)	Department of Water Resources. 2001. Statewide Indoor/Outdoor Split. Accessed December 2, 2008. Available at: <http://www.landwateruse.water.ca.gov/annualdata/urbanwateruse/2001/landuselevels.cfm?use=8>.	
Complete streets (i.e., bike lanes and pedestrian sidewalks on both sides of streets, traffic calming features such as pedestrian bulbouts, cross-walks, traffic circles, and elimination of physical and psychological barriers (e.g., sound walls and large arterial roadways, respectively).)	1-5%	CAPs, GHGs	Mobile sources	Dierkers, G., E. Silsbe, S. Stott, S. Winkelman, an M. Wubben. 2007. *CCAP Transportation Emissions Guidebook*. Center for Clean Air Policy. Washington, D.C. Available: <http://www.ccap.org/safe/guidebook.php>. as cited in California Air Pollution Control Officers Association (CAPCOA) 2008. *CEQA and Climate Change.*	

Energy Efficiency Mitigation Measures (cont.)					
Measure	**Sector Reductions**	**Applicable Pollutants**	**Sector**	**Notes**	**Additional Comments**
Maximize interior day light		GHGs	R, C, M		
Increase roof/ceiling insulation		CAPs, GHGs	R, C, M		
Create program to encourage efficiency improvements in rental units		CAPs, GHGs	R		
Install rainwater collection systems in residential and Commercial Buildings		GHGs	R, C, M		
Install low-water use appliances and fixtures		GHGs	R, C, M	California Air Pollution Control Officers Association (CAPCOA) 2008. CEQA and Climate Change.	
Restrict the use of water for cleaning outdoor surfaces/Prohibit systems that apply water to non-vegetated surfaces		GHGs	R, C, M	California Attorney General's Office GHG Reduction Measures	
Implement water-sensitive urban design practices in new construction		GHGs	R, C, M		
Waste Reduction Mitigation Measures					
Provide composting facilities at residential uses		GHGs	R		
Create food waste and green waste curb-side pickup service		GHGs	R, C, M		
Require the provision of storage areas for recyclables and green waste in new construction		GHGs	R, C, M		

Notes: CAPs = Criteria Air Pollutants; GHGs = Greenhouse Gases; ROG = Reactive Organic Gases; R = Residential Development; SFR = Single Family Residential; MFR = Multi-Family Residential; C = Commercial Development; M = Mixed Use Development; A/C = Air Conditioning; GBC = Green Building Code; and VOC = Volatile Organic Compounds.
Source: Information compiled by EDAW 2009 for the Bay Area Air Quality Management District CEQA Guidelines (approved June 2010) found at http://www.baaqmd.gov/~/media/Files/Planning%20and%20Research/CEQA/BAAQMD%20CEQA%20Guidelines_June%202010.ashx.

DRAFT

ENVIRONMENTAL IMPACT REPORT
for the
MIRAVALE PHASE III SPECIFIC PLAN

VOLUME I

State Clearinghouse # 2006081129

Prepared for

City of Soledad
Planning Department
Soledad City Hall
248 Main Street
Soledad, CA 93960

October 2008

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1.0 INTRODUCTION

1.1 AUTHORIZATION AND PURPOSE

This document is an Environmental Impact Report (EIR) for the proposed Miravale III Specific Plan, prepared in accordance with the California Environmental Quality Act (CEQA) of 1970 and CEQA Guidelines, as amended. This EIR has been prepared by Denise Duffy and Associates, Inc. (DD&A) for the City of Soledad as the "Lead Agency," in consultation with the appropriate local, regional and state agencies.

The purpose of the EIR is to inform the public and decision makers of the significant environmental effects of the project, identify possible ways to minimize the significant effects, and describe reasonable alternatives that support the objectives of the project. As defined by the CEQA Guidelines, Section 15382, "significant effect on the environment" means:

> *"... a substantial, or potentially substantial adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance."*

This EIR addresses implementation of Miravale III Specific Plan on 920-acres located within unincorporated lands of Monterey County on the northern edge of the City of Soledad. Full implementation of the Miravale III Specific Plan allows for mixed-use development consisting of approximately 1,470 single-family residential units, 2,730 multi-family residential units (includes affordable housing, workforce housing, and senior housing units), 120 hotel rooms, 275,000 square feet of retail commercial space and an 18-hole golf course. The project also proposes three school sites (two elementary schools and one middle school), a fire and police substation, a recycled water plant,[1] and approximately 75 acres of open space and recreation areas, including parks, playgrounds, and a trail system. The project proposes sphere of influence amendments and annexation by the City of Soledad from the County of Monterey and future subdivision of the site. The project site is located generally between San Vicente Road and Orchard Lane, and is surrounded by agricultural land to the north and east, an existing residential subdivision to the south, and undeveloped foothills of the Gabilan Mountain Range to the west.

1.2 EIR PROCESS

CEQA Guidelines require preparation of an EIR when a Lead Agency determines that there is evidence that a project may have a significant effect on the environment. The need to prepare an EIR for the project was established by the City of Soledad as a result of preliminary evaluation of the likely environmental effects of the project.

This EIR is tiered from the Final Program Environmental Impact Report for the City of Soledad General Plan, certified on September 21, 2005. "Tiering" refers to the analysis of general matters in broader, programmatic EIRs with subsequent narrower EIRs for individual projects that concentrate on site-specific issues and incorporate by reference the general discussions in the programmatic EIR. CEQA encourages the use of tiered EIRs to reduce delays and excessive paperwork in the environmental review process. The concept of tiering is described in State CEQA Guidelines Section 15152 as follows:

[1] The proposed recycled water plant is also referred to as a "scalping plant" in other City documents, but for the purposes of this EIR it is referred to as a "recycled water plant."

> (a) "Tiering" refers to using the analysis of general matters contained in a broader EIR (such as one prepared for a general plan or policy statement) with later EIRs and negative declarations on narrower projects; incorporating by reference the general discussions from the broader EIR; and concentrating the later EIR or negative declaration solely on the issues specific to the later project.
> (b) Agencies are encouraged to tier the environmental analyses which they prepare for separate but related projects including general plans, zoning changes, and development projects. This approach can eliminate repetitive discussions of the same issues and focus the later EIR or negative declaration on the actual issues ripe for decision at each level of environmental review. Tiering is appropriate when the sequences of analysis is from an EIR prepared for a general plan, policy or program to an EIR or negative declaration for another plan, policy, or program of lesser scope, or to a site-specific EIR or negative declaration. Tiering does not excuse the lead agency from adequately analyzing reasonably foreseeable significant environmental effects of the project and does not justify deferring such analysis to a later tier EIR or negative declaration. However, the level of detail contained in a first tier EIR need not be greater than that of the program, plan, policy, or ordinance being analyzed.

The tiering of the environmental analysis for this project allows the EIR to rely on the General Plan EIR for 1) a discussion of general background and setting information; 2) overall growth related issues; and 3) issues that were previously evaluated in sufficient detail in the General Plan EIR where conditions have not changed. This EIR incorporates by reference appropriate information from the General Plan program EIR. Additional environmental review has been completed in accordance with CEQA to evaluate the project-specific effects of the Miravale III Specific Plan.

In accordance with the requirements of CEQA, the City of Soledad circulated a Notice of Preparation (NOP) in August and September 2006 for the required 30-day review period to interested agencies, groups and individuals. The City also conducted a public scoping meeting to solicit input. All comments received were considered during the preparation of this Draft EIR preparation. The NOP and comments received in response to the NOP are contained as Appendix A of the Draft EIR.

This Draft EIR will be circulated for agency and public review during a 45-day public review period. Comments received by the City on the Draft EIR will be reviewed and responses to comments will be provided in the Final EIR. The City must certify that it has reviewed and considered the information in the Final EIR and that the Final EIR has been completed in conformity with the requirements of CEQA.

Although the EIR does not control the lead agency's ultimate decision on the project, the City must consider the information in the EIR and respond to each significant effect identified in the EIR. If significant adverse environmental effects are identified in the EIR, approval of the project must be accompanied by written findings, as follows:

A. Changes or alterations have been required in, or incorporated into, such project that mitigate or avoid the significant environmental effects thereof as identified in the completed EIR.

B. Such changes or alterations are within the responsibility and jurisdictions of another public agency and such changes have been adopted by such other agency, or can and should be adopted by such other agency.

C. Specific economic, social or other considerations make infeasible the mitigation measures or project alternatives identified in the EIR.

State law requires that a public agency adopt a monitoring program for mitigation measures that have been incorporated into the approved project to reduce or avoid significant effects on the environment. The purpose of the monitoring program is to ensure compliance with environmental mitigation during project implementation and operation. A Monitoring Program will be included in the Final EIR.

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2.0 SUMMARY

2.1 Introduction

This summary provides a brief description of the proposed project, project alternatives, and the significant impacts identified during the environmental analysis. Responsibility for implementation of mitigation measures is with the project applicant, unless otherwise noted. This summary is intended as an overview and should be used in conjunction with a thorough reading of the EIR. The text of this report, including figures, tables and appendices, serves as the basis for this summary.

2.2 Summary of Project Description

The project consists of the development and implementation of the Miravale III Specific Plan. The Specific Plan site is located within unincorporated lands of Monterey County on the northern edge of the City of Soledad. The 920-acre site is generally between San Vicente Road and Orchard Lane, and is surrounded by agricultural land to the north and west, an existing residential subdivision to the south, and undeveloped foothills of the Gabilan Mountain Range to the east.

The Specific Plan calls for a mixed-use development including 1,470 single-family residential units, 2,730 multi-family residential units (includes affordable housing, workforce housing, and senior housing units), 120 hotel rooms, 275,000 square feet of retail commercial space and an 18-hole golf course. Conceptual plans include a variety of residential types, including apartments, townhouses, and attached homes on small and large lots. The project also proposes three school sites (2 elementary schools and 1 middle school), a fire and police substation, a recycled water plant, and approximately 75 acres of open space and recreation areas, including parks, playgrounds, and a trail system. A full project description is provided in Section 3.0 of this Draft EIR.

2.3 Alternatives Evaluated in this EIR

In compliance with CEQA, this section evaluates the comparative advantages and disadvantages of a range of project alternatives. The alternatives considered in the EIR are summarized below.

- *No Project Alternative – No Development*
- *Buildout Consistent with General Plan*
- *Reduced Project Alternative*
- *No Golf Course Alternative*
- *Alternative Design: Increased Senior Housing Alternative*

No Project – No Development: The No Development scenario consists of leaving the site in its current undeveloped condition. The No Development alternative would avoid both the adverse and beneficial effects of the project. It would eliminate all of the significant environmental impacts of the project, but would fail to meet any of the project's objectives.

Buildout Consistent with General Plan: Development under this scenario would assume buildout of the project site consistent with existing policies contained within the General Plan. Under this scenario, a Specific Plan would be prepared, as required by the General Plan. Single family residential uses would be prohibited above the 400 foot elevation contour and the project would consist of the construction of approximately 2,680 units. Additional units identified in other expansion areas would not be applied to this alternative and no General Plan amendments would be required. This alternative would consist of an

array of residential uses, including low, medium, and high density land uses, as well as commercial, and public uses.

Reduced Project: This alternative consists of reducing development on the project site to avoid significant impacts. More specifically, development of this alternative would result in the reduction of residential uses on the project site by 50 percent. As a result, this alternative would result in the construction of 2,100 residential units. The Reduced Project alternative would also result in a 50 percent reduction of commercial uses on the project site as well. More specifically, this alternative would allow approximately 125,000 square feet of commercial space. All development under this scenario would occur within the predominantly level portions of the project site and no development would occur within the foothill areas. Development would primarily be concentrated adjacent to existing residential areas within the City of Soledad.

No Golf Course: This alternative consists of eliminating the golf course and associated infrastructure in order to avoid potential significant adverse environmental impacts associated with agricultural resources, biological resources, cultural resources, hazardous materials, public services, utilities, and traffic. This alternative would still allow for the development of up to 4,200 residential units and commercial uses. As currently proposed, the golf course, driving range, and other associated infrastructure occupy approximately 160 acres of the 920 acre site. This area may be developed at some future time consistent with the program and policies identified in the General Plan, but additional impacts could result from additional development within the existing golf course alignment. These impacts would be beyond the scope of analysis contained in this EIR. Potential impacts include increased traffic, noise, deterioration of air quality, increased demands for public services and similar. For the purposes of this analysis, it is assumed that the existing golf course alignment would be utilized for low-intensity public recreational uses.

Alternative Design: Increased Senior Housing Alternative: This alternative consists of increasing the number of senior level housing from 500 to 1,500 units in order to minimize and/or avoid potential impacts to public services and traffic. Build-out of this alternative would still result in the construction of 4,200 units and commercial uses; however, a larger proportion of these units, approximately 35 percent, would be restricted for senior level housing. This alternative is anticipated to result in approximately the same impacts as the proposed project in terms of aesthetics, agricultural resources, biological resources, cultural resources, geology and soils, hazards, hydrology, land use and planning, noise, and utilities. Development of this alternative, however, would lessen project impacts to school facilities.

2.4 SUMMARY OF PROJECT IMPACTS

A summary of significant project impacts and mitigation measures are provided in Table 2-1. Mitigation measures have been identified to either avoid the impact or reduce the level of significance. In addition, the following table also identifies significant and unavoidable project impacts that cannot be reduced to a less-than-significant through the incorporation of mitigation. The significance after mitigation implementation is also stated.

Table 2-1
Summary of Significant Environmental Impacts and Mitigation

Environmental Impact	Mitigation		Level of Significance After Mitigation
4.1 Aesthetics			
The project would permanently alter a scenic vista, consisting of a portion of the Gabilan Mountain Range foothills, by causing changes to topography, removing vegetation, and adding roads, buildings, pavement, and lighting.	4.1-1	Building heights of all new structures shall adhere to the limits set forth in the Miravale III Specific Plan dated June 2007. Additionally, all new structures shall adhere to the applicable Development Standards as established in Section 2.0 of the Specific Plan. Prior to the issuance of any building permit for development within the Specific Plan area, the project applicant shall submit detailed plans, including elevations, site plans, and/or other documentation detailing compliance with applicable development standards, subject to the review and approval of the City of Soledad.	Significant and unavoidable.
	4.1-2	In order to minimize potential adverse visual impacts associated with development within the hillside portions of the project site, the project applicant shall submit and have approved, prior to the recordation of the final map for Phases three and four, building envelopes for each new residential lot proposed above the 400 foot elevation contour. The proposed building envelopes shall be located in the least visually sensitive area of each lot. No new structures shall be constructed outside of the approved building envelopes, unless otherwise approved by the City of Soledad.	
	4.1-3	In order to minimize aesthetic-related impacts due to development within the hillside portion of the site, the project applicant, prior to project approval, shall submit a revised Specific Plan that includes the following policy in Section 2.6 Low Density Residential (LDR & LDR-H/M3-R-1): All new residential units proposed within areas of the project site above the 400 foot elevation contour shall be subject to a Design Review approval process or similar. As part of the design review process, vertical building envelopes shall be identified and staking and flagging shall be required to demonstrate the extent of proposed development. All new structures shall be designed to minimize visual impacts to the greatest extent feasible.	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	4.1-4 Final design plans for proposed development shall utilize natural landforms and vegetation for screening structures, access roads, building foundations, cut and fill slopes, and exterior lighting. Roads, parking, and utilities shall be designed to minimize visual impacts. Prior to the issuance of any grading and/or building permit, the project applicant shall submit design-level drawings demonstrating compliance with this measure, subject to the review and approval of the City of Soledad. If an alternative design would minimize impacts, the applicant shall submit evidence demonstrating that the alternative design is infeasible. 4.1-5 The applicant shall provide landscape screening appropriate to the surrounding area in order to integrate the development with the existing natural landscape. Landscaping plans shall be submitted to the City of Soledad for review and approval prior to the issuance of any building or grading permit. 4.1-6 All buildings shall be designed with colors and materials that effectively blend the structures with the surrounding landscape. Building applications for new structures shall include color and material sample photo sheets and shall be approved by the City of Soledad, prior to the issuance of any building permit. 4.1-7 A site-specific geotechnical report shall be prepared for new development on hillsides in order to ensure that the development will not cause or worsen natural hazards, such as erosion and sedimentation, and will minimize risk to life and property from slope failure, landslides, and flooding. The report shall include erosion and sediment control measures, such as temporary vegetation sufficient to stabilize disturbed areas. Prior to the issuance of any grading and/or building permit for new development within the hillside portions of the project site, the project applicant shall submit a geotechnical report prepared by a qualified professional to the City of Soledad Department of Public Works for review and approval. The site-specific	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact	**Mitigation**		**Level of Significance After Mitigation**
		geotechnical report shall identify feasible recommendations and avoidance measures to minimize potential impacts.	
	4.1-8	Land alterations within areas above the 400 foot elevation shall be minimized by keeping cuts and fills to a minimum, limiting grading to the smallest practical area of land, limiting land exposure to the shortest practical amount of time, replanting graded areas to insure establishment of plant cover before the next rainy season, and creating grading contours that blend with the natural contours on site or look like contours that would naturally occur. Prior to the issuance of any grading permit, the project applicant shall submitted detailed grading plans consistent with the intent of this mitigation, subject to the review and approval of the City of Soledad.	
Development of the proposed project may impact scenic resources within view of a State Scenic Highway.	No Mitigation Measures identified.		Less-than-significant
The project would permanently alter the existing visual character of the site by causing changes to topography, removing vegetation, and adding roads, buildings, pavement, parking areas, and lighting.	4.1-9	In order to minimize tree removal and associated visual impacts, final design-level improvements plans shall retain existing mature eucalyptus and other tree species to the greatest extent possible. Final design-level plans shall be prepared in consultation with a registered arborist/forester to minimize tree removal and ensure the health of remaining trees. Prior to the issuance of any grading and/or building permits, final plans shall be subject to the review and approval of the City of Soledad Director of Public Works. If the removal of existing mature eucalyptus is required the applicant shall submit evidence demonstrating that there are no feasible design alternatives to avoid tree removal. In the event that tree removal is required, the project proponent shall prepare a tree removal and replacement plan for each phase of construction, subject to the review and approval of the City of Soledad Community Development Director. The tree removal and replacement plan shall identify specific grading limits that minimize tree removal, as well as appropriate tree replacement ratios and replanting locations.	Significant and unavoidable.
	4.1-10	Final design plans for the proposed gateways shall include elements,	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact		**Mitigation**	**Level of Significance After Mitigation**
		such as signage, landscaping and landscaped center medians, and appropriate architectural detailing consistent with the Miravale III Specific Plan. Prior to issuance of any permit for the construction of any of the four gateways, the project applicant shall submit detailed plans that include the above referenced elements, subject to the review and approval of the City of Soledad.	
	4.1-11	Final design plans for proposed residential development shall include form, scale, and character elements which emulate the best characteristics of the existing residential neighborhoods, such as single and two-story dwellings with adequate off-street parking, landscaped front yards with trees, and sidewalks. Prior to the issuance of any building permit for residential development within the Specific Plan area, the project applicant shall submit design-level drawings consistent with the intent of this measure, subject to the review and approval of the City of Soledad.	
	4.1-12	Final design plans for proposed multi-family development shall include useable open space for each dwelling and shall be designed to be integrated with the surrounding neighborhood. Prior to the issuance of any building permit for multi-family development within the Specific Plan area, the project applicant shall submit design-level drawings consistent with the intent of this measure, subject to the review and approval of the City of Soledad.	
	4.1-13	Final design plans for proposed development shall include a tree planting plan in order to increase the number and density of tree cover within new development areas. Prior to the issuance of any grading and/or building permit, the project applicant shall submit a detailed tree planting plan, subject to the review and approval of the City of Soledad.	
The project would create a new source of light or glare that would adversely affect day or nighttime views in the area.	4.1-14	All buildings shall be designed so that exterior lighting is down-lit and illuminates the intended area only. Building applications for new structures shall include an exterior lighting plan subject to approval of the Soledad Planning Department that includes the following	Less-than-significant.

Table 2-1
Summary of Significant Environmental Impacts and Mitigation

Environmental Impact	Mitigation	Level of Significance After Mitigation
	requirements: 1) exterior lighting shall be directional; 2) glare from exterior lighting shall be adequately minimized; 3) the source of directional lighting shall not be directly visible; and 4) vegetative screening shall be considered, where appropriate, as a means of reducing development-related light and glare. The project applicant shall submit an exterior lighting plan to the City of Soledad Planning Department prior to the issuance of any building permit. 4.1-15 Ornamental lighting use for streets, parks, public open spaces, trails, bike paths, parking lots, and walkways shall utilize fixtures consisting of metal halide with cut-off luminaries in order to control light and glare. Prior to the issuance of any building permit, the project applicant shall provide documentation as part of the exterior lighting plan described in Mitigation Measure 4.1-12 demonstrating that these measures are incorporated into site lighting, subject to the review and approval of the Soledad Planning Department. 4.1-16 Light reduction and screening measures shall be required in order to reduce nighttime ambient light increases in the area. Lighting levels in commercial areas shall be kept as low as feasible and controlled to minimize operating time. Light sources shall be installed, so there is no light radiation above the horizontal plane (i.e., dark sky). Lighting shall be focused downward to prevent the splay of ambient light to other areas. Prior to the issuance of any building permit, the project applicant shall provide documentation as part of the exterior lighting plan described in Mitigation Measure 4.1-12 demonstrating that these measures are incorporated into site lighting, subject to the review and approval of the Soledad Planning Department	
4.2 Agricultural Resources		
The proposed project would include the conversion of prime agricultural land.	No feasible mitigation.	Significant and unavoidable.

Table 2-1
Summary of Significant Environmental Impacts and Mitigation

Environmental Impact	Mitigation	Level of Significance After Mitigation
Development of land designated for urban development as part of Phase 4 of the Specific Plan will require the cancellation of Land Conservation Act Contract 73-25 within the project site.	No feasible mitigation.	Significant and unavoidable.
The proposed project will be sited adjacent to existing agricultural uses located on the boundary of the project footprint. This has the potential to cause an increase in land use compatibility problems and nuisance complaints due to urban uses being sited adjacent to agricultural uses. In order to minimize these potential land use conflicts, the project has been designed with a minimum 60' buffer zone between the residential and agricultural uses along the western boundary of the project site. Additional buffers, however, are warranted along the northern and eastern project boundaries. Moreover, as currently proposed, the 60' buffer does not meet the minimum buffer distance recommended by the Monterey County Agricultural Commissioner. To ensure that residential uses are adequately buffered from agricultural uses, additional measures are necessary to protect human health and the environment resulting from potential conflicts between agricultural and urban uses.	4.2-1 Adequate buffer areas between urban and agricultural uses, including a minimum 50' buffer along the northern and eastern boundary of the project site, shall be incorporated into the proposed project. Prior to the recordation of any final map, the project applicant shall submit evidence in the form of agricultural setbacks delineating buffer locations consistent with the recommendations contained in the Agricultural Resources Report, subject to the review and approval of the City of Soledad. 4.2-2 In order to ensure the adequacy of the proposed 60' agricultural buffer located along the western boundary of the project site, the project applicant shall submit a detailed landscape plan that includes vegetative screening in addition to physical barriers, such as fences, walls, or similar to protect human health and safety. One or more of the following options may also be used in combination with landscaping requirements to create an average 60 foot buffer between the agricultural parcel property line and habitable structures within the Plan area: a. Public or private road right-of-ways; b. Landscaped islands and planting areas; c. Recreational trail corridors; and/or d. Placing dwellings in the rear portion of lots. Prior to the recordation of any final map along the western project boundary, an agricultural buffer setback shall be delineated on the final map, subject to the review and approval of the City of Soledad. 4.2-3 Prior to the issuance of any certificate of occupancy for residences adjacent to on-going agricultural uses on the western project boundary, the project applicant shall provide documentation demonstrating that	Less-than-significant

Table 2-1
Summary of Significant Environmental Impacts and Mitigation

Environmental Impact		Mitigation	Level of Significance After Mitigation
		adequate screening and landscaped improvements have been installed and/or constructed within the 60' agricultural buffer, subject to the review and approval of the City of Soledad.	
The proposed project has the potential to impact routine and on-going agricultural activities on the areas adjacent to the northern, eastern, and western boundaries of the project site.	4.2-4	Access for agricultural equipment and vehicles to the adjoining row crop land on the western boundary shall continue to be provided from the ramp to Highway 101 North (see Figure 2 in Technical Appendix T-1, Agricultural Report). The current access road to the Braga property should remain at the current width to allow for passing and ensure adequate turnaround space for field equipment. Implementation of this measure would reduce impacts to routine and on-going agricultural operations on lands west of the proposed project site.	Significant and unavoidable.
	4.2-5	Prior to the issuance of any permit, the project applicant shall have recorded a right-to-farm notice on parcels adjacent to existing and on-going agricultural uses consistent with the requirements of the City of Soledad General Plan, subject to the review and approval of the City of Soledad.	
4.3 Air Quality			
Construction activities, such as clearing, excavation and grading operations, construction vehicles traffic on unpaved ground, and wind blowing over exposed earth would generate dust and particulate matter.	4.3-1	Prior to start of construction, the project applicant or contractor shall submit to the City of Soledad Public Works Department a construction dust mitigation plan. This plan shall specify the methods of dust control that would be utilized, demonstrate the availability of needed equipment and personnel, use reclaimed water for dust control, and identify a responsible individual who, if needed, can authorize implementation of additional measures. The construction dust mitigation plan shall, at a minimum, include the following measures: • Limit grading activity to a maximum of 2.5 acres daily. As more detailed construction information becomes available, emissions from grading activities could be reassessed to determine if the area of grading could be increased. Such an assessment would have to be conducted using appropriate assumptions and mitigation measures.	Significant and unavoidable.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact		**Mitigation**	**Level of Significance After Mitigation**
		• Water all active construction areas at least twice daily and more often during windy periods. Active areas adjacent to existing businesses should be kept damp at all times. If necessary, during windy periods, watering is to occur on all days of the week regardless of onsite activities. • Cover all trucks hauling trucks or maintain at least two feet of freeboard. • Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites. • Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites. • Sweep streets daily (with water sweepers) if visible soil material is deposited onto the adjacent roads. • Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more). • Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles. • Limit traffic speeds on unpaved roads to 15 mph. • Replant vegetation in disturbed areas as quickly as possible. • Suspend excavation and grading activity when hourly-average winds exceed 15 mph and visible dust clouds cannot be contained within the site.	
Construction activities would involve use of the heavy-duty off-road equipment and large trucks that use diesel fuel resulting in emissions of diesel particulate matter and NOx.	4.3- 2	Projects developed under the specific plan should be evaluated for individual construction period air quality impacts. Project-specific mitigation measures would be identified at that time. However, the following mitigation measures should be implemented for all projects to reduce diesel particulate emissions from on-site construction equipment: • Use off-road construction equipment, manufactured during or after 1996 that meets the NOx emissions standard of 6.9 grams per brake-horsepower hour or use of alternative fuels (such as	Less-than-significant

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact		**Mitigation**	**Level of Significance After Mitigation**
		biodiesel) that result in lower particulate emissions. • The contractor shall install temporary electrical service whenever possible to avoid the need for independently powered equipment (e.g. compressors). • Diesel equipment standing idle for more than two minutes shall be turned off. This would include trucks waiting to deliver or receive soil, aggregate, or other bulk materials. Rotating drum concrete trucks could keep their engines running continuously as long as they were onsite and staged away from residential areas. • Properly tune and maintain equipment for low emissions. • Stage large diesel powered equipment (i.e. wheeled tractor, wheeled loader, roller by using gasoline-powered equipment to reduce NOx emissions. • Limit the hours of operation for heavy-duty equipment.	
Implementation of the proposed specific plan would result in increases in long-term operational emissions of ozone precursor pollutants. These emissions would exceed significance thresholds established by the MBUAPCD.	4.3- 3	The project shall apply the following measure to the extent appropriate for the specific land uses proposed: • Develop a Transportation Demand Management Program with the intent of reducing vehicle trips and vehicle miles traveled associated with build out of the specific plan. Components of this plan may include: o Develop parking strategies for commercial and retail uses that reduce single occupant vehicle trips. o Provide bicycle storage/parking facilities. o Provide shower/locker facilities in light industries and office uses. o Provide onsite or near site child care centers for large employment centers. o Develop park-and-ride lots. o Provide opportunities to include or increase transit service to plan area. • Include plans to incorporate safe and efficient modes of bicycle and pedestrian transportation. Bicycle routes and pedestrian paths should include amenities such as signs and traffic signal activation	Significant and unavoidable.

Table 2-1
Summary of Significant Environmental Impacts and Mitigation

Environmental Impact	Mitigation	Level of Significance After Mitigation
	(e.g., loop activators). • Identify energy efficiency goals for new developments that would conserve energy beyond requirements of the State Title 24 building code. • Provide exterior electrical outlets on new buildings that encourage use of electrical landscape equipment. • Prohibit open wood burning fireplaces in new residences unless they are natural gas-fired or EPA certified wood heaters that meet EPA's particulates emission standard of 7.5 grams per hour.	
Development of residential uses adjacent to agricultural uses has the potential to result in nuisances and odors due to ongoing agricultural operations.	Please refer to Mitigation Measures 4.2-1 through 4.2-3.	Less-than-significant.
4.4 Biological Resources		
The proposed project would represent temporary and permanent impacts to all habitats and the vast majority of vegetation within project boundaries, and will result in the removal of 3 or more oak trees plus all Eucalyptus and/or Tamarisk trees lining San Vicente Road. Temporary impacts to vegetation included grubbing and grading associated with development of the site; permanent impacts include the conversion of open vegetated areas to urban housing through placement of structures, homes, roads, driveways, etc.	4.4-1 A Forest Management Plan shall be prepared for the project due to proposed tree removals. The City approved Forest Management Plan (and associated replanting plan) shall be incorporated as a condition of project approval to satisfy General Plan Conditions C/OS 17-19. Prior to the issuance of any grading and/or building permit, the project applicant shall submit a Forest Management Plan, subject to the review and approval of the City of Soledad. 4.4-2 Trees and vegetation not planned for removal shall be protected during construction to the maximum extent feasible. This shall include the use of exclusionary fencing of herbaceous and shrubby vegetation, such as hay bales and protective wood barriers for trees. Only certified weed-free straw shall be used to avoid the introduction of non-native, invasive species. 4.4-3 Following construction, the disturbed areas that are proposed as parks and native landscaping areas shall be restored to pre-project contours to the maximum extent feasible and revegetated using locally-occurring native species and native erosion control seed mix.	Less-than-significant

Table 2-1
Summary of Significant Environmental Impacts and Mitigation

Environmental Impact	Mitigation	Level of Significance After Mitigation
	4.4-4 Protective fencing shall be placed so as to keep construction vehicles and personnel from impacting vegetation adjacent to the project site outside of work limits. 4.4-5 Grading, excavating, and other activities that involve substantial soil disturbance shall be planned and carried out in consultation with a qualified hydrologist, engineer, or erosion control specialist, and shall utilize standard erosion control techniques to minimize erosion and sedimentation to native vegetation. 4.4-6 No construction equipment shall be serviced or fueled outside of designated staging areas.	
The presence/absence of jewelflower has not been determined at this time, but appropriate habitat is present within project boundaries. This species could be permanently impacted by proposed grading, excavation, and other activities that may result in the permanent loss or disturbance of individual jewelflowers and/or jewelflower habitat.	4.4-7 A qualified botanist shall be retained to conduct preconstruction surveys for Lemmon's jewelflower during the typical flowering season of this species (March-May), to determine the presence/absence of this species. If no Lemmon's jewelflower is present, no additional mitigation is required. If Lemmon's jewelflower is present, a qualified biologist shall prepare a mitigation plan to be approved by CDFG prior to initiation of construction. The City of Soledad Planning Department shall be provided verification of CDFG concurrence and satisfaction prior to issuance of grading permits.	Less-than-significant.
Project development would fragment (i.e., divide and disrupt) the vast majority of the existing wildlife habitat on the site, and would represent an urban encroachment into the foothills of the Gabilan Range (an important wildlife corridor). The ongoing presence of homes, roads, cars, people, firearms, pets, etc. would adversely impact any wildlife currently utilizing the site, particularly in the grassland portions of the site (i.e. deer, coyote, fox, jackrabbits, squirrels, and raptors). Comparable development is present immediately south of the proposed project, but does not extend into the grassland/foothill portions of the site.	4.4-8 Prior to approval of each final map, the applicant shall prepare and submit draft Covenant, Conditions, and Restrictions (CC&Rs) applicable to that phase that shall include the following: a) restrict installation fencing to the immediate vicinity of residences, and where fencing is placed adjacent to open space areas and areas of natural, undisturbed habitat, fences shall be installed such that a six inch space is left between the bottom of the fence and the surface of the ground; b) prohibit off-road vehicle use; c) prohibit illegal discharge of firearms; d) prohibit the installation of road medians throughout the development. These CC&Rs shall be reviewed and approved by the City of	Significant and unavoidable.

Table 2-1 **Summary of Significant Environmental Impacts and Mitigation**			
Environmental Impact	**Mitigation**		**Level of Significance After Mitigation**
	Soledad prior to approval of each final map.		
Suitable foraging/dispersal habitat for San Joaquin kit fox is present throughout project boundaries, with potential denning habitat present in the annual grassland, rocky outcrop, and fallow agricultural portions of the site (see Early Evaluation Report in Appendix C). The vast majority of the habitats present within project boundaries would be directly impacted by the proposed project (grubbing and grading, construction phase impacts, permanent placement of structures and impermeable surfaces, etc.). Impacts proposed in the grassland portions of the site will likely result in kit fox abandonment of the property due to ongoing disturbance. For this reason, the project is assumed to have a significant and unavoidable adverse affect on San Joaquin kit fox (i.e. direct mortality, loss of habitat, loss of dens, etc.).	4.4-9	The applicants shall enter into consultation with USFWS and CDFG and shall provide evidence of their compliance with applicable requirements of the federal Endangered Species Act and California Endangered Species Act prior to the issuance of building permits.	Significant and unavoidable.
	4.4-10	Pre-construction surveys for kit fox dens shall be required for all development phases of the future project. Pre-construction surveys shall be conducted by a qualified biologist no less than 14 days and no more than 30 days prior to the start of any ground disturbing activities to locate kit fox den sites. In addition to pre-construction surveys, a qualified biologist, meeting the required qualifications described in the *U.S. Fish and Wildlife Service Standardized Recommendations for the Protection of the San Joaquin Kit Fox Prior to Ground Disturbance*, June 1999 (USFWS Recommendations for SJKF), shall be on-site to monitor construction activities for the San Joaquin kit fox. In the event that an active kit fox den is found, then the standard mitigation actions outlined in the USFWS Recommendations for SJKF, are recommended to avoid possible take of kit fox during future construction activities. These actions are general in nature; therefore, site specific strategies for the project site shall be based upon consultation with USFWS and CDFG, as stated above in Mitigation Measure #4.4-10. If active kit fox den sites are found and/or kit fox individuals are observed during the survey, the applicant will be required to comply with all mitigation actions required by USFWS and CDFG and the City shall monitor implementation of those actions.	
Multiple badger dens and badger diggings were observed in the vicinity of the onsite reservoir and within other portions of the annual grassland habitat. An adult badger was observed emerging from an onsite den by Biosearch biologists. Badger diggings were also observed in fallow agricultural portions of the site, demonstrating badger utilization of these areas as foraging habitat. Therefore, construction activities in grassland portions of the	4.4-11	The applicant shall retain a qualified biologist to conduct focused preconstruction surveys for potential American badger dens. These surveys shall be conducted no sooner than 2 weeks prior to the start of construction. Surveys for badger dens may be conducted at the same time as burrowing owl surveys. Please refer to the mitigation measures in the Preliminary BA (June 2008) for measures that may be implemented based on the results of these surveys.	Significant and unavoidable.

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Summary of Significant Environmental Impacts and Mitigation

Environmental Impact	Mitigation		Level of Significance After Mitigation
site have the potential to impact badger dens, and construction within fallow agricultural portion of the site will impact badger foraging habitat. Project-related construction activities (i.e. grading, excavation, development, etc.) may result in a permanent loss or disturbance of American badgers and their habitat.			
Two special-status bat species may be present onsite (pallid bat and Townsend's big-eared bat); several other bat species may also be present. Removal of onsite trees, removal of onsite buildings, and development of the site (including encroachment/disruption of rocky outcrops) may result in direct impacts to bats and/or bat roosts (day, night, foraging, and maternity) and would remove the vast majority of onsite foraging habitat for these species.	4.4-12	A qualified bat specialist shall conduct site surveys to characterize bat utilization of the site and species composition present (techniques utilized to be determined by the biologist). Please refer to the mitigation measures in the Preliminary BA (June 2008) for measures that may be implemented based on the results of these surveys.	Less-than-significant.
Salinas pocket mouse is known to occur onsite; presence was confirmed in September 2006. As the vast majority of the onsite grassland habitat will be converted to residential usage and the remaining portions will be fragmented from surrounding habitat and subject to ongoing disturbance (cars, lights, noise, sound, vibration, etc.), significant impacts to this species are anticipated (direct and indirect mortality).	4.4-13	The applicant shall contract a qualified biologist to coordinate with CDFG and prepare a mitigation and monitoring plan for Salinas pocket mouse. Verification of CDFG concurrence/approval shall be submitted to the City of Soledad prior to initial grubbing and grading of the site.	Significant and unavoidable.
Tree removal (i.e., Eucalyptus and Tamarisk trees lining San Vicente Road and oaks present in the northeast corner of the site) and disturbance associated with construction of the proposed project would likely impact any nesting birds and/or raptors present within project boundaries (harassment, stress, brood-less, nest abandonment, injury, mortality). Per the CDFG Guidelines, impacts to burrowing owls are defined as disturbance or	4.4-14	Burrowing owls are known to occupy burrows in mixed grassland, active agricultural, and fallow agricultural portions of the Miravale site during the non-breeding season (breeding season utilization not observed in the course of protocol-level surveys). A qualified biologist shall conduct preconstruction surveys to locate active breeding and/or wintering burrowing owls (depending on season) no more than 30 days prior to the start of construction. If ground disturbing activities are delayed or suspended for more than 30 days after the preconstruction survey, the site shall be resurveyed. The	Less-than-significant.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact		**Mitigation**	**Level of Significance After Mitigation**
harassment within 160 feet of occupied burrows, destruction of burrows and burrow entrances, and degradation of foraging habitat adjacent to occupied burrows. In addition, the project would require grading, grubbing, tree removal, excavation, and other activities that may result in a permanent loss or disturbance of raptors and migratory birds and their habitat.		survey shall conform to the CDFG 1995 Staff Report protocol. Wherever burrows are identified, impact avoidance and mitigation measures shall be implemented (previously mapped burrow locations may not be occupied and/or new burrows may be occupied). Please refer to the mitigation measures regarding burrowing owl in the Preliminary BA (June, 2008) for avoidance and mitigation measures that may be implemented based on the results of these surveys.	
	4.4-15	If project activities will initiate during the typical avian nesting season (February 15– August 1), a qualified biologist shall conduct focused preconstruction surveys no more than 14 days prior to initiation of construction activities for nesting birds, including (but not limited to) white-tailed kite, northern harrier, loggerhead shrike, and horned lark, in all areas that may provide suitable nesting habitat within 300 feet of the construction area. If active nests are found, a suitable construction buffer shall be established by a qualified biologist, and no work shall occur within that buffer until August 1 when young are assumed fledged. Alternatively, a qualified biologist can conduct weekly nest checks to gauge nestling/fledgling status, and construction may proceed once fledglings have dispersed from the nest provided written concurrence from CDFG. No active nest shall be impacted or removed without a depredation permit from CDFG, and a depredation permit will not be issued for impacts to Fully Protected Species such as the white-tailed kite. For activities that occur outside of the nesting season (generally September 1 through February 14), preconstruction surveys are not required. If construction is initiated outside of the nesting season and continues into the nesting season, preconstruction surveys are required if construction will occur in areas not previously accessed and/or disturbed (>300 feet from previous construction activities).	
	4.4-16	A preconstruction survey shall be conducted no more than 14 days prior to modification, demolition, or removal of onsite buildings. If no owls or other nesting birds are observed, then demolition or removal may proceed. If barn owls (or any other nesting birds) are observed	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact		**Mitigation**	**Level of Significance After Mitigation**
		during the preconstruction survey, a determination shall be made on whether birds are roosting or nesting. If a single owl is roosting, demolition or removal of the structure can proceed after the owl has been persuaded to move from the roost area. Non-invasive techniques include light shining into the roost space for one or two nights and days. If barn owls (or other nesting avian species) are found to be actively nesting in the barn, work on or demolition of the structure shall be postponed until one of the following conditions have been met: 1) a qualified biologist monitoring the nest determines that the owls have abandoned the nest without any outside interference or 2) a qualified biologist monitoring the nest has determined that the young have fledged and are capable of relocating and using another roost site. Once the young have fledged, non-invasive techniques may be used to encourage the owls to leave the barn. Under either scenario, the monitor shall ensure that all owls have left the building prior to construction or demolition activities. The barn owl nesting period is typically between February 15 and July 15.	
The presence of California red-legged frog and/or Western spadefoot has not been determined at this time. The project as currently designed would fill the onsite reservoir to establish home-sites, removing a potential breeding resource for these species. Pond 3 would likewise be permanently filled as a result of the proposed project. If CRLF or spadefoot are present, proposed impacts to onsite agricultural basins (particularly the reservoir) would result in direct impacts to these species including "take." (i.e. loss of individuals and habitat, loss of a breeding resource, direct mortality, etc.). In addition, grading and other earthmoving activities proposed would represent an adverse affect on upland estivation habitat for these species, if present.	4.4-17	Protocol-level CRLF surveys (USFWS, August 2005) shall be completed at each aquatic resource present within project boundaries. Protocol-level CRLF surveys would likely detect Western spadefoot, if present. If it is determined that CRLF are present, the applicant shall coordinate with the USFWS to determine the appropriate course of action per the requirements of the federal ESA (e.g., applying for an Incidental Take Permit [Section 7 and/or 10 depending on lead agency]) and implementing the permit requirements. Any mitigation and avoidance measures required by USFWS for potential impacts to CRLF (if applicable) would likewise reduce impacts to Western spadefoot given their overlapping habitat characteristics. If it is determined that spadefoot are present, but CRLF are not, coordination with CDFG regarding appropriate mitigation to reduce impacts to this species shall be required.	Significant and unavoidable.
Proposed development of the majority of the onsite	4.4-18	The applicant shall retain a qualified biologist to conduct a	Significant and

Table 2-1
Summary of Significant Environmental Impacts and Mitigation

Environmental Impact	Mitigation		Level of Significance After Mitigation
grassland habitat and fragmentation of remaining grassland habitat represents a significant impact to coast horned lizards and black-legless lizards (and other wildlife species).		construction monitoring program for black legless lizards, coast horned lizards, and San Joaquin coachwip which shall include procedures for capture and release. The biologist shall remain on-site during initial grading activities to salvage and relocate these species that may be uncovered during earthmoving activities. Recovered individuals shall be placed in appropriate habitat outside of the project site in accordance with the MOU with CDFG. The biologist shall walk alongside the grading equipment in each new area of disturbance and shall have the authority to halt construction temporarily if necessary to capture and relocate an individual. Any individual captured in the grading zone shall be relocated as soon as possible to adjacent suitable habitat outside of the area of impact, pursuant to the MOU.	unavoidable.
	4.4-19	The applicant shall conduct an employee education program for construction crew and City staff prior to construction activities. A biological monitor shall meet with the construction crew at the onset of construction to educate the construction crew on the following: 1) the appropriate access route in and out of the construction area; 2) how biological monitor will examine the area and agree upon a method which will ensure the safety of the monitor during such activities, 3) the special-status species that may be present; 4) the specific mitigation measures that will be incorporated into the construction effort; and 5) the proper procedures if a special-status animal or any other animal is encountered within the project site.	
	4.4-20	A representative shall be appointed by the City who will be the contact source for any employee or contractor who may inadvertently kill or injure a special-status species or find one dead, injured, or trapped. The representative shall be legally responsible to notify USFWS and CDFG immediately in the event that "take" of any special-status wildlife species occurs. The representative shall be identified during the Employee Education Program and his/her contact information shall be provided to USFWS and CDFG. It is imperative that this individual will be present onsite every day and will be accessible to regulatory	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact		**Mitigation**	**Level of Significance After Mitigation**
		agency personnel.	
	4.4-21	All food-related and other trash shall be disposed of in closed containers and removed from the project area at least once a week during the construction period or more often if trash is attracting avian or mammalian predators. Construction personnel shall not feed or otherwise attract wildlife to the area. These instructions to the construction crew shall be reiterated during the employee education program and during update meetings with construction crews. The instructions shall also be posted conspicuously on the site.	
Implementation of the proposed project would result in impacts to wildlife movement and nursery sites.	See above.		Significant and unavoidable.
4.5 Cultural Resources			
Development of the project and the resulting move of the historical resource to another location would cause a substantial, adverse change to a historical structure eligible for listing in the California Register on the site.	4.5-1	Relocation of House. The project proponent shall ensure that the design and implementation of the relocation project is consistent with the *Secretary of the Interior's Standards for* Rehabilitation *and Illustrated Guidelines for Rehabilitating Historic Buildings (U.S. Department of the Interior, National Park Service, 1992),* the California Historical Building Code, and the Mitigation Monitoring and Reporting Plan (MMRP) for the project. Prior to recordation of the final map, the project applicant shall submit a relocation plan prepared by a qualified professional in accordance with the general recommendations of *Moving Historic Buildings*, a publication of the National Park Service, to the City of Soledad for review and approval. The relocation plan shall discusses planning, research, and recording prior to the move. In addition, the relocation plan shall identify siting, foundation construction, building reassembly, and restoration work after a successful move. See John Obed Curtis, *Moving Historic Buildings*, Heritage Conservation and Recreation Service, Publication No. 9, US Department of Interior (1979) for further details. Prior to the relocation, the applicant shall provide verification of compliance with related mitigations to the City of Soledad Community Development Department Director for review and approval. In addition, the structure shall be relocated prior to the issuance of any building and/or grading	Less-than-significant.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	permit for development within the Specific Plan area. 4.5-2 Protective Measures. The project proponent shall develop and implement measures to protect the character-defining features of the Lorentzen House building from damage by the relocation project. The features include, but are not limited to scale, massing, and layout of the house, as well as siding and wood frame fenestration. Protective measures shall be prepared by a qualified professional in accordance with the *Secretary of the Interior's Standards for Rehabilitation and Illustrated Guidelines for Rehabilitating Historic Buildings* (U.S. Department of the Interior, National Park Service, 1992), the California Historical Building Code, *Moving Historic Buildings*, and the MMRP for the project. Prior to the recordation of the final map, the project applicant shall submit a relocation plan, consistent with Mitigation Measure 4.5-1, which incorporates protective measures consistent with the intent of this measure. Prior to the relocation of the structure, the applicant shall submit evidence from a qualified professional demonstrating that protective measures have been implemented, subject to the review and approval of the City of Soledad. 4.5-3 Repair of Inadvertent Damage. The project proponent shall ensure that any inadvertent damage to the character-defining features of the Morris Lorentzen House resulting from the rehabilitation project is repaired in accordance with the *Secretary of the Interior's Standards for Rehabilitation and Illustrated Guidelines for Rehabilitating Historic Buildings* (U.S. Department of the Interior, National Park Service, 1992) and California Historical Building Code. A qualified professional shall be consulted prior to any repairs. The condition of the building shall be photographed as part of the proposed recordation document and/or video documentation, prior to the start of the relocation, and this will help to establish the baseline condition for assessing inadvertent damage. The project applicant shall submit detailed documentation prepared by a qualified professional demonstrating that all repairs have been completed in accordance with	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	applicable standards prior to the issuance of any building and/or grading permit. 4.5-4 Professional Standards. All activities regarding historical architectural resources and historic preservation carried out as part of this project shall be carried out by or under the direct supervision of persons meeting, at a minimum, the Secretary of the Interior's professional qualifications standards (48 FR 44738-9) in these disciplines. Prior to the relocation of the Lorentzen House, the applicant shall submit evidence to the City of Soledad demonstrating compliance with this measure. 4.5-5 Monitoring. The mitigation measures applying to the relocation of the Lorentzen House shall be set forth in a Mitigation Monitoring and Reporting Program (MMRP) for the project. The MMRP will guide project-specific mitigation, monitoring, and/or reporting programs for various aspects of mitigation monitoring, reporting, and enforcement in order to ensure full compliance with the conditions of project approval. 4.5-6 Coordination. The project proponent shall coordinate with and inform interested parties, including, but not limited to the Soledad Historical Society and the Monterey County Historical Society, regarding the status of its compliance with the mitigation measures set forth in the MMRP, as necessary. 4.5-7 Recordation to Historic American Building Survey standards. Prior to the start of any project work, the project proponent shall ensure that the Lorentzen House property is recorded and documented in accordance with the Level II recordation standards of the Historic American Building Survey/Historic American Engineering Record (HABS/HAER) program. This level of recordation would include: ▪ Archival reproduction of any existing historic images of the property and grounds; ▪ Archival reproduction of any existing maps, sketches, or	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact		**Mitigation**	**Level of Significance After Mitigation**
		drawings of the house; ▪ Production of measured architectural plans and drawings; ▪ Production of large-format photographs of exterior and interior views of the house, and exterior views of the house and current setting, including relationship to non-eligible outbuildings; and ▪ Narrative history and description of the property (based on the narrative provided in the Seavey (2006) evaluation of the property, and the Monterey County survey(s) of similar properties. The original archival set of recordation documents and photograph prints will be submitted to the Soledad Historical Society (or its designee), and archival quality photocopies of the documentation set will be provided to the following interested parties and local repositories: the Monterey County Historical Society; the Monterey County Libraries (Soledad and Salinas branches), and the UC Santa Cruz Library Special Collections Department. The project proponent would ensure that this recordation documentation was prepared prior to carrying out any other treatment and would make the content of the document available for other mitigation measures, such as the preparation of interpretive material.	
Construction of the project may result in the discovery and disturbance of unknown archaeological resources and/or human remains.	4.5-8	In order to ensure that project-impacts to potentially unknown resources are avoided, the project proponent shall be responsible for on-going monitoring of project construction. Prior to the issuance of any grading permit, the project proponent shall provide the City of Soledad with documentation identifying construction personnel that will be responsible for on-site monitoring. If archaeological resources or human remains are accidentally discovered during construction, work shall be halted within 150 feet (50 meters) of the find until a qualified professional archaeologist can evaluate it. Work shall not recommence until the project archaeologist has submitted documentation to the City indicating that discovered resources have been adequately salvaged and no further resources have been identified within the area of disturbance	Less-than-significant.

Table 2-1
Summary of Significant Environmental Impacts and Mitigation

Environmental Impact	Mitigation		Level of Significance After Mitigation
	4.5-9	In order to ensure that the proposed project does not impact buried human remains during project construction, the project proponent shall be responsible for on-going monitoring of project construction. Prior to the issuance of any grading permit, the project proponent shall provide the City of Soledad with documentation identifying construction personnel that will be responsible for on-site monitoring. If buried human remains are encountered during construction, work in that area must halt and the archaeologist and the coroner immediately notified. If the remains are determined to be Native American, then the NAHC must be notified within 24 hours as required by Public Resources Code 5097. The NAHC will notify designated Most Likely Descendants who will provide recommendations for the treatment of the remains within 24 hours. The NAHC will mediate any disputes regarding treatment of remains. Work shall not recommence until the project archaeologist, coroner, and NAHC, submit documentation to the City indicating that buried human remains have been adequately salvaged and no further remains have been identified within the area of disturbance.	
4.6 Geology, Soils and Mineral Resources			
The project would be exposed to potential adverse effects from strong seismic ground shaking that may result in damage to proposed structures.	4.6-1	To minimize the potential effects from strong seismic ground shaking on project components, a project-specific geotechnical analysis shall be performed by a registered professional engineer with geotechnical expertise, and all recommendations shall be incorporated into final design plans. Prior to the issuance of any building and/or grading permit, the project applicant shall submit a project-specific geotechnical analysis to the City of Soledad Public Works Director for review and approval. The project engineer shall develop project-level plans based upon and in response to the observations and recommendations made in the project specific geotechnical analysis.	Less-than-significant.
	4.6-2	In order to minimize potential seismic-related hazards, the project engineer shall incorporate the seismic shaking analysis contained within the Geologic Hazards Investigation Update prepared by Nolan	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact		**Mitigation**	**Level of Significance After Mitigation**
		Associates (September 2006) into project design. Prior to the issuance of any building and/or grading permits, the project applicant shall submit design level plans demonstrating that the recommendations of the Geologic Hazards Investigation Update are incorporated into project design, subject to the review and approval of the City of Soledad Public Works Director. In addition, all structures shall be designed to the most current standards of the California Building Code, at a minimum.	
	4.6-3	In order to minimize seismic-related hazards to new public facilities, a site-specific probabilistic seismic hazards assessment shall be incorporated into the design of any schools, hospitals, fire or police stations, or any other critical facilities planned for the project site. An individual assessment shall be performed for each site by an engineering geologist. Prior to the issuance of any grading and/or building permit for new public facilities, including but not limited to new schools, hospitals, and fire or police stations, a probabilistic seismic hazards assessments shall be prepared and submitted to the City of Soledad Director of Public Works for review and approval.	
Construction of the project could result in substantial soil erosion or loss of topsoil.	4.6-4	In order to reduce wind and water erosion on the project site, an erosion control plan and Storm Water Pollution Prevention Plan (SWPPP) shall be prepared for the site preparation, construction, and post-construction periods. The erosion control plan shall incorporate best management practices consistent with the requirements of the National Pollution Discharge Elimination System (NPDES). The erosion component of the plan must at least meet the requirements of SWPPP required by the California State Water Resources Control Board. If earth disturbing activities are proposed between October 15 and April 15, these activities shall be restricted per the requirements of Soledad Municipal Code Chapter 15.08. Prior to the issuance of any permit, the project proponent shall submit detailed plans to the satisfaction of the City of Soledad Public Works Director. The components of the erosion control plan and SWPPP shall be monitored for effectiveness by City of Soledad Public Works. The following measures shall be implemented, where appropriate, to control erosion:	Less-than-significant.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	1) Keep construction machinery off of established vegetation as much as possible, especially the vegetation on the upwind side of the construction site; 2) Establish specific access routes at the planning phase of the project, and limits of grading prior to development, which should be strictly observed; 3) Utilize mechanical measures (i.e. walls from sand bags and/or wooden slat or fabric fences) to reduce sand movement; 4) Immediate revegetation (plus the use of temporary stabilizing sprays), to keep sand movement to a minimum; and 5) For larger-scale construction, fabric or wooden slat fences should be placed around the construction location to reduce sand movement. 4.6-5 Areas disturbed by grading shall be stabilized with adequate landscaping vegetative cover. A re-vegetation and landscaping plan shall be prepared by a landscape architect with experience in working with the type of soils that are characteristic of the site, subject to the review and approval of the City of Soledad. Prior to the issuance of any certificate of occupancy and concurrent with project construction, disturbed areas shall be re-vegetated consistent with the City approved landscaping plan. All project replanting shall be continually monitored by the landscape architect for a duration of three years. The landscape architect shall submit annual monitoring reports to the City of Soledad after each successive year detailing the success of landscaping. Success shall be based on an 80% survival rate. If it is determined that the replanting has not been successful, additional replanting shall be required by the City of Soledad. 4.6-6 All drainage from improved surfaces shall be captured by closed pipe or lined ditches and carried to neighborhood storm sewers or natural drainages. At no time shall any concentrated discharge be allowed to	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact	**Mitigation**		**Level of Significance After Mitigation**
		spill directly onto the ground adjacent to structures or to fall directly onto steep slopes. The control of runoff is essential for erosion control and prevention of water ponding against foundations and other improvements. Prior to the issuance of any grading and/or building permit for each new structure, the project applicant shall submit an erosion control plan consistent with this measure, subject to the review and approval of the City of Soledad Public Works Director.	
The project could be exposed to localized liquefaction and collapse.	4.6-7	In order to reduce the risk of localized liquefaction and collapse, and allow for adequate foundation and structural fill support, grading plans shall be consistent with a project-specific geotechnical analysis. The project geotechnical engineer shall prepare a quantitative assessment of liquefaction and seismically-induced settlement potential for the project as part of a comprehensive site geotechnical evaluation, prior to the recordation of each final map. Measures to ensure adequate reduction of risk to standard acceptable levels in accordance with standard geotechnical practice shall be incorporated into project design and specifications, subject to the review and approval of the City of Soledad Public Works Director.	Less-than-significant.
The project could be exposed to potential adverse effects from on- or off-site landslides and lateral spreading that may result in damage to proposed structures.	4.6-8	Portions of the project located within debris flow hazard areas as described in the Geological Hazards Investigation Update prepared by Nolan Associates (September 2006, see pg. 14) shall incorporate design measures to mitigate this hazard to acceptable levels in accordance with standard engineering practices. Suitable measures include: 1) Restricting development to outside these areas; 2) Constructing artificial channels or diversion walls, designed to divert fluidized debris away from habitable structures; or 3) Constructing impact walls, designed to withstand anticipated debris flow volumes and velocities. An engineering geologist shall be retained to provide site-specific geologic design criteria for debris flow hazard areas once the final project plans are available. Diversion or retaining structures shall be designed based on recommendations by a geotechnical engineer, subject to review and approval of the City of Soledad Public Works Director. Prior to the recordation of each final map, the project applicant shall submit evidence demonstrating that adequate design measures are incorporated to mitigate potential hazards to acceptable	Less-than-significant.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact	**Mitigation**		**Level of Significance After Mitigation**
		engineering standards, subject to the review and approval of the City of Soledad.	
The project could be exposed to localized soil expansion.	4.6-9	In order to minimize potential hazards associated with expansive soils, the expansion potential of site soils shall be evaluated as part of a site-specific geotechnical study to ensure hazards are reduced to an acceptable level of geotechnical and Uniform Building Code practices. The recommendations of a geotechnical engineer for mitigating soil shrink-swell hazards shall be incorporated into project design. These measures may include replacement of soil with engineered backfill or treatment of expansive soil with lime. Prior to the recordation of each final map, the project applicant shall submit evidence demonstrating that adequate measures are incorporated to mitigate potential hazards to acceptable engineering standards, subject to the review and approval of the City of Soledad Director of Public Works.	Less-than-significant.
4.7 Hazards and Hazardous Materials			
The project proposes a variety of uses in an area that may be contaminated with hazardous materials. Release of these contaminants could pose a health risk to construction workers and future users on the site.	4.7-1	Prior to the recordation of any final map, the applicant shall arrange for a Phase II Environmental Site Assessment to be prepared which assesses the localized environmental conditions described in the Phase I Environmental Site Assessment prepared by D&M Consulting Engineers, Inc. (September 2006) and identifies any required remedial actions for the safe handling, removal and special needs for any identified materials. The Phase II Assessment shall include site-specific soil sampling in order to assess the presence of potential soil contamination and to identify special needs for soil handling during construction/grading activities and possible health risks to construction workers and future users consistent with the recommendations contained in the Phase 1 Environmental Site Assessment prepared by D&M Consulting Engineers, Inc. If results indicate the presence of such materials in excess of screening levels for residential, educational, or commercial uses, a Remediation Plan shall be prepared and implemented to reduce contamination to acceptable levels, maintain the safety of construction workers and future site users, and assure proper management of contaminated	Less-than-significant.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	materials in accordance with state and local regulatory requirements. This plan shall be subject to review and approval by the Monterey County Division of Environmental Health. Prior to the issuance of any building and/or grading permit, the project applicant shall submit evidence to the City of Soledad for review and approval demonstrating compliance with this measure. 4.7-2 Prior to commencement of new development, the applicant shall obtain approval of a Soil Management Plan from the Monterey County Division of Environmental Health, which establishes management practices for handling potentially contaminated soil, if encountered, during construction/grading activities. 4.7-3 In order to reduce human health risks to construction personnel and future site occupants, the project proponent shall retain a qualified consultant to survey all buildings to be demolished for asbestos under the National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines prior to demolition activities. If asbestos containing material is documented within existing on-site structures, all potentially friable asbestos shall be removed prior to building demolition in accordance with NESHAP guidelines. Prior to the issuance of a grading permit, the project proponent shall submit written evidence to the City of Soledad Director of Public Work from a qualified consultant demonstrating that all asbestos containing material, if present, has been properly removed and demolition activities may proceed without exposing construction personnel to asbestos related-hazards. 4.7-4 In order to reduce human health risks to construction personnel and future site occupants, the project proponent shall retain a qualified consultant to conduct a lead-based paint survey to evaluate the presence of lead-based paint residues in site soils adjacent to existing structures. If lead contamination is documented on-site, all peeling and flaking lead-based paint shall be removed and properly disposed of separately from building debris, in accordance with current	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact		**Mitigation**	**Level of Significance After Mitigation**
		Department of Toxic Substances Control policies. In addition, all existing structures within the Specific Plan area that were constructed prior to 1978 shall be surveyed for lead-based paint prior to any demolition activities. Prior to the issuance of any permit for each phase of development, the project proponent shall submit written evidence from a qualified consultant documenting that all lead-based paint hazards have been appropriately removed and disposed of in accordance with industry standards, subject to the review and approval of the City of Soledad.	
Due to the proximity of the Soledad Sanitary Landfill to the proposed school sites, there is the potential for hazardous emissions and/or other environmental hazards to affect the health and safety of students attending new schools within the project area. More specifically, the existing landfill has the potential to expose several of the proposed school sites to environmental hazards. Although the landfill is listed as "closed" and no known hazardous incidents have been reported, releases of emissions may, nevertheless, adversely affect the health of students.	4.7-5	If, during the course of the Phase II Environmental Site Assessment, it is determined that the existing Soledad Sanitary Landfill would expose the proposed school sites to an environmental hazard that cannot be reduced to an acceptable level through remediation, the project applicant, in conjunction with the Soledad Unified School District and the City of Soledad, shall identify new school sites within the Miravale III project area that would not be exposed to known environmental hazards, prior to the recordation of any final map. If new school locations are necessary, the applicant shall amend the Specific Plan and submit a revised tentative map demonstrating the new school locations, subject to the review and approval of the City of Soledad, prior to the recordation of any final map. Any new school site shall be coordinated with the Soledad Unified School District.	Less-than-significant.
Future development could involve the use/storage of hazardous materials and/or be located in proximity to existing agricultural use/storage of hazardous materials. Accidental release of hazardous materials could result in significant impacts on public health and the environment.	The following mitigation measure is in addition to mitigation previously identified in **Section 4.2 Agricultural Resources** that are intended to reduce potential land use conflicts associated with agricultural operations.		Less-than-significant.
	4.7-6	The applicant shall prepare a Chemical Application Management Plan (CHAMP). This plan shall detail the procedures to construct, operate, and maintain the golf course. The CHAMP shall provide technical public disclosure regarding pesticides, fertilizers and other chemicals to be used on the golf course, as well as methods of application and handling. This plan shall be submitted to the Monterey County Environmental Health Division for review and approval. Prior to the issuance of any permit for golf course development, the project applicant shall submit documentation to the City of Soledad	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	demonstrating that a CHAMP has been prepared and approved by the County of Monterey. The following provisions shall be included in the CHAMP: ▪ Drought, pest, and disease resistant grass species shall be selected. ▪ Pesticides shall be handled, applied, and disposed of by a licensed (State-certified) spray technician. ▪ Only approved and legal chemicals shall be used. All county, state, and federal guidelines must be strictly adhered to regarding storage, handling, and application of pesticides. ▪ Advanced technology/monitoring equipment shall be used to insure minimal application of pesticides, herbicides, and fertilizers. This equipment shall be maintained and in proper calibration. ▪ A controlled and designated area/facility shall be used for the proper mixing and loading of pesticides into application equipment. The facility shall consist of an impermeable pad with controlled and contained drainage, and should be at least 50 feet from open ditches, ponds, or other water bodies. Rinse water shall be properly stored and hauled for disposal at an approved facility. ▪ Selection of pesticides shall be based on the ability to achieve treatment goals and criteria to minimize off-site movement. Selection of less toxic, less mobile, and less persistent pesticides shall be a priority management criterion. ▪ Pesticide applications shall be carefully timed and combined with other pest management practices; pests shall be accurately identified and pesticide applications made only when necessary, using the least amount required for all seasons. ▪ Pesticides shall not be applied when soil moisture is high during the rainy season. Applications shall be restricted prior to any anticipated late or early season storm events to preclude potential impacts from runoff. ▪ Irrigation applications shall be consistent with turf grass	

Table 2-1
Summary of Significant Environmental Impacts and Mitigation

Environmental Impact	Mitigation		Level of Significance After Mitigation
		evapotranspiration requirements. Over-watering shall be avoided.	
4.8 Hydrology and Water Quality			
Construction and operation of the project could impact water quality through substantial soil erosion during grading activities, loss of topsoil, and surface runoff from the proposed development.	4.8-1	In order to ensure that impacts are minimized to the greatest extent feasible, the project shall be designed to meet the BMP standards for operational phase storm water runoff and to maintain the onsite BMPs. The project shall implement BMPs to manage water quality by providing onsite runoff treatment in line with the onsite infiltration system. Prior to the issuance of any grading and/or building permit, the project applicant shall prepare a Construction Management Plan that identifies a designated construction supervisor responsible for the continued implementation of all construction BMPs throughout the duration of project construction. Moreover, the Construction Management Plan shall also identify BMPs to be implemented as part of the project and associated monitoring activities. The Construction Management Plan shall be reviewed by the City of Soledad Public Works Director prior to the issuance of any permit.	Less-than-significant.
	4.8-2	In order to prevent excess sediment buildup and ensure that all percolation basins are functioning in accordance with project-level plans, the project applicant and/or his/her successor in interest, shall be responsible for the long-term maintenance of all percolation basins and related private on-site drainage improvements and shall enter into a maintenance agreement with the City to provide for such. Bi-annually a basin maintenance report shall be submitted to the City of Soledad, subject to the review and approval of the Public Works Director, demonstrating that the basins have been properly maintained and cleaned in accordance with City standards. Prior to the issuance of any building and/or grading permit, the project applicant shall enter into a maintenance agreement with the City of Soledad.	
Construction and operation of the project could potentially result in flooding impacts to off-site properties if adequately sized drainage facilities are not provided within the proposed development.	4.8-3	In order to ensure that project-induced impacts related to changes in the existing drainage patterns on the project site are minimized, the project applicant shall submit design-level improvement plans for the project's storm drainage collection and retention system. Final design-	Less-than-significant.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact		**Mitigation**	**Level of Significance After Mitigation**
		level plans shall be supported with appropriate soils and hydrologic data in accordance with City standards. All conveyance system and retention basins shall be sized and designed in accordance with applicable City design standards and shall be appropriately sized to accommodate stormwater runoff from a 100-year storm event. Prior to the recordation of any final map, the project applicant shall submit all design-level plans and supporting details to the City of Soledad Director of Public Works for review and approval. The VTM and Specific Plan shall be revised as necessary to reflect final locations of drainage facilities, subject to the review and approval of the City of Soledad.	
4.9 Land Use and Planning			
The proposed project would conflict with several policies intended to avoid and/or mitigate environmental impacts.		Mitigation measures have been identified in this EIR to reduce the extent of project-induced impacts, but these impacts cannot be minimized to a less-than-significant level. Measures have been identified in **Section 4.1 Aesthetics** and **4.4 Biological Resources.** No additional measures are feasible.	Significant and unavoidable.
As proposed, the Miravale III Specific Plan has the potential to conflict with adopted planning documents pertaining to public services.	4.9-1	In order to maintain project consistency with adopted City-wide facility planning documents, the project applicant/developer shall revise Section 5.0 of the Specific Plan to incorporate revisions identified by the City of Soledad Director of Public Works, prior to project approval. The following policy revisions have been identified as necessary. Revisions are <u>underlined.</u> Revise Wastewater Policy 2 to read as follows, "Design and construct the wastewater treatment system for Miravale III in accordance with applicable requirements of the Soledad Urban <u>Water</u> Management Plan, Long-Term Wastewater Management Plan<u>, and the Recycle Water Service Ordinance No. 645.</u> Revise Water Policy 1 to read as follows, "Design and construct the water supply and distribution system for Miravale III that expands upon and is integrated with the City's water distribution system and which meets the needs of future project developments of the Specific Plan area <u>consistent with the Urban Water Management Plan and the</u>	Less-than-significant.

Table 2-1
Summary of Significant Environmental Impacts and Mitigation

Environmental Impact		Mitigation	Level of Significance After Mitigation
		City's 2005 Water Master Plan." Revise Stormwater Policy 5 to read as follows, "Design and construct a stormwater collection and retention system that adequate retains peak storm flows onsite, avoids aggravating or causing offsite downstream from the project site, and ensures separation of stormwater drainage from Recycled water generated within the Plan area and that is consistent with the 2007 Stormwater Management Plan, Stormwater Master Plan, and Ordinance No. 617" Add a new policy to the Section 5.2.2 Law Enforcement and Fire Protection/Medical Services. The new policy shall read as follows: "9. Police and fire services will be maintained with funding from a public safety benefit assessment district or similar district."	
4.10 Noise			
Future residential uses developed at the project site would be exposed to exterior noise levels greater than 65 dBA CNEL, which exceeds the noise and land use compatibility standards presented in the City of Soledad's General Plan. Interior noise levels would be expected to exceed 45 dBA CNEL without the incorporation of noise insulation features into the project's design.	4.10-1	Maintain a sufficient buffer distance between transportation noise sources and future sensitive land uses, or alternatively, construct noise barriers or create acoustically shielded outdoor use areas utilizing buildings to achieve noise exposures of 65 dBA CNEL or less. The specific determination of necessary mitigation measures will occur during project level environmental review and design. Results of the analysis shall be submitted to the City prior to issuance of a building permit.	Less-than-significant.
	4.10-2	Retain a qualified Acoustical Specialist to prepare for City review and approval a detailed acoustical analysis of interior noise reduction requirements and specifications for all projects proposed within the 60 dBA CNEL contours of area roadways, in accordance with State and City standards. Interior noise levels must be maintained at or below 45 dBA CNEL. Building sound insulation requirements will include forced air mechanical ventilation in noise environments exceeding 60 dBA CNEL. Special building construction techniques (e.g., sound-rated windows and building facade treatments) may be required where exterior noise levels exceed 65 dBA CNEL. These treatments include,	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact		**Mitigation**	**Level of Significance After Mitigation**
		but are not limited to, sound rated windows and doors, sound rated exterior wall assemblies, and acoustical caulking. The specific determination of required treatments will be made on a unit-by-unit basis during project design. Results of the analysis, including the description of the necessary noise control treatments, will be submitted to the City along with the building plans prior to issuance of a building permit. Feasible construction techniques such as these would adequately reduce interior noise levels to 45 L_{dn} or lower.	
	4.10-3	Non-residential development will comply with the noise standards established in the Zoning Code at existing or planned residential properties in the vicinity. Further, efforts will be made to reduce noise impacts through the following planning and equipment requirements: ▪ Development site planning will be utilized in a fashion that reduces noise impacts for nearby sensitive receptors, such as by not locating loading docks near residences. ▪ Equipment screens, fan silencers, and engine mufflers will be used to mitigate noise from mechanical equipment. ▪ Noise barriers will be used to control noise from parking and vehicle circulation. ▪ For recreational uses, proposed development must consider impacts upon the adjacent residential development in terms of the location of active sports areas, their orientation on the site, whether or not lights are included, and speech amplification systems.	
Traffic volume increases from the project would increase traffic noise along the local roadway network. In some locations, there would be a substantial, permanent increase in noise levels at sensitive receptors.	4.10-4	The project shall incorporate noise reduction methods, subject to the review and approval of the City of Soledad. Methods to reduce noise on the project site may include the following measures: ▪ Pave and re-pave streets with "quieter" pavement types, such as Open-Grade Rubberized Asphaltic Concrete, that would reduce noise levels by 2 to 3 dBA depending on the existing pavement type, traffic speed, traffic volumes, and other factors. All new and improved streets within the project area shall use quieter pavement types.	Significant and unavoidable.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact		**Mitigation**	**Level of Significance After Mitigation**
		▪ Implement new or larger noise barriers that may reduce noise levels by 5 dBA CNEL in areas that would not impair access requirements. Final design of such barriers, including an assessment of their feasibility and reasonableness, must be approved by the City during project-specific development applications. An increase in barrier height per foot equates to approximately 1 dBA noise reduction. However, noise barriers must be considered as a last resort to alternative noise reduction methods per the City of Soledad General Plan. ▪ Install traffic calming measures to slow traffic and provide qualitative improvement by smoothing out the rise and fall in noise levels caused by speeding vehicles. For each 5 mph reduction in average speed, noise generation is reduced by approximately 1 dBA. ▪ Provide affected residences with building sound insulation, such as sound rated windows and doors on a case-by-case basis to reduce interior noise levels to below the 45 dBA CNEL noise standard.	
Existing and proposed noise-sensitive land uses would be exposed to construction noise levels in excess of the significance thresholds for a period of more than one construction season.	4.10-5	Noise-generating activities at the construction site or in areas adjacent to the construction site associated with the project in any way should be restricted to the hours of 7:00 a.m. to 7:00 p.m., Monday through Friday, and 8:00 a.m. to 6:00 p.m. on Saturdays, unless otherwise approved by the City. No construction activities should occur on Sundays or holidays, including New Years and 4th of July.	Significant and unavoidable.
	4.10-6	Equip all internal combustion engine driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.	
	4.10-7	Locate stationary noise generating equipment (e.g., portable concrete crusher) as far as possible from sensitive receptors. Construct temporary noise barriers to screen stationary noise generating	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	equipment when located near adjoining sensitive land uses. 4.10-8 Utilize "quiet" air compressors and other stationery noise sources where technology exists. 4.10-9 Route all construction traffic to and from the project site via designated truck routes where possible. Prohibit construction related heavy truck traffic in residential areas where feasible. 4.10-10 Control noise from construction workers' radios to a point that they are not audible at existing residences bordering the project site. 4.10-11 Consider the use of multiple-pile drivers to expedite construction where pile driving is required. (Although noise levels generated by multiple pile drivers would be higher than the noise generated by a single pile driver, the total duration of pile driving activities would be reduced.) 4.10-12 Use temporary noise control blanket barriers to shroud pile drivers or erect in a manner to shield the adjacent land uses. Such noise control blanket barriers can be rented and quickly erected. 4.10-13 Pre-drill foundation pile holes to minimize the number of impacts required to seat the pile. Pre-drilling reduces the number of blows required to seat the pile and is a standard construction noise control technique. 4.10-14 The contractor shall prepare a detailed construction management plan identifying the schedule for major noise-generating construction activities. The construction management plan shall identify a procedure for coordination with the adjacent noise sensitive facilities so that construction activities can be scheduled to minimize noise disturbance. Prior to the issuance of any grading and/or building permit, the project applicant shall submit a detailed construction management plan to the City of Soledad for review and approval.	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	4.10-15 The project applicant shall designate a "disturbance coordinator" who shall be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shll require that reasonable measures warranted to correct the problem are implemented. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule. Prior to the issuance of any grading and/or building permit, the project proponent shall provide the City of Soledad with the contact information for the designated "disturbance coordinator."	
4.11 Population and Housing		
The project would represent an increase in overall residential holding capacity identified in the 2005 General Plan EIR for portions of the Mirassou, San Vincente and Northwest Expansion Areas within the project area and could be considered growth inducing if annexations and development in the remaining expansion areas exceed development potential addressed in the General Plan EIR.	4-11.1 Phase approval of development applications and annexations in the Mirassou, San Vincente and Northwest Expansion Areas to maintain holding capacity and population projections in Table 4.11-5 of the General Plan EIR. Monitor development approvals in these expansion areas to limit overall density and population growth to the holding capacity identified to ensure consistency with projections in approved City planning documents. 4-11.2 Implement General Plan policies L-2 to L-7 and other applicable policies for phased development and population growth in the project and expansion areas. General Plan policies L-2 to L-7, (below) identify expansion area requirements and applicable policies for annexation of these areas: L-2 Further annexations to the City may occur when a) a substantial portion of the development capacity within the existing city limits has been developed, b) a substantial public benefit can be realized through the annexation, such as the provision of public open space, additional parkland, or the protection of scenic vistas, or natural resources, or c) a special type of use is proposed that cannot be practically	Less-than-significant.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	accommodated in the existing city limits, and d) the project can be found to provide a financial benefit to the City or to be fiscally neutral. The Planning Commission shall review the merits of a request for annexation based on these criteria, and make a recommendation to the City Council. L-3 A specific plan shall be required for all annexations and development of properties designated *Expansion Area*. Specific plans shall be prepared in accordance with the standards provided in Appendix B of the General Plan. L-4 The City shall promote patterns of development that allow for the efficient and timely extension of infrastructure and services. L-5 New development shall not be allowed unless adequate public services are available to serve such new development, or that can be provided at the time of development. L-6 New development shall pay its fair share of providing additional public services needed to accommodate such development. L-7 Master plans for sewer, water, roads, drainage and other public improvements shall be required for new development on large undeveloped parcels and may be included in the specific plan required by policy L-3, and as determined by the City.	
Although the project site is located in an area that has been identified for future population growth in City's General Plan, the project would result in a significant growth-inducing impact through the introduction of new sources of employment and a significant portion of the City's projected population growth, which would result in additional	No Mitigation Measures identified.	Significant and unavoidable.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact	**Mitigation**		**Level of Significance After Mitigation**
demands on existing facilities.			
The Miravale III Specific Plan is inconsistent with the Housing Element, which requires affordable housing to be fully integrated with market rate housing.	4.11.3	The applicant shall enter into a Development Agreement per Program 4.3 of the City's Housing Element with the City that prescribes the parameters of the development of affordable housing consistent with the City's Housing Element, Inclusionary Housing Ordinance, and the revised Specific Plan. The Development Agreement shall be reviewed and approved by the City of Soledad prior to or concurrent with project approval.	Less-than-significant.
The Miravale III Specific Plan is inconsistent with affordable housing requirements of the City's Inclusionary Housing Ordinance.	4.11.4	Prior to project approval, the Specific Plan shall be revised to provide 20% of the units proposed in each Planned Development area and the Low Density Residential area to be affordable housing units. Alternatively, the project applicant shall dedicate real property for affordable housing or submit payment of in-lieu fees in order to ensure project consistency with the requirements of the City of Soledad's Inclusionary Housing Ordinance, subject to the approval of the City of Soledad. The project's consistency with the City's Inclusionary Housing Ordinance shall be evidenced in the Development Agreement (DA) prepared for the project, subject to the approval of the City of Soledad. The DA shall be reviewed concurrently with the project's General Plan amendments, Specific Plan and the Vesting Tentative Map.	Less-than-significant.
4.12 Public Services and Recreation			
The project would result in an increased demand for police and fire services.	4.12-1	Prior to the initiation of construction for Phase 2 of the proposed development, the proposed fire and police facilities located on West Street shall be constructed and operational. Prior to the issuance of any building permit for new residential and commercial development in Phase 2, the project applicant shall obtain written documentation from the Soledad Fire and Police Departments indicating that the fire and police substations are operational, subject to the review and approval of the City of Soledad.	Less-than-significant.
	4.12-2	Prior to the issuance of building permits, the applicant/developer shall pay a City Public Facilities Development Impact Fee for each type of new development in accordance with the adjusted impact fee in effect	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact		**Mitigation**	**Level of Significance After Mitigation**
		at the time of building permit issuance. All fees shall be subject to the review and approval of the City of Soledad Community Development Director.	
	4.12-3	Prior to the recordation of each final map for development within areas currently designated as "State Responsibility Areas," the applicant shall submit evidence, subject to the review and approval of the City of Soledad Fire Department, demonstrating that a minimum 100-foot defensible space will be provided around any structure constructed within the foothill area. The defensible space shall be cleared of and maintained free of brush and combustible debris, and any landscaping placed within the defensible space shall be irrigated.	
The project would result in an increased demand for educational services.	4.12-4	Prior to project approval, the project applicant shall submit evidence, including a revised Specific Plan and tentative map, demonstrating that an additional two elementary school sites of sufficient size and a 40-acre high school site will be designated within the project boundaries to meet project demands, subject to the review and approval of the City of Soledad and the Soledad Unified School District. The 40-acre high school site shall be operational prior to the issuance of any certificate of occupancy for Phase II of the proposed project, unless otherwise approved by the City of Soledad and the Soledad Unified School District[1]	Less-than-significant.
	4.12-5	The applicant/developer shall pay a school impact fee for each type of development pursuant to the criteria set forth within California Government Code Section 65995. Prior to the issuance of building permits, the applicant shall pay required school mitigation fees. As indicated above, the fees set forth in Government Code Section 65996 constitute the exclusive means of both "considering" and "mitigating" school facilities impacts of projects [Government Code Section	

[1] Alternatively, if additional school sites will not be provided in conjunction with project development, the project applicant shall obtain written documentation from the Soledad Unified School District demonstrating that adequate school facilities, including a 40-acre high school and two appropriately sized middle schools, will be available within the City of Soledad to accommodate anticipated project demands. If, however, adequate capacity does not exist, development shall be restricted until such time that additional capacity is available to accommodate subsequent phases of development.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact	**Mitigation**		**Level of Significance After Mitigation**
		65996(a)]. They are "deemed to provide full and complete school facilities mitigation" [Government Code Section 65996(b)].	
As proposed, the project does not meet the minimum required parkland ratio of three acres per 1,000 residents.	4.12-6	In order to ensure adequate improved parkland is provided as part of project development, the applicant shall submit detailed plans, including a revised Specific Plan and Tentative Map, demonstrating that adequate parkland (3 acres/1,000 residents) is designated within the project boundaries consistent with the requirements of the General Plan and Miravale III Specific Plan dated June 2007, prior to project approval, subject to the review and approval of the City of Soledad.	Less-than-significant.
Population growth anticipated under the Miravale III Specific Plan would create additional demands on park and recreational facilities.	4.12-7	Prior to the issuance of any building permit, the applicant/developer shall submit payment of a Park Facilities Impact Fee in accordance with the adjusted impact fee in effect at the time of building permit issuance, if determined to be applicable. All fees shall be subject to the review and approval of the City of Soledad Community Development Director.	Less-than-significant.
4.13 Traffic and Circulation			
Based on the significance criteria, the project has the potential to increase hazards due to a design feature or incompatible uses.	4.13-1	Due to large traffic volumes and vehicle speeds, at-grade golf cart crossings shall not be permitted along streets classified as collectors or arterials. Prior to the issuance of any building and/or grading permit for development associated with the golf course facility, the project applicant shall submit detailed design-level plans demonstrating compliance with this measure, subject to the review and approval of the Director of Public Works. Improvements shall be constructed in accordance with this measure prior to the issuance of any certificate of occupancy or final permit for development associated with the golf course.	Less-than-significant.
Based on the significance criteria, the project will have a significant impact on eleven study intersections, five roadway segments, and signal warrants would be met on nine intersections under project conditions.	4.13-2	*Moranda Road and Front Street:* Widen NB Front Street to two lanes, add a second NB through lane, EB free-right-turn lane and widen Front Street between Moranda road and San Vicente Road. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance in order to mitigate the impact at this location. No certificate of occupancy shall be issued for new residential or commercial	Less-than-significant.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad. Alternatively the project can contribute its fair share towards the construction of the extension of Gabilan Drive to US 101. If this alternative is chosen local roadways shall be monitored annually to ensure that LOS levels are maintained in accordance with the City of Soledad's adopted standards until the extension is complete. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works. 4.13-3 *San Vicente Road and Front Street:* Widen NB Front Street to two lanes, NB San Vicente Road to three lanes, add two EB left-turn lands and a SB free-right-turn lane. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance in order to mitigate the impact at this location. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad. Alternatively the project can contribute its fair share towards the construction of the extension of Gabilan Drive to US 101. If this alternative is chosen local roadways shall be monitored annually to ensure that LOS levels are maintained in accordance with the City of Soledad's adopted standards until the extension is complete. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works. 4.13-4 *San Vicente and Gabilan Drive:* Signalize this intersection and add a second westbound left-turn land, exclusive northbound right-turn lane, and southbound left-turn land. SB San Vicente Road will need to be widened to accommodate the dual left-turn lanes from Gabilan. Prior to the issuance of any building permit for each phase of development,	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	the project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance in order to mitigate the impact at this location. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad. Alternatively the project can contribute its fair share towards the construction of the extension of Gabilan Drive to US 101. If this alternative is chosen local roadways shall be monitored annually to ensure that LOS levels are maintained in accordance with the City of Soledad's adopted standards until the extension is complete. If this alternative is selected the project applicant shall submit payment of the projects fair share towards the construction of this improvement in accordance with the traffic impact fee in effect at the time of building permit issuance for each phase of the project. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works. 4.13-5 *West Street and Gabilan Drive:* Signalize the intersection and add exclusive left-turn lanes with protected phasing on all approaches. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance in order to mitigate the impact at this location. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works. 4.13-6 *Main Street and Gabilan Dive:* Signalize the intersection with protected left-turn phasing along Gabilan Drive. Prior to the issuance of any building permit for each phase of development, the project	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance in order to mitigate the impact at this location No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad. Alternatively the project can contribute its fair share towards the construction of the extension of Gabilan Drive to US 101. If this alternative is chosen local roadways shall be monitored annually to ensure that LOS levels are maintained in accordance with the City of Soledad's adopted standards until the extension is complete. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works. 4.13-7 *Andalucia Drive and Gabilan Drive:* Signalize this intersection with protected left-turn phasing along Gabilan Drive. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance in order to mitigate the impact at this location. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad. 4.13-8 *Orchard Land and Metz Road:* Signalize this intersection with protected left-turn phasing on Metz Road and split phasing on Orchard Lane. The project applicant shall submit payment of the City of Soledad traffic impact fee in effect that the time of building permit issuance in order to mitigate the impact at this location. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact	**Mitigation**		**Level of Significance After Mitigation**
		Public Works. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad.	
	4.13-9	*Oak Street and Front Street:* Widen Front Street to four lanes between Nestles Road and Oak Street and add a second EB left-turn lane at the intersection of Nestles Road and Oak Street. Alternatively, the construction of the US 101/SR 146 bypass would alleviate impacts at this intersection. The project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance. All fees shall be paid prior to the issuance of any building permits for each phase of development and shall be subject to the approval of the Director of Public Works. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad.	
The project will have a significant impact on two freeway ramps and four freeway segments.	4.13-10	*Moranda Road and US 101 NB Ramps:* Signalize the intersection and widen the NB US 101 on ramp to add a second NB left-turn lane. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance in order to mitigate the impact at this location. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad. Alternatively the project can contribute its fair share towards the construction of the extension of Gabilan Drive to US 101. If this alternative is chosen local roadways shall be monitored to ensure that LOS levels are maintained in accordance with the City of Soledad's adopted standards until the extension is complete. In addition the US 101 interchange at Moranda Road/Front Street will require reconfiguration/reconstruction to provide more efficient access to the project site and north Soledad in	Less-than-significant with mitigation. However, if these improvements are determined to be infeasible impacts would be significant and unavoidable.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
	general. As this is a regional improvement, funding of at least part of the mitigation should be the responsibility of TAMC, and TAMC should include the improvement within its traffic impact fee. In this case, the project's payment of the City's adopted TIF fee, which includes regional improvements, would mitigate the project's regional impact at this location. However, should the widening of the freeway and improvement of interchanges be deemed infeasible or not part of the fee program, the impact should be considered significant and unavoidable. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works. 4.13-11 *Front Street and US 101 SB Ramps:* Signalize this intersection, widen southbound Front Street to two lanes and add a second lane on the off-ramp. In addition, the volume of vehicles exiting southbound US 101 at Front Street indicate the need for widening of Front Street, between US 101 and Moranda Road, to two lanes southbound and/or reconfiguration/reconstruction of the US 101 interchange at Moranda Road/Front Street to provide more efficient access to the project site and north Soledad in general. As this is a regional improvement, funding of at least part of the mitigation should be the responsibility of TAMC, and TAMC should include the improvement within its traffic impact fee. In this case, the project's payment of the City's adopted TIF fee would mitigate the project's impact at this location. However, should the widening of the freeway and improvement of interchanges be deemed infeasible or not part of the fee program, the impact should be considered significant and unavoidable. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance in order to mitigate the impact at this location. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works. 4.13-12 The project applicant shall be required to pay towards the City's TIF	

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact		**Mitigation**	**Level of Significance After Mitigation**
		program, which includes regional improvements. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance in order to mitigate the impact at this location. The payment of fees is considered mitigation for project impacts to freeway facilities. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works. Should the widening of the freeway and improvement of interchanges be deemed infeasible or not part of the fee program, the impact should be considered significant and unavoidable.	
The project together with the cumulative developments will have a significant impact on two intersections	4.13-13	*Moranda Road and Front Street:* Addition of an east leg to the intersection to serve the Soledad Plaza project site. In order to mitigate potential impacts at this intersection, the project applicant shall submit payment of the City's adopted traffic impact fee in effect at the time of building permit issuance for each phase of development, subject to the review and approval of the City of Soledad Director of Public Works. All fees shall be paid prior to the issuance of any building permit for each phase of development.	Less-than-significant.
	4.13-14	*San Vicente Road and Gabilan Drive:* Addition of a west leg to the intersection to serve the Soledad Plaza project site. In order to mitigate potential impacts at this intersection, the project applicant shall submit payment of the City's adopted traffic impact fee in effect at the time of building permit issuance for each phase of development, subject to the review and approval of the City of Soledad Director of Public Works. All fees shall be paid prior to the issuance of any building permit for each phase of development.	
4.14 Utilities and Service Systems			

Table 2-1
Summary of Significant Environmental Impacts and Mitigation

Environmental Impact	Mitigation		Level of Significance After Mitigation
Development of the proposed project would require or result in the construction of new water and recycled water facilities and the expansion of existing facilities. Project development would also require the construction of additional distribution and storage systems, transmission mains and improvements. Potential significant environmental effects could be realized through construction of the facilities if not planned and constructed consistent with Citywide infrastructure improvement plans.	4.14-1	Design and construct the water supply and distribution system for the project that is integrated with the City's water distribution system and consistent with the Urban Water Management Plan and the City's 2005 Water Master Plan. Prior to the issuance of any building permit, the project applicant shall submit detailed design-level infrastructure plans in accordance with this measure, subject to the review and approval of the City of Soledad Director of Public Works.	Less-than-significant.
	4.14-2	All water and recycled water facilities and infrastructure shall be designed with sufficient capacity to accommodate the project and be required to adhere to all applicable City standards in terms of infrastructure sizing, design and construction. Prior to the issuance of any building permit, the project applicant shall submit detailed design-level infrastructure plans in accordance with this measure, subject to the approval of the Director of Public Works.	
	4.14-3	All water and recycled water pipelines shall be placed underground and in the utilities right-of-way and constructed to comply with all applicable state and local standards. Prior to the issuance of any building permit, the project applicant shall submit detailed design-level infrastructure plans in accordance with this measure, subject to the review and approval of the City of Soledad Director of Public Works.	
	4.14-4	The project shall be required to construct new infrastructure that is of adequate capacity to serve the project's projected water and fire flow demand in addition to the provider's existing commitments. Prior to the issuance of any building permit, the project applicant shall submit detailed design-level infrastructure plans in accordance with this measure, subject to the approval of the Director of Public Works.	
Development of the proposed project would potentially exceed existing and planned wastewater treatment capacity.	4.14-5	In order to ensure that the proposed wastewater treatment system is consistent with the applicable requirements of the Soledad Urban Water Management Plan, Long-Term Wastewater Management Plan, and Chapter 13.11 Recycled Water Service, the project applicant shall submit detailed design-level plans in accordance with these requirements, prior to the issuance of any building and/or grading	Less-than-significant.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact		**Mitigation**	**Level of Significance After Mitigation**
		permit, subject to the review and approval of the City of Soledad Public Works Director.	
	4.14-6	Prior to the approval of the first final map within the Specific Plan area, all required permits for the on-site recycled water facility, including, but not limited to, a Waste Discharge Permit from the Regional Water Quality Control Board and approval of the system design, shall be obtained. The project applicant shall submit written evidence to the City of Soledad documenting compliance with this measure.	
	4.14-7	In order to ensure that adequate wastewater treatment is available to accommodate each phase of project development, the treatment capacity for the on-site recycled water facility shall be increased to accommodate each phase of the project prior to the final approval of the first building permit or occupancy permit for each of the respective project phases as appropriate. Subject to the review and approval of the Director of Public Works, excess treatment capacity shall be added to the plant and disposal facilities, as needed, for each phase of the project, to accommodate future increases in wastewater flow rates, based on estimates of future development. In addition, flows shall be metered and records of the flows shall be provided to the RWQCB for review and approval. No building permits shall be issuance unless sufficient capacity exists to accommodate additional phases of development.	
	4.14-8	Prior to the issuance of any building permit, the applicant/developer shall submit payment of the current City Development Impact Fee for each type of development in accordance with the adjusted impact fee in effect at the time of building permit issuance. Additionally, the applicant/developer shall submit payment of all fees necessary to fund the construction of the expansion of the treatment plant located within the project site, as required by the City of Soledad. All fees shall be subject to the review and approval of the Director of Public Works.	
Development of the proposed project would require	4.14-9	All water and wastewater infrastructure shall be designed with	Less-than-significant.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation			
Environmental Impact		**Mitigation**	**Level of Significance After Mitigation**
or result in the construction of new water or wastewater treatment facilities and expansion of existing facilities, including the construction of water and wastewater facilities, transmission mains and improvements which could cause significant environmental effects through construction of the facilities if not planned and constructed consistent with Citywide infrastructure improvement plans.		sufficient capacity to accommodate the project and be required to adhere to all applicable City standards in terms of infrastructure sizing, design and construction. Prior to the issuance of any building and/or grading plan, the project applicant shall submit detailed evidence, including but not limited to design-level infrastructure plans, consistent with the requirements of this mitigation, subject to the approval of the Director of Public Works. 4.14-10 All wastewater pipelines shall be placed underground and in the utilities right-of-way. Prior to the issuance of any building permit, the project applicant shall submit detailed design-level infrastructure plans in accordance with this measure, subject to the review and approval of the City of Soledad Director of Public Works. 4.14-11 The project would be required to construct new infrastructure that is of adequate capacity to serve the project's projected demand in addition to the wastewater provider's existing commitments. Prior to the issuance of any building permit, the project applicant shall submit detailed design-level documentation, in addition to written documentation from the City of Soledad, documenting that design-level plans are in accordance with City standards, as well as documenting that the City has sufficient capacity to accommodate project demands in addition to existing commitments, subject to the approval of the Director of Public Works.	
Project construction would result in significant construction-generated waste. The following mitigation has been identified by the Salinas Valley Solid Waste Authority to ensure that all construction-generated waste is recycled to the greatest extent feasible in order to minimize impacts to existing facilities within their jurisdiction.		4.14-12 Prior to the commencement of construction related activities, the applicant/developer shall prepare and submit a Construction and Demolition Diversion Plan consistent with the requirements of the City's adopted Diversion Plan Ordinance, subject to the review and approval of the Salinas Valley Solid Waste Authority and the City of Soledad. This plan shall identify on-going implementation measures for the diversion and separation of construction waste to ensure that all construction-generated solid waste is recycled to the greatest extent possible.	Less-than-significant.
Development of the proposed project would increase demands for electricity and natural gas		The following mitigation measure is necessary to reduce project demands for electricity and natural gas and is in addition to other mitigation measures	Less-than-significant.

Table 2-1 Summary of Significant Environmental Impacts and Mitigation		
Environmental Impact	**Mitigation**	**Level of Significance After Mitigation**
consumption.	identified **Section 4.3 Air Quality.** 4.14-13 In order to prevent the wasteful use of energy, all new residential, commercial, and hospitality oriented structures shall incorporate the principles of passive solar design to the maximum extent feasible. Typical passive solar design principles may include the following; 1) large south-facing windows; 2) tile, brick, or other thermal mass material used in flooring or walls to absorb natural heat; 3) improved insulation; 4) building orientation that takes advantage of the sun, shade, and wind; and 5) energy efficient building materials. For new structures that are unable to incorporate these principles, the project applicant shall submit detailed evidence, such as site plans, landscape plans, and similar, to the City of Soledad Public Works Director demonstrating that there are no viable design alternatives to accommodate these principles. Prior to the issuance of each individual building permit for new structures, the project applicant shall submit evidence, including but not limited to, site plans, proposed building materials, and landscape plans, to the City of Soledad Public Works Director for review and approval.	
5.0 CEQA Considerations		
Development of the proposed project would contribute to a number of potentially significant cumulative impacts.	Implementation of mitigation measure identified above, in addition to adherence to applicable General Plan policies.	Cumulative impacts would be reduced to a less-than-significant level for geology and soils, utilities and service systems. Significant unavoidable cumulative impacts include aesthetics, agricultural resources, air quality, transportation and traffic, and biological resources

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3.0 PROJECT DESCRIPTION

This section presents the project description as required by CEQA Guidelines Section 15124. The proposed project consists of the development and implementation of the Miravale III Specific Plan. The Specific Plan calls for a mixed-use development including 1,470 single-family residential units, 116 duplex/small lot single-family residential units, 2,614 multi-family residential units (includes affordable housing, workforce housing, and senior housing units), 120 hotel rooms, 275,000 square feet of retail commercial space and an 18-hole golf course. Conceptual plans include a variety of residential types, including apartments, townhouses, and attached homes on small and large lots. The project also proposes three school sites (two elementary schools and one middle school), a fire and police substation, a recycled water plant, and approximately 75 acres of open space and recreation areas, including parks, playgrounds, and a trail system. The Specific Plan is based upon a preliminary Vesting Tentative Map, which shows proposed lotting and infrastructure improvements (refer to Figure 3-1).

The project site is currently zoned by the County for farmland and permanent grazing uses and is being used for agricultural cultivation, with portions of the site fallow. It includes 14 existing single family units, four of which will be removed as part of the project. Two parcels, located within the northwestern portion of the project boundaries, are under Williamson Act contract. According to the City's General Plan, the entire project site is located within designated Expansion Area, comprising all or a portion of three areas: Northwest Expansion, San Vicente West, and Mirassou Expansion Area. A specific plan is required by the City in advance of annexation and development of each Expansion area. Development of the project site will require annexation to the City pursuant to Local Agency Formation Commission of Monterey County (LAFCO) regulations.

The project is proposed to be developed over a 20 year period beginning in 2008 with development of basic infrastructure. The project proponent proposes to develop the site in four phases as described below.

Phase 1 – Approximately 100 acres, containing a golf clubhouse and nine-hole golf course, approximately 23 acres of future commercial and/or hotel site, and 407 residential units having a mix of single family and duplex/small lots, workforce housing, affordable housing, and senior housing. It will include approximately 1.2 miles of collector streets (including approximately 0.8 miles of relocated San Vicente Road) and approximately 1.1 miles of local streets. It will also include a combined golf driving range and stormwater percolation holding pond.

Phase 2 – Approximately 400 acres, containing the second nine holes of the golf course and approximately 1,744 residential units with a combination of single family and duplexes/small lots, workforce housing, affordable housing, and senior housing. This phase would also include 15 acres of commercial, a public service parcel (fire and police) and two parks, all served by approximately 1.2 miles of extended West Street, 0.9 miles of extended Orchard Lane, and 5.2 miles of local streets.

Phase 3 – Approximately 200 acres, containing the easterly upper slopes, approximately 575 residential units which consist of single family and duplexes/small lots, workforce housing, affordable housing, and senior housing. As proposed, this phase would also include an elementary school, several parks, four water tanks (two existing) and three booster pump stations all served by 2.5 miles of residential streets. This phase also contains approximately 1.5 miles of hillside hiking trails.

Phase 4 – Approximately 200 acres, containing approximately 1,475 residential units which consist of single family and duplexes/small lots, workforce housing, affordable housing, and senior housing. This phase also includes an elementary school and a park, all served by 1.2 miles of local streets. It also

contains a tank site for the Zone A water tank. A middle school and an agricultural education facility are also proposed. Phase 4 also contains approximately 70 acres of agricultural land (Williamson Act) which is reserved for development of a Senior Housing Village, mobile home park, single family housing.

3.1 PROJECT LOCATION

The project is located within unincorporated lands of Monterey County on the northern edge of the City of Soledad, approximately 35 miles southeast of the Monterey Peninsula and 85 miles southeast of the San Francisco Bay Area (refer to Figure 3-2). The 920-acre project site is generally between San Vicente Road and Orchard Lane and is surrounded by agricultural land to the north and west, an existing residential subdivision to the south, and undeveloped foothills of the Gabilan Mountain Range to the east. (Refer to Figure 3-3). The Assessor's Parcel Numbers are: 417-151-082, 417-151-083, 417-151-084, 417-151-085, 257-081-005, 257-081-026, 257-081-027, and 257-081-032.

The project site consists primarily of undeveloped land. The site's topography is comprised of a natural slope from the southwest corner of the site to the northeast with steeper slopes located at the eastern boundary. The majority of the site ranges in elevation between approximately 180 and 600 feet above mean sea level. The site generally drains to the southwest toward Miravale Road and a large detention basin is proposed at the golf practice range just south. Several small drainages occur in the eastern and western portions of the site. Site vegetation can be characterized primarily with areas of open annual grassland and minimal trees. Existing trees are located near two single family homes, and a row of eucalyptus trees line one side of San Vicente Road.

The City of Soledad is located in the Salinas Valley in Central Monterey County. Downtown Soledad is located 1.5 miles south of the project site. Two freeway interchanges connect the local surface streets to Highway 101, providing access to the remainder of the County. These interchanges are located 2 miles south and 1.25 miles southwest of the project. The Salinas River is located approximately one and a half miles south of the project site.

3.2 PROJECT OBJECTIVES

The Miravale III Specific Plan proposes to develop a mix of uses on predominantly undeveloped land designated for future build-out by the City of Soledad 2005 General Plan. The project objectives are as follows:

- Provide a range of moderate-income housing for the existing and future residents of Soledad.
- Provide a mixed-use development of housing, parks, schools and neighborhood commercial uses to serve the local area and provide a balance of uses.
- Reserve land for commercial development to allow for future economic growth within the City and assist in maintaining a local jobs/housing balance.
- Provide public park lands to serve the recreational needs of the proposed development and surrounding community.
- Support the local economy by increasing income on the site through permits, fees, property taxes, and job creation.

Another project objective of the Specific Plan and development project is to implement the goals of the City of Soledad 2005 General Plan and 2003 Housing Element. A summary of these plans' goals are included in pertinent sections of this EIR.

3.3 PROJECT CHARACTERISTICS

Land Use

The project consists of completion and implementation of a Specific Plan that would allow for the creation of a phased development consisting of residential, commercial, and recreational uses. The project also proposes three school sites (two elementary schools and one middle school), a fire and police substation, a recycled water plant, an 18-hole golf course, and approximately 76 acres of open space and recreation areas, including parks, playgrounds, and a trail system. The proposed land use plan is presented in Figure 3-4.

The Specific Plan calls for a variety of residential types, including apartments, townhouses, and attached homes on small and large lots. The land use designations identified in the Specific Plan consist of Single Family Residential, Planned Development/Multi-Family, Commercial, Public/Institutional/Recreational, Open Space/Parks, Agriculture, Golf Course, and Urban Reserve. Corresponding zoning districts include Single Family Residential, Planned Development, Commercial, Public Facility, Open Space/Park, and Agriculture. A description of the proposed land use zones is provided below.

The Specific Plan is a regulatory document, adopted by an ordinance or resolution, which rezones the project area site with a Specific Plan Overlay. As a component of the General Plan, the Specific Plan is a legislative document that is controlled by the City. The Specific Plan implements the General Plan, interpreting broad goals and policies into specific regulations and guidelines that control the orderly development of land. The Specific Plan will be the primary body of standards considered by the City in the review and approval of development within the area. The standards and requirements of the Specific Plan supersede the City's existing Zoning Code, Public Works Standards, and other applicable regulations. Where the Specific Plan is silent, City Codes, effective upon the date of adoption of the Plan, will apply. The design and development standards for each zone are provided in the Specific Plan (Section 2.0). Permitted uses within each zone are presented in Appendix B of this EIR.

Single Family Residential (M3 – R-1)

Single Family Residential zones occur on approximately 241 acres of the Plan area. These low density areas are located throughout the project site. A total of 1,470 units are proposed within this designation, at a density of approximately one to six dwelling units per acre. The single-family residential development will include a mix of architectural styles, lot sizes, and structure heights. Lot sizes range from 6,000 square feet to 30,000 square feet (for hillside homes).

Village Residential (M3 – VR)

Multi Family Residential zones occur on approximately 147 acres of the Plan area. These medium to high density areas are also located throughout the project site. A total of 2,614 units are proposed within this designation, at a density averaging 19 dwelling units per acre. The multi-family residential development will include affordable housing, workforce housing, and senior housing units. Housing types consist of attached and detached single family homes, apartment complexes, townhouses, and condominiums with lot sizes ranging from 3,000 square feet to 30,000 square feet. The mix of housing is intended to provide a diverse neighborhood with housing offered at a broad range of price levels.

Table 3.0-1
Proposed Land Uses

Land Use	Zone	Acres	% of Site	Dwelling Units	Population[1]	Bldg Square Footage	Jobs[2]
Single Family Lots (6.10 du/ac average)	M3 – R-1	240.88	26.1%	1,470	5,880	-	-
Townhomes/Apartments[3] (18.99 du/ac average[4])	M3 - VR	146.97	15.9%	2,730	9,321	-	-
Commercial	M3 – VC/GC	33.22	3.6%	-	-	275,000	550
Hotel	M3 - GC	6.50	0.7%	-	-		
Churches	M3 – R1	1.67	0.2%	-	-		-
Police and Fire Dept.	M3 - PF	1.31	0.1%	-	-		-
Elementary School (2)	M3 - PF	20.00	2.2%	-	-		-
Water Tank Sites	M3 - PF	3.02	0.3%	-	-		-
Park/Open Space	M3 - OSP	75.77	8.2%	-	-	-	-
Golf Practice/Detention Pond	M3 - OSP	12.62	1.4%	-	-	-	-
Golf Maintenance	M3 - OSP	1.89	0.2%	-	-	-	-
Golf Course	M3 - OSP	144.87	15.7%	-	-	-	-
Pond	M3 - PF	3.13	0.3%	-	-	-	-
Recycled Water Plant	M3 - PF	1.82	0.2%	-	-	-	-
Roads	-	121.78	13.2%	-	-	-	-
Williamson Act Properties: - Agriculture – 1 ac - Middle School – 19 ac - Urban Reserve – 84.8 ac	M3 - AG, M3 - PF	104.8	11.4%				
Agricultural Buffer	M3 - AG	1.61	0.2%	-	-	-	-
Total	**-**	**921.77**	**100%**	**4,200**	**15,201**	**275,000**	**550**

[1]Based on 4.0 persons per single-family unit. 4.5 persons per 3 bedroom multi-family unit, 4.0 persons per 2 bedroom multi-family unit and 1.75 persons per senior or studio/one bedroom multi-family unit (Miravale III Specific Plan, June 2007).
[2]Assumes 1 job per 500 square feet of non-residential development (City of Soledad General Plan EIR, September 2005).
[3]Assumes 1,229 affordable housing units with a minimum of 500 senior housing units and 1,047 workforce housing/senior housing units.
[4]Assumes that parks, roads, and parking required for PD zone is included in the 18.99 du/ac.

Source: RRM Design, Inc., 2006

Village Commercial (M3 – VC)

Village commercial zones occur on approximately 15 acres of the Plan area. These commercial areas are located centrally in the project site, and are designated for future retail uses. A total of 175,000 square feet of commercial space is proposed within this designation.

Gateway Commercial (M3 – GC)

Gateway commercial zones occur on approximately 18 acres of the Plan area. These commercial areas are located in the southern portion of the project site, and are designated for future retail and hotel uses. A total of 100,000 square feet of commercial space is proposed within this designation.

Public Facility (M3 – PF)

Public facility zones occur on approximately 207 acres of the Plan area. Specific uses will include police and fire, schools, roads, infrastructure and utilities, and quasi-public golf course. Public facility development is proposed throughout the project site.

Open Space/Park (M3 – OSP)

As currently proposed, the Specific Plan designates 77 acres of land for park and open space uses. A total of approximately 66 acres consists of open space/passive park use, and approximately 11 acres consists of active park use. The active park use includes community parks, neighborhood parks, and playfields, as well as picnic and garden areas. The open space areas will include a walking trail system within the Gabilan Mountain Range foothills. An additional 24 acres of improved parks will be provided in conjunction with the development of the six Village Residential areas. Figure 4.12-2 provides a graphic representation of proposed open space, parks, and future park sites within the areas designated as Village Residential. For more information regarding parks and recreation, please refer to **Section 4.12 Public Services.**

Agriculture (M3 – AG)

The Specific Plan designates 86 acres for agricultural uses. This area is located within the northwest corner of the project site and has the land use designation of Urban Reserve. The area is currently farmed and will continue to be farmland until the property is taken out of the Williamson Act. The Urban Reserve area is a future expansion area for the City.

Grading

The project will require extensive grading on the site to facilitate construction of proposed uses. Proposed grading would occur throughout most of the site and for the purposes of this EIR it is anticipated that the entire site would be disturbed to accommodate projected development. According to Bestor Engineers, Inc., proposed grading will average slightly more than one foot on the lower lots, except at downhill rear lots, where adjacent to practice range/detention pond will be 0 to 10 feet of fill. Upper lots will average slightly more than four feet of cut and fill. Preliminary estimates indicate that all grading is proposed to balance upon completion of the project; however, a preliminary grading plan was not submitted as part of the project application and actual cut and fill may be subject to variation depending on the final grading plan.

Building Construction

Residential structures will generally be of wood-frame construction. The proposed single family residential units will be one and two story structures; apartment buildings will be three to four stories; and retail will generally be two stories. Residential building heights would not exceed 35 feet except for the apartment buildings which could approach 45 feet. Building heights within the proposed Village Commercial area would not exceed 35 feet; however, approximately 45 foot building heights would be allowed for commercial buildings in the Gateway Commercial area with an approximately 72 foot height limit (or 7 stories) allowed for the proposed hotel.

Street System

The project proposes a public street system to serve the development. San Vicente Road, West Street, and Miravale Road are considered arterials and provide the backbone circulation within the Plan area. Orchard Lane will be extended as a collector street. Local streets are located throughout the residential neighborhoods. Pedestrian sidewalks are provided on all public streets. Class II bike lanes would be provided on all collector and arterial streets.

The Specific Plan contains a roadway circulation plan and street sections. The circulation plan is presented in the traffic section in Figure 4.13-4. Roadways within the plan area are proposed in accordance with the standards and policies of the Soledad General Plan and will be built to City engineering standards.

Storm Drainage System

The project proposes to construct a storm drainage system to collect and store runoff from the project site. Storm water flows generated by the development will be collected in an underground piping system and directed to two existing detention ponds located within the Plan area. The two existing ponds are proposed to be enlarged and converted into detention basins in order to improve their function for downstream protection and for groundwater recharge. The proposed drainage plan is evaluated in **Section 4.8 Hydrology and Water Quality**.

Sanitary Sewer System

The City of Soledad is responsible for treatment and disposal of wastewater for the project area. The sanitary sewer collection system is also operated and maintained by the City. Buildout of the project would generate approximately 1,579,500 gallons per day of wastewater. The existing treatment plant will need to be enlarged and improved. These upgrades are scheduled to be in service by 2010. Sanitary sewer lines will be located within the proposed street right-of-ways and connect to the existing sanitary sewer lines that serve the City. The sanitary sewer system is evaluated in **Section 4.14 Utilities and Service Systems**.

Water System

Upon completion of required upgrades to the existing water system, water would be provided to the project site by the City of Soledad. The required upgrades include upgrades to the existing distribution system and construction of new facilities within the Plan area. The project would generate the demand for an average of about 1,900 acre feet of water per year. Irrigation needs for the proposed 18-hole golf course and park facilities are intended to be met using reclaimed wastewater. Consistent with the requirements of SB 221 Kuehl, which stipulates that a water purveyor must provide documentation that a

"sufficient water supply" is available to accommodate proposed development, the City has determined that there is sufficient water supply allocated to serve the project under various conditions for the next 20 years. For more information regarding water availability please refer to **Section 4.8 Hydrology and Water Quality.** Water lines will be installed within the proposed street right-of-ways and connect the existing water lines that serve the City. The water system is evaluated in **Section 4.14 Utilities and Service Systems**.

Public Improvements

The project would provide public improvements including the following: public roads, curb and gutter, sidewalks, pedestrian paths, streetlights, and public parks. In addition, roadway and intersection modifications would be provided to provide mitigation improvements to accommodate project traffic volumes (refer to **Section 4.13 Traffic and Circulation** of this EIR).

Energy and Communications

All new public utilities and equipment within the Plan area will be placed underground. It is anticipated that the following utility services will be provided for the project: 1) natural gas lines and facilities – PG&E; 2) electricity – PG&E; 3) cable television – Charter Communications; and 4) telephone – AT&T.

Schedule/Phasing

Construction of the project is planned to begin in 2008 with development of basic infrastructure. The project will be broken into 4 phases. The proposed phasing plan is presented in Figure 3-5. Total development of the site would occur over a 15 to 20-year period with buildout occurring between 2023 and 2028.

Project Implementation

The Specific Plan identifies the following implementation measures for development of the project.

- Amendment of the General Plan –both policy provisions and diagrams—concurrently with the adoption of the Specific Plan to incorporate the land use designations illustrated in the Land Use Plan, and policies included in the text of the Specific Plan.

- Amendment of the Zoning Ordinance to rezone the property "MIIISP" within the Specific Plan area.

- Preparation of a final tentative map for subdivision of the Specific Plan area consistent with the design and zoning standards described in the Specific Plan.

- Development of individual projects consistent with the land use designations and with the policies and implementation measures contained in the Specific Plan. Requests for modifications to the land uses or zoning standards identified in the Specific Plan may be approved by the City provided they are in substantial conformance with city goals and criteria of the Specific Plan.

- Application for a Sphere of Influence Amendment and subsequent Annexations approvals from LAFCO of Monterey County.

General Plan Amendments

Implementation of the Specific Plan would require a series of amendments to the City of Soledad General Plan. Proposed General Plan amendments provided by City of Soledad staff as follows:

- Revision of General Plan land use diagrams to reflect Specific Plan's proposed planning area boundary and land use designations—i.e., Figures II-4 (Northwest Expansion Area), II-6 (San Vicente West Specific Plan Area), II-7 (Mirassou Specific Plan area) and Figure II-9-Land Use Diagram and Figure VI-1-Parks and Trails.

- Revision of Figure V-2, Circulation Diagram, to reflect the circulation system proposed by the VTM/Specific Plan contingent upon demonstration that the proposed circulation achieves the same objectives—connectivity/service levels, etc.—as that shown by the Fig. V-2.

- Revision of the land use descriptions and development potential tables for the affected Expansion Areas—Northwest Expansion Area (pp. II-11 –II-12), San Vicente West (p.II-16), and Mirassou Specific Plan area (p. II-18) to reflect the alternative land use concept of the proposed Specific Plan. Revisions may include deletion of the L-shaped block from the Mirassou Specific Plan Expansion area.

- Modification of Table II-1, General Plan Development Potential, to allow an additional 1,050 - 1,550 units—over and above the maximum development currently allowed (number of additional units varies depending upon the extent to which development is reduced in the NW Expansion area)

- Modification of Land Use Policy L-45 to allow exceptions to the restriction on ridgeline development per the proposed Specific Plan/VTM.

- Modification of Land Use Policy L-5 and Policy S-1 and S-23 to allow exceptions to the requirements that adequate public services, including schools, be provided concurrent with new development (or demonstration that the existing middle school and high school—with or without improvements—can accommodate the majority of students generated by the project.

- Possible need for modification of PR-33 to allow exception to the requirement that new development provide its fair share of public park and recreation opportunities (the minimum standard of 3.0 acres per 1000 residents is being met through the implementation of project-specific mitigation but this includes approximately 8 acres of trails and park connections; further, the General Plan goal is 5 acres of parkland for each 1,000 persons).

3.4 REQUIRED PERMITS AND APPROVALS

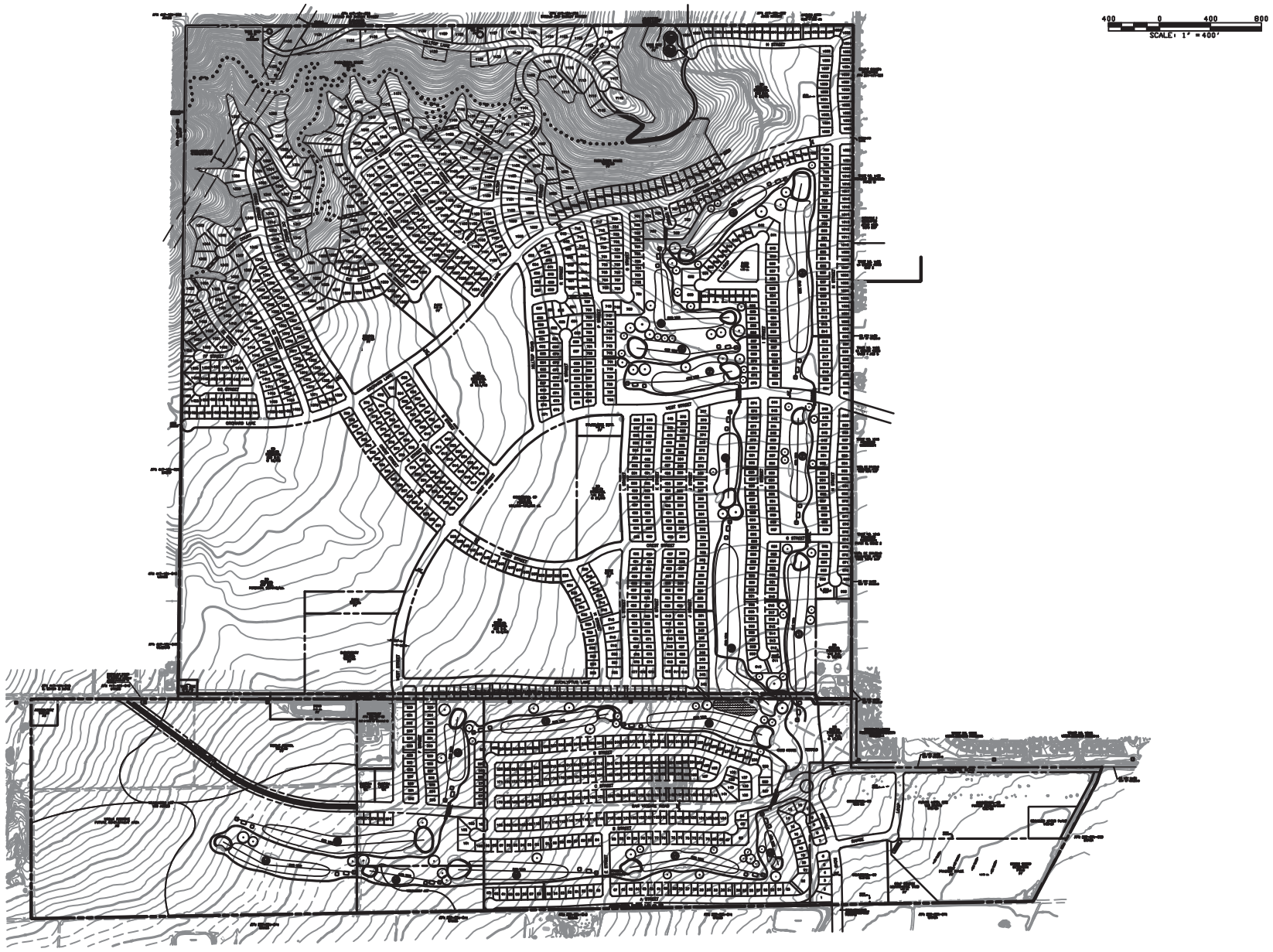
This Draft EIR is an informational document for both agency decision-makers and the public. The City of Soledad is the lead agency responsible for certification of the Final EIR and approval of potential future project permits. Project entitlements will include, but not be limited to, General Plan Amendment, Specific Plan, Zone Change (Pre-Zoning), Architectural Review, Sphere of Influence Amendment, Annexation, Tentative Subdivision Map, and Development Agreements to allow for the proposed development. The following is a listing of permits and approvals under the City and other jurisdictions.

CITY OF SOLEDAD

- Amendment of the General Plan to incorporate the land use designations illustrated in the Land Use Plan, and certain provisions proposed by the Draft Specific Plan.
- Amendment of the Soledad Zoning Ordinance to add the zoning designation of "SP" for all properties within the Specific Plan area.
- Adoption of the Miravale III Specific Plan.
- Approval of the vesting tentative map consistent with the adopted Specific Plan area design and zoning standards.
- Approve and execute a Development Agreement governing development of the project, including financing and installation of infrastructure.
- Approval of inclusionary housing agreement.
- Approval of Subdivision Improvement Agreements and Final Maps.
- Approval of Conditional Use Permits for all planned developments and commercial projects.
- Review and approve all required permits, including, but not limited to, building, grading, encroachment, and occupancy permits.

AGENCIES

- Monterey County Local Agency Formation Commission (LAFCO) for the approval of sphere of influence amendment and annexation required for development within the incorporated limits of the City.
- Monterey County for Williamson Act lands revocation.
- Other agencies with permit or review authority over some aspect of the project include Monterey County, the Regional Water Quality Control Board, Caltrans, Dept. of Conservation, AMBAG, MBUAPCD, Soledad Unified School District , TAMC, and the Dept. of Fish & Game and/or the U.S. Fish and Wildlife Service.



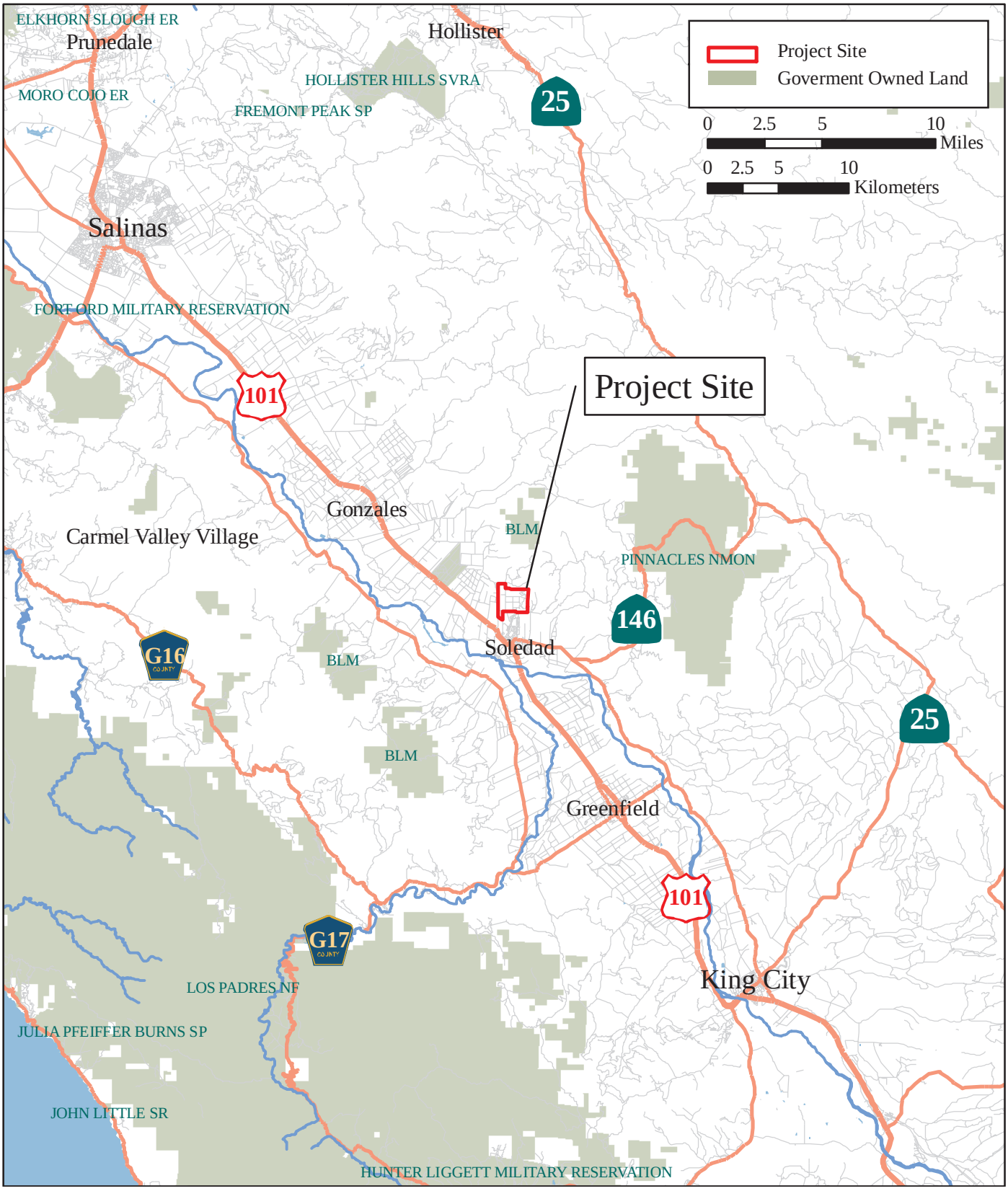
Source: Bestor Engineers, 2006

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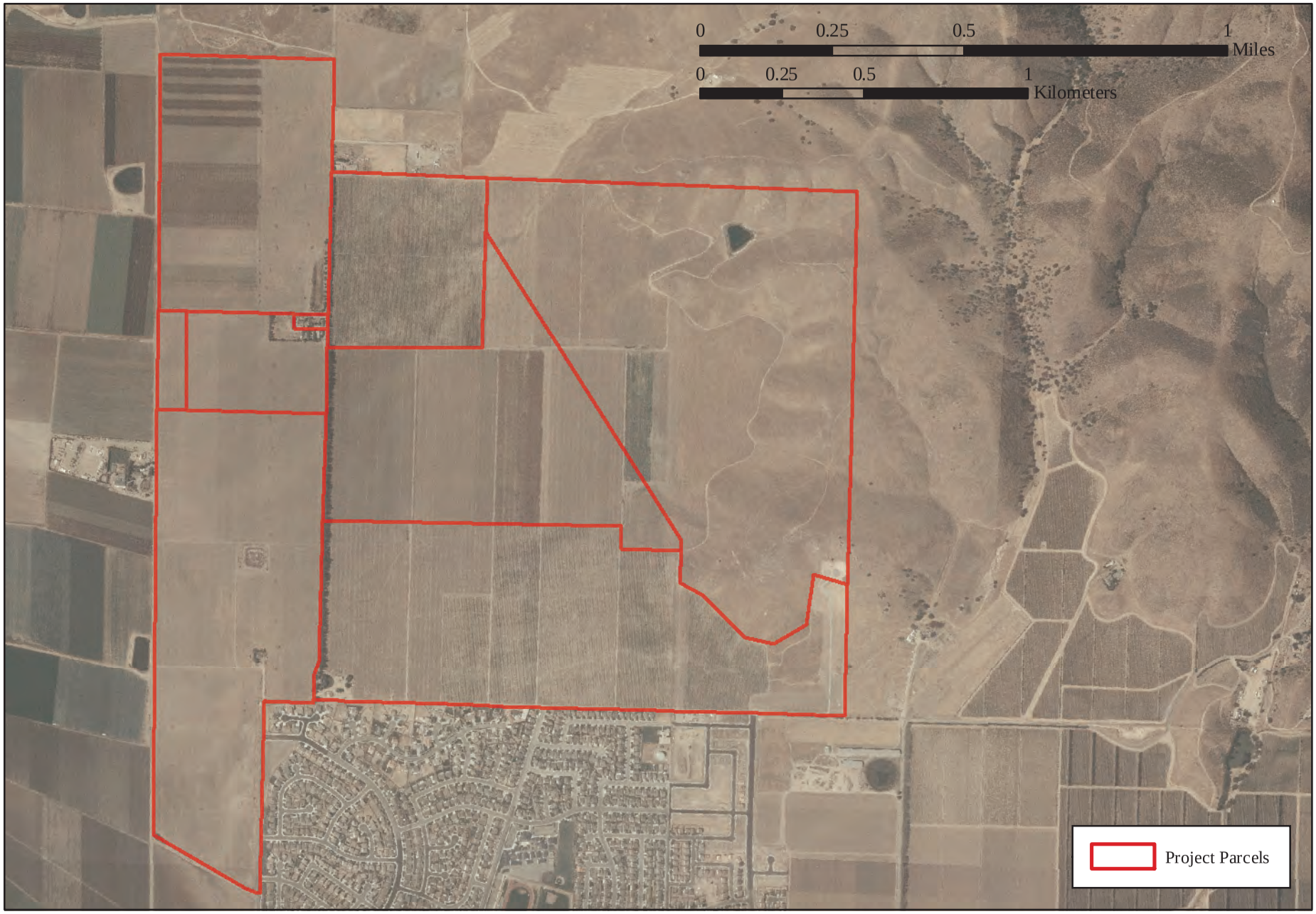
Vesting Tentative Map

Figure 3-1

DENISE DUFFY & ASSOCIATES, INC.



N	Vicinity Map	Figure 3-2

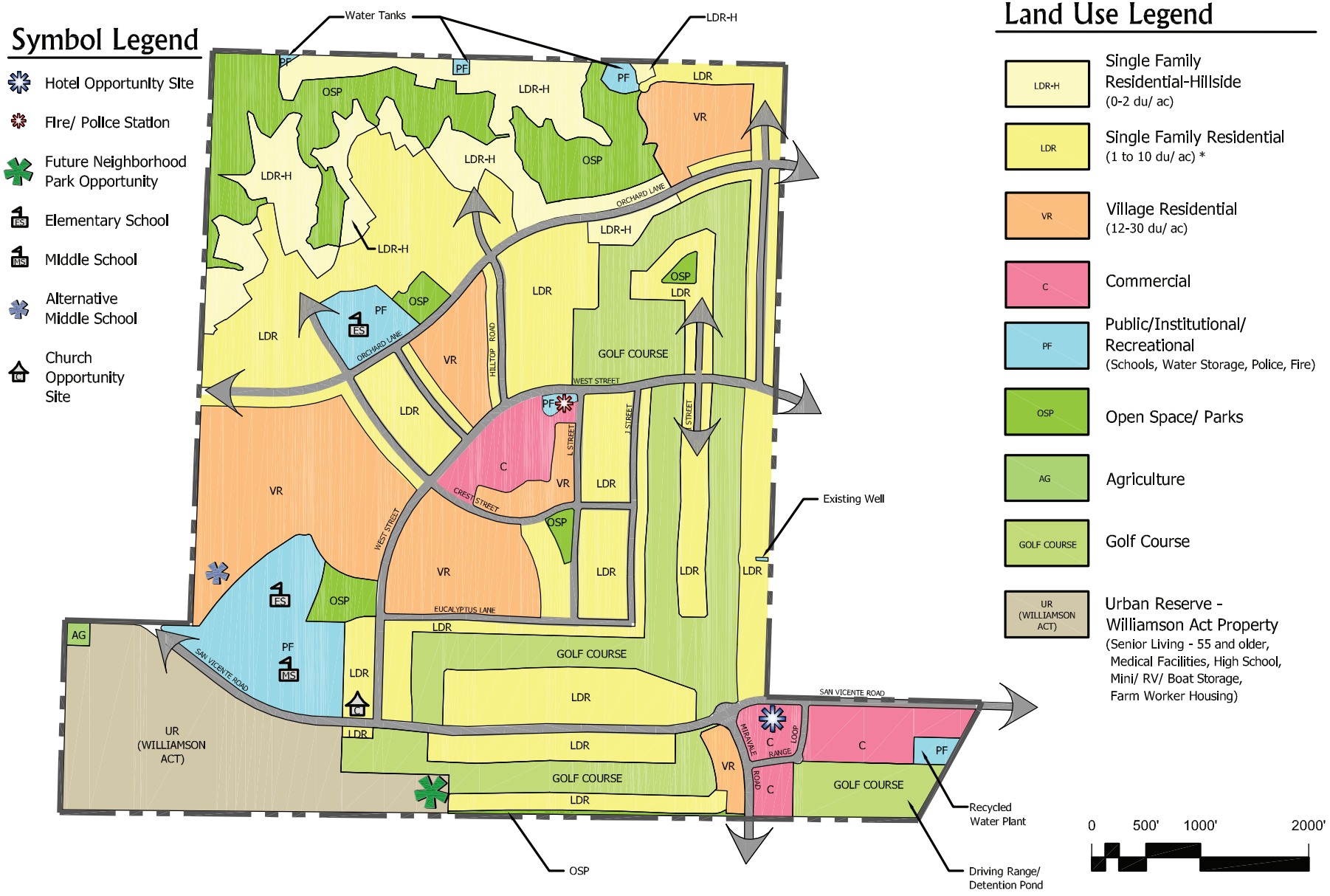


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Aerial Map

Figure 3-3

DENISE DUFFY & ASSOCIATES, INC.



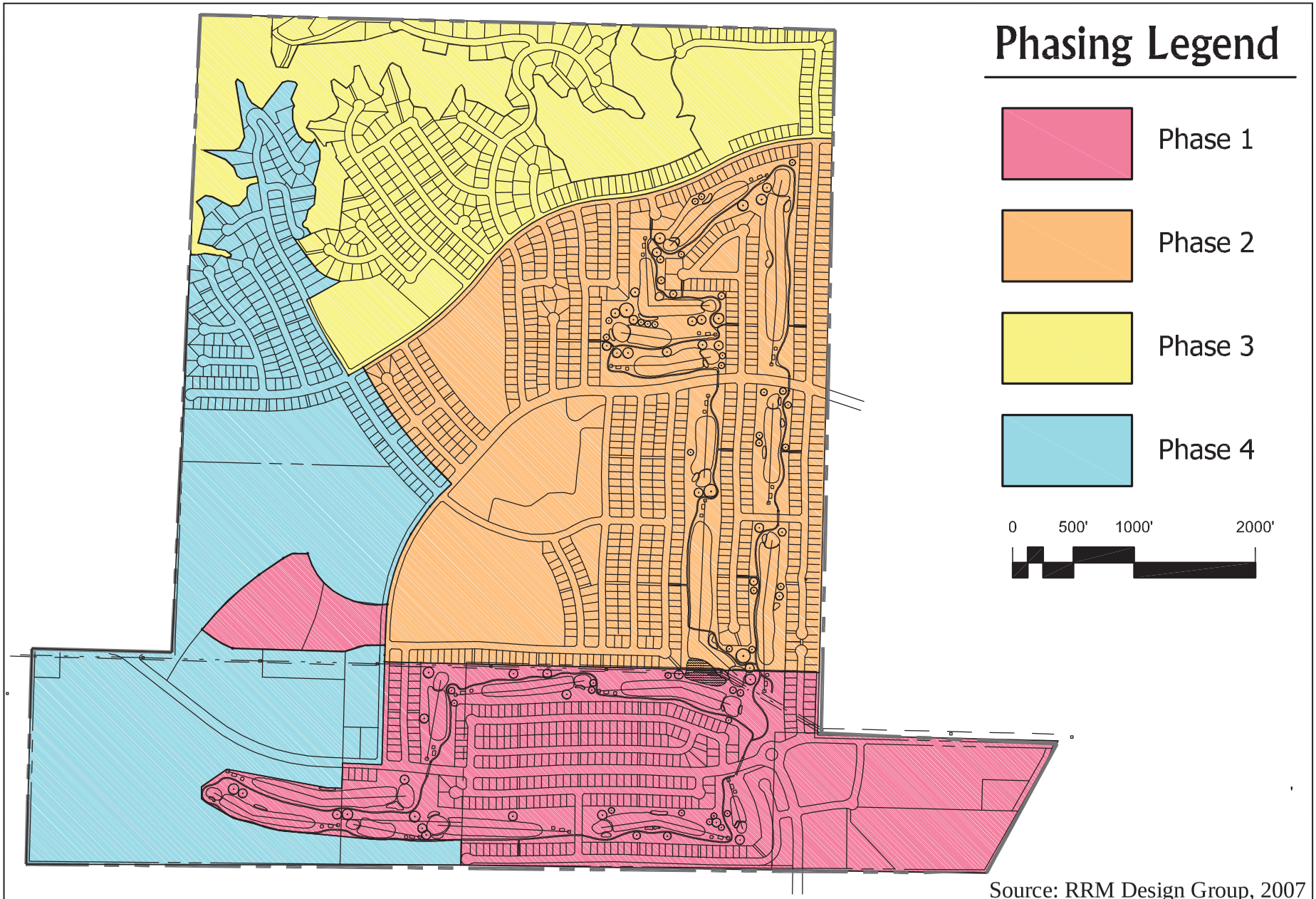
Source: RRM Design Group, 2007

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Proposed Land Use Plan

Figure 3-4

DENISE DUFFY & ASSOCIATES, INC.



Source: RRM Design Group, 2007

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Proposed Phasing Plan

Figure 3-5

DENISE DUFFY & ASSOCIATES, INC.

4.0 ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION MEASURES

This section describes each of the environmental categories affected by the proposed project. Each category consists of three parts: Introduction, Environmental Setting, and Impacts and Mitigation Measures. Environmental impacts can be described as: less-than-significant impacts, potentially significant, significant adverse impacts, and unavoidable significant impacts. The specific criteria for determining the significance of a particular impact are identified prior to the impact discussion in each issue section, and are consistent with significance criteria set forth in CEQA Guidelines and local, regional, state or federal standards. Although not required by CEQA, mitigation measures may be identified for less-than-significant impacts to further reduce potential effects.

A separate Mitigation Monitoring Program will be developed in conjunction with the Final EIR, which outlines the mitigation measures and the monitoring and reporting methods that would be employed. The Mitigation Monitoring Program will be considered for adoption by the City Council at the time the Final EIR is certified.

Under CEQA, a significant impact is defined as a substantial, or potentially substantial, adverse change in the environment (Public Resources Code 21068). The guidelines implementing CEQA direct that this determination be based on scientific and factual data. The specific criteria for determining the significance of a particular impact are identified prior to the impact discussion in each section, and are consistent with significance criteria set forth in the guidelines implementing CEQA.

Regional Setting

The project site is located within unincorporated lands of Monterey County (County) on the northern edge of the City of Soledad, approximately 35 miles southeast of the Monterey Peninsula and 85 miles southeast of the San Francisco Bay Area. The 920-acre project site is generally between San Vicente Road and Orchard Lane and is surrounded by agricultural land to the north and west, an existing residential subdivision to the south, and undeveloped foothills of the Gabilan Mountain Range to the east. The City of Soledad is located in the Salinas Valley; downtown Soledad is located approximately 1 mile south of the project site. Two freeway interchanges connect the local surface streets to Highway 101 providing access to the remainder of the County. These interchanges are located 1.75 miles south and 0.5 mile southwest of the project. The Salinas River is located 1.25 miles south of Metz Road, which is located 1.25 miles south of the project site (2.5 miles to Salinas River from project site).

The Salinas River is located approximately 2.5 miles south of the project site. The Salinas River Watershed covers approximately 4,600 square miles of San Luis Obispo and Monterey counties. The Salinas River flows northwesterly through the Salinas valley, emptying into the Monterey Bay National Marine Sanctuary. The Salinas Valley lies in the Coast Ranges and is defined to the west by the Sierra de Salinas and to the east by the Gabilan Range. The valley is approximately 10 miles wide and 155 miles long. The primary land uses in the Salinas Valley (Salinas River watershed) are row crops, vineyards, pasture, and grazing lands, as well as urban areas, military bases, and public open space. The County portion of the watershed includes the Salinas River and its primary tributaries, the Arroyo Seco, Nacimiento, and San Antonio rivers.

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4.1 AESTHETICS

Introduction

This section assesses the existing visual quality of the project site and potential changes to the visual and aesthetic environment that would result from the proposed development. In assessing the visual quality of a site, it is important to consider that visual quality is not determined solely by the physical attributes of a project, but also by the relationship between the project and the total visual environment. The primary aesthetic concerns associated with the proposed project are potential changes in aesthetic character of the site and impacts to a scenic vista.

The visual analysis is based on the potential for the proposed project to alter the existing visual character of the site and surrounding areas. The EIR consultant conducted a field survey, and photos were taken of the project site from various vantage points and circulation routes (refer to map on Figure 4.1-1). The various vantage points were selected to be representative of the existing aesthetic quality of the area and to further assess the potential aesthetic/visual impacts associated with project development from Highway 101 and adjoining residential areas, where the proposed project would be most visible to the greatest number of people. Photographs from the various vantage points are presented in Figure 4.1-2. In addition, several internal site locations were also selected to provide a general assessment of the existing visual character of the site. Prior to the site visit, aerial photographs and maps were studied and areas of special interest or potential scenic value were noted for assessment during the field survey. Available data in the Miravale III Specific Plan, including proposed design guidelines, setbacks and height limits, and zoning, was also analyzed as part of the visual assessment.

Setting

The project is located within the unincorporated area of Monterey County on the northern edge of the City of Soledad. The visual character of the Soledad area is comprised of nearby foothills, distant mountain ranges, farmland, grazing land, urban development, and Highway 101. The 920-acre project site is generally located between San Vicente Road and Orchard Lane and is surrounded by agricultural land to the north and west, an existing residential subdivision to the south, and undeveloped foothills of the Gabilan Mountain Range to the east.

The project site has a rural/agricultural appearance with a majority of the site reserved for agricultural uses. The site is generally vacant of structures and other physical features except for a couple of farm houses and associated support structures, farming equipment, detention and percolation ponds, pumping houses and equipment, and access roads. Much of the site is in active agricultural production for row crops and vineyards. A portion of the site has been left fallow, and dryland grasses and weeds have established. An existing row of mature eucalyptus trees along San Vicente Row provide a physical barrier between the existing cultivated areas of the western portion of the site and the vineyard and fallow land on the eastern portion. The existing row of mature eucalyptus trees are highly visible from distant land uses, including Highway 101, and provide a visual barrier between the existing row crops and portions of the City of Soledad located east of the site. The eastern edge of the site contains predominantly undeveloped foothills currently utilized for grazing activities. Existing development within these foothills include ranch roads, water tanks, electrical power lines, and small-scale communication equipment. The project site is bounded on the south by the City of Soledad city limits, which consist predominately of residential uses that are suburban in nature and include single family residences comparable in density to the single family residential units proposed along the southern boundary of the project site. The project site's southwestern and eastern edges are visible by cars traveling on Highway 101. Other views of the project site are available from surrounding urban areas, primarily those areas adjacent to San Vicente Road.

Regulatory Environment

City of Soledad General Plan

The Land Use and Conservation/Open Space Elements of the General Plan guide the City's future physical and spatial form, and appearance. Numerous goals and policies of the General Plan are intended to protect the visual character of the City and surrounding scenic resources. The following aesthetic and visual resource policies apply to development within the project area.

Policy C/OS-7 The City shall require new public and private development to protect scenic resources by:

a. Prohibiting structures along ridgelines, steep slopes (above the 400 foot elevation contour), or in other highly visible locations unless no practical alternative is available, or such a location is necessary to protect public health and safety;
b. Utilizing natural landforms and vegetation for screening structures, access roads, building foundations, and cut and fill slopes;
c. Requiring landscaping which provides a landscape transition between development areas and adjacent open space or undeveloped areas; and is compatible with the scenic resources being protected;
d. Incorporating sound Soil Conservation Service practices and minimizing land alterations. Land alterations shall be minimized by: keeping cuts and fills to a minimum; limiting grading to the smallest practical area of land; limiting land exposure to the shortest practical amount of time; replanting graded areas to ensure establishment of plant cover before the next rainy season; and creating grading contours that blend with the natural contours on site or look like contours that would naturally occur;
e. Designing roads, parking, and utilities to minimize visual impacts. If possible, utilities shall be underground. Roadways and parking shall fit the natural terrain; and
f. Designing projects to fit the sites scale and character. Structures shall be designed and located so: they do no silhouette against ridgeline, or hilltops; roof lines and veridical architectural features blend with and do not detract from the natural background or ridge outline; residential density and massing is decreased with increased elevation where it would mar the scenic quality of the scenic resources; they fit the natural terrain, and they utilize building materials, colors, and textures that blend with the natural landscape and avoid the creation of high-contracts situations.

Policy C/OS-8 The City shall require public or private development to:

a. The City shall designate hillside areas above the 400 foot elevation contour as Open Space/Grazing, Public Facility (parkland) or Agriculture.
b. Locate primary structures, accessory structures, paving, and grading at the base of a hill (generally that are below the 400 foot contour or 15 percent slope) unless: 1) no practicable alternative is available, 2) the location on a greater slope or at a greater elevation provides more aesthetic quality, or 3) the location is necessary to protect public health and safety.
c. Utilize design, construction, and maintenance techniques that: 1) preserve and enhance the hillsides; 2) ensure that development near or on portions of a hill do not cause, or make worse natural hazards (such as erosion, sedimentation, fire, or water quality concerns); 3) include erosion and sediment control practices including temporary vegetation sufficient to stabilize disturbed areas; 4) minimize risk to life

and property from slope failure, landslides, and flooding; 5) maintain the character and visual quality of the adjacent hillside.

Policy C/OS-9 The City shall support the preservation and enhancement of natural land forms, natural vegetation, and natural resources to the maximum extent feasible.

Environmental Impact Report on the Soledad General Plan. The General Plan EIR evaluated potential aesthetic impacts associated with the adoption and implementation of the Soledad General Plan, including future development within the project area. This program-level EIR focused on general impacts associated with implementation of the General Plan, rather than project-specific impacts associated with individual development projects, such as the Miravale III project. According to the General Plan EIR, the following aesthetic impacts were identified:

- Development of the various land uses contemplated in the General Plan would alter the visual character and/or quality of the area. This impact was identified as significant and unavoidable.

- Temporary construction related impacts were identified due to buildout according to the General Plan. This impact was identified as adverse, but not significant.

- Buildout of the General Plan would result in additional sources of light and glare, which would be visible from adjoining areas and from Highway 101. This impact was considered significant, unless mitigated.

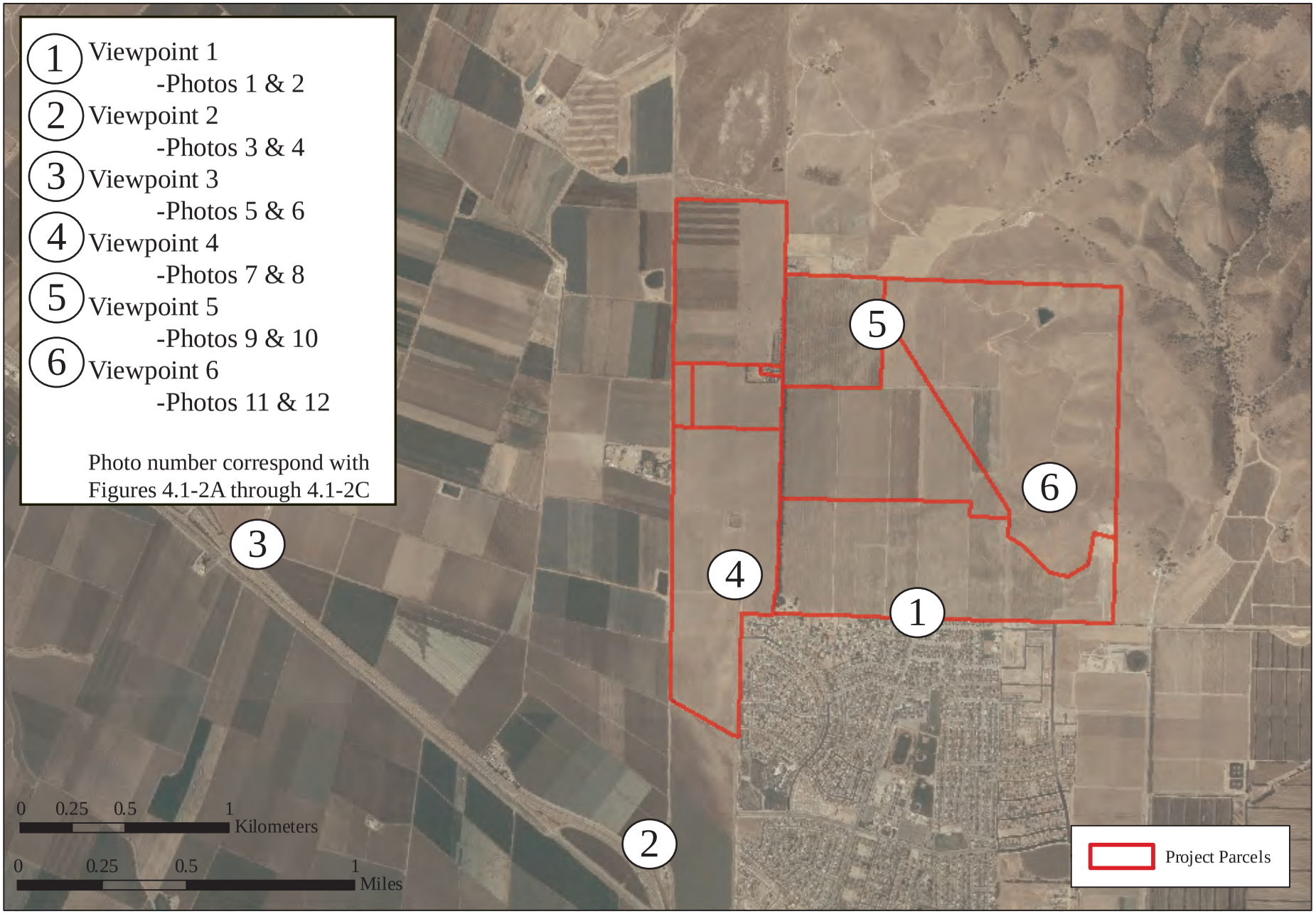
Miravale III Specific Plan

Section 2.0 of the Miravale III Specific Plan identifies land use goals and policies regarding the physical development of the approximately 920-acre project site. More specifically, Section 2.0 identifies land uses within the project area and provides corresponding development standards and policies for each respective land use category (i.e. residential, commercial, etc.). Each land use category is further classified according to density type (i.e. low density residential, medium to high density, etc.). Specific policies and goals are provided for each respective type of land use category according to density type. The following summarizes applicable Land Use goals regarding the aesthetic character of site.

- Land Use Goal LU-8 states that the project shall create new, attractive residential neighborhoods that are in close proximity to parks, open spaces, schools, and neighborhood commercial.

- Land Use Goal LU-10 states that project development should protect the scenic vistas of the hills above Soledad through careful siting and design standards that minimize grading and visibility of new hillside development.

In addition to the aforementioned Land Use Goals, the Miravale III Specific Plan identifies specific policies and guidelines regarding the development of the project site, including building scale and massing, landscaping, signage, lighting, and articulation. Moreover, to minimize potential impacts due to hillside development, specific Hillside Development Standards were developed as part of the Specific Plan. The Hillside Development Standards and Guidelines identify specific grading practices and designs, including the preservation of the natural topography, to minimize potential visual impacts. Additionally, specific measures are included to address fire related hazards, drainage issues, and building design within the hillside portion of the site.



N

Viewpoint Map

Figure 4.1-1

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Photo 1. View of existing on-site agricultural uses looking NW from West St.



Photo 2. View of City of Soledad and project site looking NW from Moranda Rd.



Photo 3. View of existing on-site agricultural uses looking N from West St.



Photo 4. View of project site and existing development within the City of Soledad from Moranda Rd.

Site Photos

Figure 4-1.2A

DENISE DUFFY & ASSOCIATES, INC.



Photo 5. Distant view of project site looking W from Camphora Gloria Rd.



Photo 6. Distant view of project site looking NW from Camphora Gloria Rd.



Photo 7. View of Existing Agriculture Pond.



Photo 8. View of existing row crops looking NE.

Site Photos

Figure
4-1.2B

DENISE DUFFY & ASSOCIATES, INC.



Photo 9. View of existing on-site agricultural uses looking S.



Photo 10. View of existing on-site agricultural use looking W.



Photo 11. View of project site looking NW.



Photo 12. View pf project site looking W.

Site Photos

Figure 4-1.2C

DENISE DUFFY & ASSOCIATES, INC.

Relevant Project Characteristics

The majority of the project site is vacant and has historically been utilized for agricultural cultivation and grazing. There are several existing buildings located on the site, including equipment storage areas, and a worker housing area with assorted other buildings and water detention facilities. The Specific Plan calls for the replacement of the existing agricultural and grazing uses with a mixed-use urban development consisting of new roads and infrastructure, single-family and multi-family residential units, retail commercial space, a golf course, school and public safety sites, and open space and recreation areas. The project would require extensive grading on the site to facilitate construction of proposed uses. Proposed grading would occur throughout most of the site and would involve approximately 2.05 million cubic yards (CY) of cut/fill. All grading is proposed to balance upon completion of the project. In addition to extensive site grading, development of the proposed project would also result in the removal of existing mature eucalyptus and other tree species along San Vicente Road to facilitate project infrastructures and proposed uses. Existing mature trees located along San Vicente Road contribute to the overall visual character of the site and represent a visual landmark as perceived from distant and adjacent land uses.

As identified above, the Miravale III Specific Plan establishes specific development standards for each of the respective land use categories. Development standards establish maximum allowable building heights, lot coverage, setbacks, parking requirements, and allowable density. As such, the physical development of the project site will be guided by these standards. The proposed single family residential units would be one and two story structures; apartment buildings would be a maximum of three stories; and commercial uses would generally range between three and four stories.

Thresholds of Significance

In accordance with the California Environmental Quality Act (CEQA) Guidelines, a project impact would be considered significant if the project would:

- have a substantial adverse effect on a scenic vista;
- substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within view from a state scenic highway;
- substantially degrade the existing visual character or quality of the site and its surroundings; or
- create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Impacts and Mitigation

Scenic Vista

The project site currently consists of relatively undeveloped agricultural and grazing lands. The highly visible foothills of the Gabilan Mountain Range are located on the eastern edge of the project site and serve as a dramatic backdrop to the flat valley land below. The City's General Plan recognizes the scenic value of these foothills and contains numerous policies to protect this scenic resource by limiting new development below the 400 foot elevation contour. Moreover, according to the General Plan EIR, policies prohibiting development above the 400 foot elevation contour were identified as mitigation measures to ensure that adverse impacts to scenic resources, including the Gabilan Mountain Range, were minimized to the extent feasible. These measures were incorporated as part of the City's General Plan in order to ensure the preservation of the City's unique scenic resources. Due to the relative importance of the

Gabilan Mountain Range, development above the 400 foot contour would constitute a potentially significant impact. Therefore, for the purposes of this analysis, these foothills are considered a scenic vista and development above the 400 foot elevation contour would constitute a significant impact.

Development of the proposed project would result in the conversion of agricultural and grazing lands, including a portion of the Gabilan Mountain Range foothills, into a predominately residential and commercial development, thus permanently altering views of the area, especially those views of the project site as perceived from Highway 101 and the surrounding urban areas (See Figure 4.1-2). Development within that portion of the foothills located within the project boundary would consist of grading for new roads, associated infrastructure, and large lot single-family residential building pads. Some of this development, including new residential structures and exterior lighting for roads and residences, would be located above the 400 foot elevation contour. Although the Miravale III Specific Plan contains specific policies governing development within the Hillside portion of the project site, development within this area represents a significant impact. Figure 4.1-3 depicts development above the 400 foot elevation contour. A copy of the Hillside Development standards, which govern development within the hillside areas of the project site are contained in Appendix C of this document.

Implementation of the project would introduce substantial new development, including structures of various heights and densities, which would result in decreased views of open space, especially within that portion of the Gabilan Mountain Range foothills located within the project boundaries. This increased visibility and intensity of development would have a substantial adverse effect on a scenic vista. Moreover, the introduction of new urban features on a previously undeveloped, highly visible, portion of the project site would substantially alter the existing visual character of the site. Mitigation measures 4.1-1 to 4.1-5 would help reduce the extent of visual impacts. However, the loss of natural open space and introduction of urban development within and above the foothill portions of the project site would result in a significant and unavoidable impact to a scenic vista. Implementation of the following mitigation measures would not result in any new environmental impacts beyond those identified in this EIR.

Impact **The project would permanently alter a scenic vista, consisting of a portion of the Gabilan Mountain Range foothills, by causing changes to topography, removing vegetation, and adding roads, buildings, pavement, and lighting.** ***To the extent that this change is considered a substantial degradation of this scenic vista, this represents a significant unmitigable impact.***

Mitigation

4.1-1 Building heights of all new structures shall adhere to the limits set forth in the Miravale III Specific Plan dated June 2007. Additionally, all new structures shall adhere to the applicable Development Standards as established in Section 2.0 of the Specific Plan. Prior to the issuance of any building permit for development within the Specific Plan area, the project applicant shall submit detailed plans, including elevations, site plans, and/or other documentation detailing compliance with applicable development standards, subject to the review and approval of the City of Soledad.

4.1-2 In order to minimize potential adverse visual impacts associated with development within the hillside portions of the project site, the project applicant shall submit and have approved, prior to the recordation of the final map for Phases three and four, building envelopes for each new residential lot proposed above the 400 foot elevation contour. The proposed building envelopes shall be located in the least visually sensitive area of each lot. No new structures shall be constructed outside of the approved building envelopes, unless otherwise approved by the City of Soledad.

4.1-3 In order to minimize aesthetic-related impacts due to development within the hillside portion of the site, the project applicant, prior to project approval, shall submit a revised Specific Plan that includes the following policy in Section 2.6 Low Density Residential (LDR & LDR-H/M3-R-1):

All new residential units proposed within areas of the project site above the 400 foot elevation contour shall be subject to a Design Review approval process or similar. As part of the design review process, vertical building envelopes shall be identified and staking and flagging shall be required to demonstrate the extent of proposed development. All new structures shall be designed to minimize visual impacts to the greatest extent feasible.

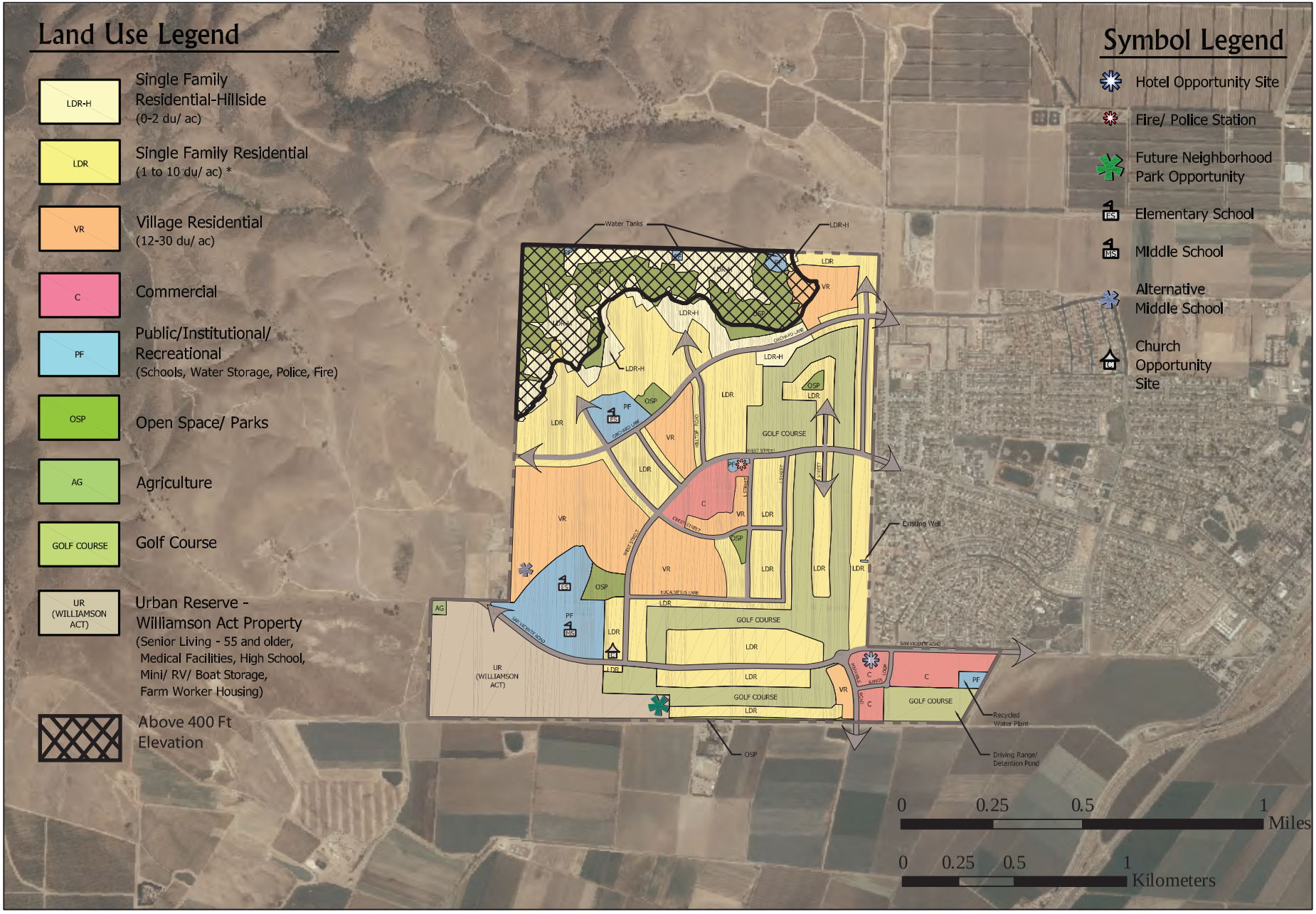
4.1-4 Final design plans for proposed development shall utilize natural landforms and vegetation for screening structures, access roads, building foundations, cut and fill slopes, and exterior lighting. Roads, parking, and utilities shall be designed to minimize visual impacts. Prior to the issuance of any grading and/or building permit, the project applicant shall submit design-level drawings demonstrating compliance with this measure, subject to the review and approval of the City of Soledad. If an alternative design would minimize impacts, the applicant shall submit evidence demonstrating that the alternative design is infeasible.

4.1-5 The applicant shall provide landscape screening appropriate to the surrounding area in order to integrate the development with the existing natural landscape. Landscaping plans shall be submitted to the City of Soledad for review and approval prior to the issuance of any building or grading permit.

4.1-6 All buildings shall be designed with colors and materials that effectively blend the structures with the surrounding landscape. Building applications for new structures shall include color and material sample photo sheets and shall be approved by the City of Soledad, prior to the issuance of any building permit.

4.1-7 A site-specific geotechnical report shall be prepared for new development on hillsides in order to ensure that the development will not cause or worsen natural hazards, such as erosion and sedimentation, and will minimize risk to life and property from slope failure, landslides, and flooding. The report shall include erosion and sediment control measures, such as temporary vegetation sufficient to stabilize disturbed areas. Prior to the issuance of any grading and/or building permit for new development within the hillside portions of the project site, the project applicant shall submit a geotechnical report prepared by a qualified professional to the City of Soledad Department of Public Works for review and approval. The site-specific geotechnical report shall identify feasible recommendations and avoidance measures to minimize potential impacts.

4.1-8 Land alterations within areas above the 400 foot elevation shall be minimized by keeping cuts and fills to a minimum, limiting grading to the smallest practical area of land, limiting land exposure to the shortest practical amount of time, replanting graded areas to insure establishment of plant cover before the next rainy season, and creating grading contours that blend with the natural contours on site or look like contours that would naturally occur. Prior to the issuance of any grading permit, the project applicant shall submitted detailed grading plans consistent with the intent of this mitigation, subject to the review and approval of the City of Soledad.



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400 Foot Elevation Contour Map

Figure 4.1-3

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Scenic Resources

Many state highways are located in areas of outstanding natural beauty. California's Scenic Highway Program was created by the Legislature in 1963. Its purpose is to preserve and protect scenic highway corridors from change which would diminish the aesthetic value of lands adjacent to highways. The State Scenic Highway System includes a list of highways that are either eligible for designation as scenic highways or have been so designated.

There are two state highways within the project vicinity. These include Highway 101 and Highway 146. Neither of these highways are included on the State Scenic Highway System list of highways that are either eligible for designation as scenic highways or have been so designated. Implementation of the project is not expected to substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within view from a state scenic highway. **This would represent a less-than-significant impact.**

Visual Character

As identified in the General Plan EIR, the City of Soledad consists of two towns: the historic city center east of Front Street and the conventional residential subdivisions extending outward from the city center to the east toward the foothills of the Gabilan Range. Surrounding this urbanized landscape are agricultural fields and the Gabilan Range foothills. The project site is currently undeveloped and has historically been used for agriculture and cattle grazing purposes. Surrounding land uses consist predominantly of agricultural uses to the north, west, and east of project site. Existing residential development is located to the south. The project site is located within an area designated for future expansion under the City's General Plan.

Development of the proposed project would permanently alter the visual character of the site, transforming what is currently 920 acres of relatively undeveloped agricultural and grazing land into an urban landscape. Substantial grading would be required in order to accommodate project development. As a result, project development would alter the existing visual character of the site by causing changes to topography, removing vegetation, including mature eucalyptus along San Vicente Road, and adding roads, residences and commercial uses. Although the Miravale III Specific Plan has incorporated design measures, including height restrictions, landscape screening, appropriate color and architectural schemes, light and glare reduction and screening measures, and the use of non-reflective building materials, to minimize visual impacts, the introduction of urban features would permanently alter the existing visual character of the project site as perceived from adjacent public vantage points, including Highway 101 and adjacent residential uses. Currently, the project site, as perceived from adjacent and distant land uses, consists predominantly of existing mature eucalyptus trees, agricultural uses, and associated infrastructure. Removal of existing vegetation, particularly the mature eucalyptus trees, would substantially alter the existing visual character of the project site. This would constitute a significant impact to the existing visual character of the site. Below is a description of the project's primary development components, uses, and their resulting visual effects.

According to the Miravale III Specific Plan, single-family residential development would occur on approximately 241 acres of the project site. The single-family residential development would include a mix of architectural styles, lot sizes, and structure heights. The majority of single-family residential development is proposed within the eastern and southern portions of the project site. Portions of this development would be visible from Highway 101 and adjacent residential areas, particularly proposed residential structures above the 400 foot elevation contour line. Development above the 400 foot elevation contour line would substantially alter the existing visual character of the project site.

Multi-family residential development would occur on approximately 150 acres of the project site designated as Village Residential. Pursuant to Section 2.10 of the Miravale III Specific Plan, permitted uses under the Village Residential designation consist of single-family dwellings, duplexes, triplexes, apartments clustered homes, townhouses, condominiums and other similar uses. Moreover, the multi-family residential development within the Village Residential areas would include a mix of architectural styles, lot widths, and structure heights consistent with the development standards and policies contained in Section 2.10 of the Specific Plan. The majority of multi-family residential development is proposed within the northern portion of the project site.

Two locations, totaling approximately 40 acres, have been designated within the Specific Plan area for future commercial development. More specifically, an area designated as "Village Commercial" is centrally located within the Specific Plan area and is intended to provide area residents with easy and convenient access to retail uses. Another commercial area is designated as "Gateway Commercial" and is located within the southwestern area of the proposed development near the intersection of San Vicente Road and Miravale Road. Allowable uses under both the Village Commercial and Gateway Commercial designations allow for a variety of commercial uses. Section 2.11 of the Miravale III Specific Plan identifies development standards and policies regarding commercial development within the Specific Plan area. Building heights in these areas would extend up to three stories with the exception of the Gateway Commercial district, which allows building heights of up to four stories. Further, the Gateway Commercial district has been identified as the future location for a hotel, although no formal plans have been submitted. According to the development standards for the Gateway Commercial district contained in Section 2.8.1 of the Specific Plan and Appendix H of this document, the maximum allowable building height for a hotel is 75 feet. Development of commercial uses, especially in the Gateway Commercial district, would be highly visible from adjacent residential uses and vehicular traffic along Highway 101. Moreover, the construction of a hotel up to approximately 75 feet would create a prominent visual landmark that would be visible from adjacent and distant land-uses.

The proposed project also consists of the development of public facilities, including project infrastructure, parks, police and fire facilities, schools, and open space, on approximately 285 acres of the project site. Recreational uses would include both passive and active uses, including open space areas and formal parks, such as playfields, picnic areas, and similar. A walking and biking trail system would also be provided. The project also proposes an approximately 159 acre golf course. In addition to open space and park land, public facilities within the proposed project area include locations for future police and fire substations, schools, roads, infrastructure and utilities, and urban reserve uses. Public facility development is proposed throughout the project site.

In addition to the aforementioned land uses, project development also includes the establishment of four project gateways. These gateways are intended to provide a visual entrance to the Specific Plan area and are proposed along Orchard Lane, West Street, the intersection of San Vicente Road and Miravale Road, and San Vicente Road near the primary entrance to the site. Section 2.12 of the Specific Plan identifies numerous guidelines regarding the aesthetic character and quality of the gateways. Development of the proposed gateways would be readily visible from adjacent land uses and Mitigation 4.1-9 is intended to ensure consistency with each of the four gateways.

In summary, the project would permanently alter the existing visual character of the site by causing changes to topography, removing vegetation, and adding roads, buildings, pavement, parking areas, and lighting. These impacts were previously considered in the environmental analysis for the 2005 General Plan. As described in the General Plan, the project site is located within designated urban growth expansion areas, comprising all or a portion of three sub-areas: Northwest Expansion, San Vicente West, and Mirassou. These areas will eventually be developed in accordance with the urban land uses identified in the General Plan. Mitigation measures 4.1-1 to 4.1-5 will help reduce the visual impacts. The loss of

agricultural land and natural open space and introduction of urban development, however, would result in significant and unavoidable impact to the visual character of the site. In order to minimize the extent of project-induced impacts, the following mitigation measures are necessary. These mitigations, however, would not reduce the impact to a less-than-significant level. Implementation of the following mitigation measures would not result in any new environmental impacts beyond those identified in this EIR.

Impact **The project would permanently alter the existing visual character of the site by causing changes to topography, removing vegetation, and adding roads, buildings, pavement, parking areas, and lighting.** ***To the extent that this change is considered a substantial degradation of the existing visual character/quality of the site and its surroundings, this represents a significant unavoidable impact.***

Mitigation

4.1-9 In order to minimize tree removal and associated visual impacts, final design-level improvements plans shall retain existing mature eucalyptus and other tree species to the greatest extent possible. Final design-level plans shall be prepared in consultation with a registered arborist/forester to minimize tree removal and ensure the health of remaining trees. Prior to the issuance of any grading and/or building permits, final plans shall be subject to the review and approval of the City of Soledad Director of Public Works. If the removal of existing mature eucalyptus is required the applicant shall submit evidence demonstrating that there are no feasible design alternatives to avoid tree removal. In the event that tree removal is required, the project proponent shall prepare a tree removal and replacement plan for each phase of construction, subject to the review and approval of the City of Soledad Community Development Director. The tree removal and replacement plan shall identify specific grading limits that minimize tree removal, as well as appropriate tree replacement ratios and replanting locations.

4.1-10 Final design plans for the proposed gateways shall include elements, such as signage, landscaping and landscaped center medians, and appropriate architectural detailing consistent with the Miravale III Specific Plan. Prior to issuance of any permit for the construction of any of the four gateways, the project applicant shall submit detailed plans that include the above referenced elements, subject to the review and approval of the City of Soledad.

4.1-11 Final design plans for proposed residential development shall include form, scale, and character elements which emulate the best characteristics of the existing residential neighborhoods, such as single and two-story dwellings with adequate off-street parking, landscaped front yards with trees, and sidewalks. Prior to the issuance of any building permit for residential development within the Specific Plan area, the project applicant shall submit design-level drawings consistent with the intent of this measure, subject to the review and approval of the City of Soledad.

4.1-12 Final design plans for proposed multi-family development shall include useable open space for each dwelling and shall be designed to be integrated with the surrounding neighborhood. Prior to the issuance of any building permit for multi-family development within the Specific Plan area, the project applicant shall submit design-level drawings consistent with the intent of this measure, subject to the review and approval of the City of Soledad.

4.1-13 Final design plans for proposed development shall include a tree planting plan in order to increase the number and density of tree cover within new development areas. Prior to the issuance of any grading and/or building permit, the project applicant shall submit a detailed tree planting plan, subject to the review and approval of the City of Soledad.

Light and Glare

The project site currently consists of 920 acres of unlit agricultural and grazing land. Various existing uses provide a source of light which affect the project area. These are predominantly residential uses located south of the project site.

The project would provide a new source of light and glare and would accentuate existing sources due to changes in topography, removing vegetation, and adding roads, buildings, pavement, and parking areas. The proposed project would require night lighting in parking lots and along streets for safety, as well as for the traffic in the area. The residential component of the project would also contribute to the increased light and glare in the area. Commercial/retail uses would contribute increased nighttime lighting by providing security/safety lighting for businesses, as well as associated parking areas.

Overall, the proposed project would increase the intensity of development within an existing undeveloped area, and therefore the amount of artificial light produced by the site. The Highway 101 corridor and surrounding urban uses would be most affected by this increase in light and glare. Artificial lighting within the project site would impact nighttime views by altering the natural landscape and, in sufficient quantity, lighting up the nighttime sky and reducing the visibility of astronomical features. In addition, the additional lighting within the project site, especially unshielded light, could result in spillover light that could impact surrounding land uses. Further, daytime glare could occur as light reflects off pavement, vehicles, rooftops, and structures.

In order to minimize the extent of visual impacts associated with the development of the proposed project, mitigation measures are necessary. The following mitigation measures would reduce the extent of impacts by requiring that all site lighting comply with specific standards to avoid excess glare and new sources of light. Implementation of the following mitigation measures would not result in any new environmental impacts beyond those identified in this EIR.

Impact **The project would create a new source of light or glare that would adversely affect day or nighttime views in the area.** ***This would represent a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation measures.***

Mitigation

4.1-14 All buildings shall be designed so that exterior lighting is down-lit and illuminates the intended area only. Building applications for new structures shall include an exterior lighting plan subject to approval of the Soledad Planning Department that includes the following requirements: 1) exterior lighting shall be directional; 2) glare from exterior lighting shall be adequately minimized; 3) the source of directional lighting shall not be directly visible; and 4) vegetative screening shall be considered, where appropriate, as a means of reducing development-related light and glare. The project applicant shall submit an exterior lighting plan to the City of Soledad Planning Department prior to the issuance of any building permit.

4.1-15 Ornamental lighting use for streets, parks, public open spaces, trails, bike paths, parking lots, and walkways shall utilize fixtures consisting of metal halide with cut-off luminaries in order to control light and glare. Prior to the issuance of any building permit, the project applicant shall provide documentation as part of the exterior lighting plan described in Mitigation Measure 4.1-12 demonstrating that these measures are incorporated into site lighting, subject to the review and approval of the Soledad Planning Department.

4.1-16 Light reduction and screening measures shall be required in order to reduce nighttime ambient light increases in the area. Lighting levels in commercial areas shall be kept as low as feasible and controlled to minimize operating time. Light sources shall be installed, so there is no light radiation above the horizontal plane (i.e., dark sky). Lighting shall be focused downward to prevent the splay of ambient light to other areas. Prior to the issuance of any building permit, the project applicant shall provide documentation as part of the exterior lighting plan described in Mitigation Measure 4.1-12 demonstrating that these measures are incorporated into site lighting, subject to the review and approval of the Soledad Planning Department

4.2 AGRICULTURAL RESOURCES

Introduction

An *Agricultural Resources Report* was prepared by Buchanan Associates (August 17, 2007). The report utilized the California Agricultural Land Evaluation and Site Assessment model (LESA) to assess the project area agricultural resources. The following discussion incorporates this analysis; the entire report is included as Technical Appendix T-1 and is included in Volume II of this DEIR.

Agricultural resources are afforded protection under various federal and state acts (such as the Williamson Act), programs, and local governance (General Plans, specific and other types of plans, zoning ordinance, etc.). Some of the agencies involved with stewardship of agricultural resources include the U.S. Department of Agriculture (USDA), the Natural Resources Conservation Service (NRCS), and the California Department of Conservation's Division of Land Resource Protection. In California, agricultural land is also given consideration under CEQA. According to Public Resources Code §21060.1, "agricultural land" means prime farmland, farmland of statewide importance, or unique farmland, as defined by the USDA land inventory and monitoring criteria, as modified for California.

The Farmland Mapping and Monitoring Program (FMMP) produces maps and statistical data that are used for analyzing impacts on California's agricultural resources. The FMMP was established in 1982 in response to a critical need for assessing the location, quality, and quantity of agricultural lands and conversion of these lands over time. The FMMP is a non-regulatory program and provides a consistent and impartial analysis of agricultural land use and land use changes throughout California. The goal of the FMMP is to provide consistent and impartial data to decision makers for use in assessing present status, reviewing trends, and planning for the future of California's agricultural land resources. Under the FMMP, agricultural land is rated according to irrigation status and soil quality; the best quality land is called Prime Farmland. The FMMP produces Important Farmland Maps, Figure 4.2-1, which are a hybrid of resource quality (soils) and land use information.

Setting

The project site is located in an area north and west of the current Soledad City limits currently undergoing a transition from agricultural to residential and commercial uses. Currently, approximately 430 acres of the 929 acre project site appear to be used for the production of irrigated row crops, including grapes (approximately 155 acres), lettuce, and leafy greens (approximately 275 acres). Approximately 330 acres of the project site are not planted to any crops, while the remaining non-irrigated lands (approximately 170 acres) are non-grazed lands. Equipment storage areas, worker housing, other buildings, and water detention and impoundment ponds comprise approximately 7 acres of the non-cropped area. Within the project site, two parcels totaling approximately 107 acres are under Williamson Act contract (See Appendix D). According to the Agricultural Resources Report, the property owner has filed for non-renewal status with cancellation pending in 2016.

Land uses surrounding the proposed project site are varied. The northern and eastern boundaries are largely grazing and fallow lands; although, approximately 2,000 feet in the southwest corner is adjacent to San Vicente Road and existing residential areas. The southern boundary is predominantly residential, while the entire western boundary is adjacent to irrigated row crop land. Current crop production is within approximately 50 feet of the residential areas on the southern boundary, while residential development at the southeastern corner of the project site is approximately 150 feet from adjacent crop land.

Fourteen soil types are found on the project site as identified in Figure 4.2-2 and Table 4.2-1. Total potentially irrigated land within the project site is approximately 82 percent of the total project site or 760 acres. As shown in Table 4.2-1, Land Capability Classes (LCC), or Units, classify soils according to their characteristics and slopes. These classifications range from a 'high' of I-1 to a 'low' of VIIIs-1. The soils within the project site range from a soil classification of I to VII, as detailed in Table 4.2-1. Classes I and II are generally considered to be of prime agricultural significance.

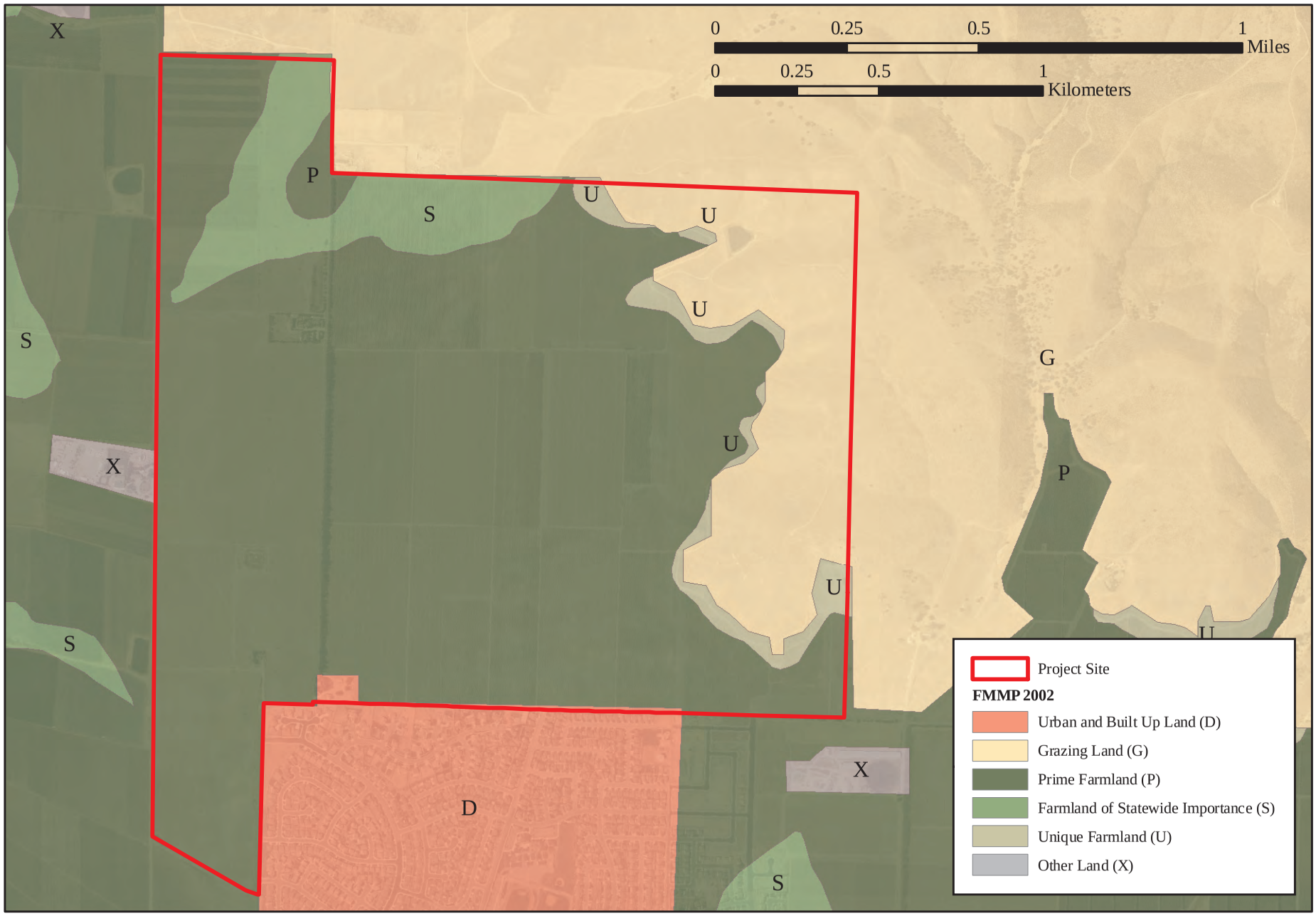
The NRCS also assigns a Storie Index Rating to types of soils; the rating is based exclusively on soil characteristics. Lands which qualify for a Storie Index Rating of 80 to 100 are generally considered agriculturally significant. As presented in Table 4.2-1, there are several soil types in the Study Area with a Storie Index Rating above 80. Figure 4.2-2 shows the location of these soils types within the project site. Also shown in Table 4.2.1, is the classification of prime soils based upon the California Department of Conservation Important Farmlands Mapping Program. According to the 1998 Monterey County Important Farmlands Map (see Figure 4.2-2), there are 760 acres of potentially irrigated soils on the site that are classified as Prime Farmland and Farmland of Statewide Importance by the California Department of Conservation Important Farmlands Mapping Program.

Table 4.2-1
Soil Series and Land Capability Class and Storie Designations within the Project Site

Soil Type	Acres	Prime	Land Capability Class (LCC) Or Unit	Storie Index Rating
Arroyo Seco gravelly loam, 2 to 5 percent slopes	38.9	x	II	72
Arroyo Seco gravelly sandy loam, 0 to 2 percent slopes	127.9	x	III	63
Arroyo Seco gravelly sandy loam, 2 to 5 percent slopes	8.9	x	III	60
Chualar loam, 0 to 2 percent slopes	212.6	x	I	85
Chualar loam, 2 to 5 percent slopes	283.4	x	II	81
Gloria sandy loam, 2 to 9 percent slopes	6.4		III	27
Gloria sandy loam, 0 to 5 percent slopes	2.4		IV	25
Hanford gravelly sandy loam, 0 to 5 percent slopes	22.0	x	II	60
Placentia sandy loam, 0 to 2 percent slopes	9.1	x	III	45
Placenta sandy loam, 2 to 9 percent slopes	53.1	x	IV	37
Salinas clay loam, 0 to 2 percent slopes	4.4	x	I	85
Vista coarse sandy loam, 15 to 30 percent slopes	45.2		VI	29
Vista coarse sandy loam, 30 to 75 percent slopes	70.1		VII	12
Vista-rock outcrop complex	44.7		VII	6
Total acres	**929.0**	**760.2**		

Agricultural Land Capability

Overall, there are three separate land classification systems which are primarily used to determine an area's suitability for agriculture and/or provide definition for prime agricultural lands. Increasingly in California, the Department of Conservation's Farmland Mapping criteria are being applied to the assessment of agricultural land capability and determination of impacts due to development of these lands. The following discusses the classification systems and the resultant project characteristics.

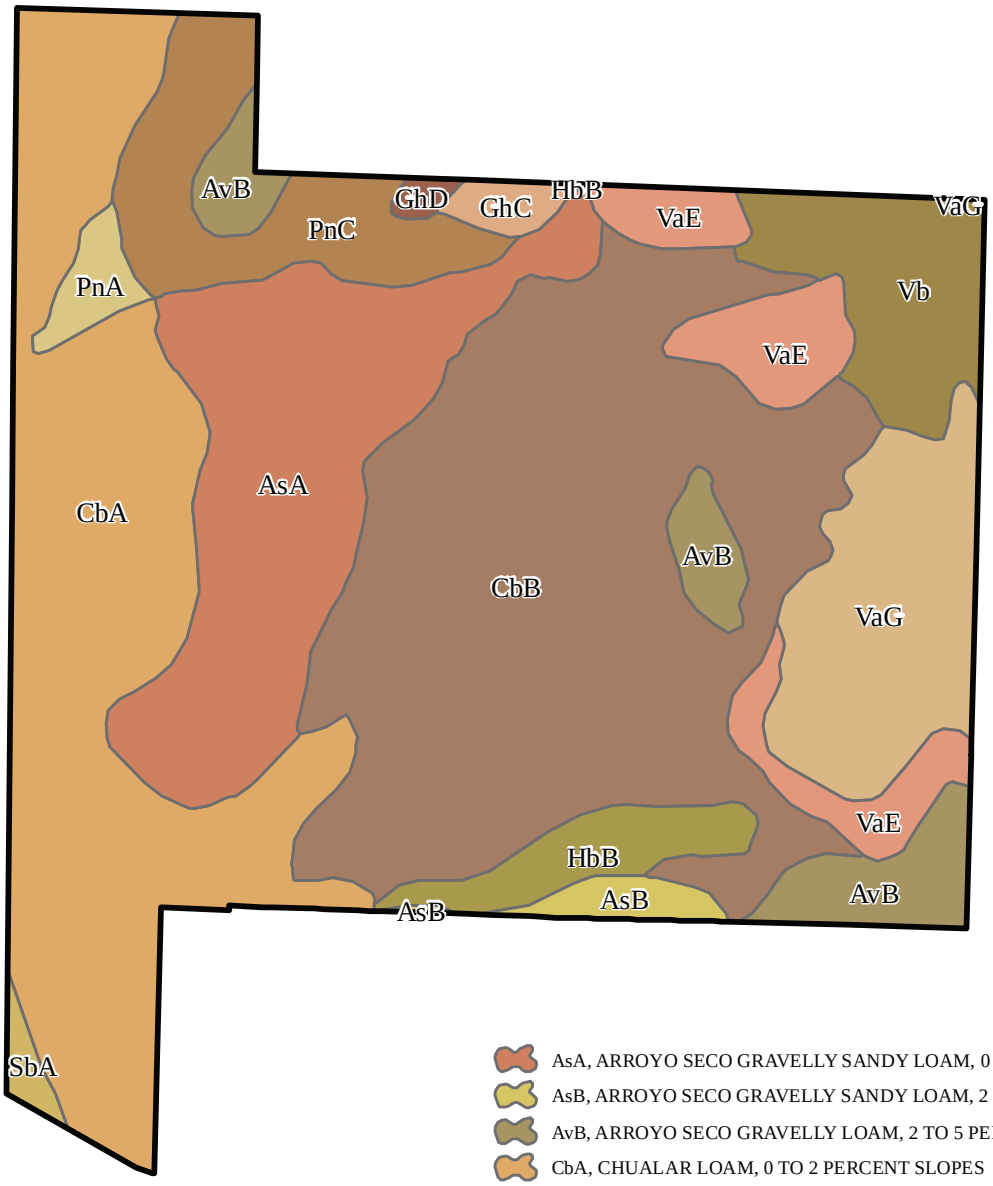


N

2002 Monterey County Important Farmlands Map

Figure 4.2-1

DENISE DUFFY & ASSOCIATES, INC.



AsA, ARROYO SECO GRAVELLY SANDY LOAM, 0 TO 2 PERCENT SLOPES
AsB, ARROYO SECO GRAVELLY SANDY LOAM, 2 TO 5 PERCENT SLOPES
AvB, ARROYO SECO GRAVELLY LOAM, 2 TO 5 PERCENT SLOPES
CbA, CHUALAR LOAM, 0 TO 2 PERCENT SLOPES
CbB, CHUALAR LOAM, 2 TO 5 PERCENT SLOPES
GhC, GLORIA SANDY LOAM, 2 TO 9 PERCENT SLOPES
GhD, GLORIA SANDY LOAM, 9 TO 15 PERCENT SLOPES
HbB, HANFORD GRAVELLY SANDY LOAM, 0 TO 5 PERCENT SLOPES
PnA, PLACENTIA SANDY LOAM, 0 TO 2 PERCENT SLOPES
PnC, PLACENTIA SANDY LOAM, 2 TO 9 PERCENT SLOPES
SbA, SALINAS CLAY LOAM, 0 TO 2 PERCENT SLOPES
VaE, VISTA COARSE SANDY LOAM, 15 TO 30 PERCENT SLOPES
VaG, VISTA COARSE SANDY LOAM, 30 TO 75 PERCENT SLOPES
Vb, VISTA-ROCK OUTCROP COMPLEX

0 0.125 0.25 0.5 Miles

0 0.25 0.5 Kilometers

Project Boundaries

Source: NRCS, 2005

N

Soil Types

Figure 4.2-2

State Farmland Mapping & Monitoring Program

The State of California's Farmland Mapping and Monitoring Program (FMMP) monitors land use change affecting California's agricultural land. The program, administered by the California Department of Conservation's Office of Land Conservation, produces maps and statistical data to be used for assessing the importance of agricultural lands, which is rated according to soil quality and irrigation status. The best quality land is called Prime Farmland; other classifications, in descending order according to their suitability, include Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, Grazing Land, Urban and Built-up Land, and Other Lands.

Table 4.2-2
State Important Farmland Mapping Classifications

Category	Description
Prime	**Prime farmland** is land with the best combination of physical and chemical features able to sustain long-term production of agricultural crops. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. The land must have been used for the production of irrigated crops at some time during the two update cycles prior to the mapping date of 1992 (or since 1988).
Farmland of Statewide Importance	**Farmland of Statewide Importance** is land similar to prime farmland, but with minor shortcomings, such as greater slopes or with less ability to hold and store moisture. The land must have been used for the production of irrigated crops at some time during the two update cycles prior to the mapping date (or since 1988).
Unique Farmland	**Unique Farmland** is land of lesser quality soils used for the production of the State's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards, as found in some climatic zones in California. The land must have been cultivated at some time during the two update cycles prior to the mapping date (or since 1988).
Farmland of Local Importance	Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.
Other Land	**Other Land** is not included in other mapping category. For example, low density rural development; brush, timber; wetlands and riparian areas not suitable for livestock grazing; confined livestock; poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40.
Urban and Built-Up Land	**Urban and Built-Up Land** is occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. Common examples include residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, and water control structures.
Grazing Land	**Grazing Land** is land on which the existing vegetation is suited to the grazing of livestock. The minimum mapping unit for this category is 40 acres.

Source: California Department of Conservation

State of California's Farmland Mapping and Monitoring Program (FMMP) Classification. The 760 acres of potentially irrigated land have soils classified as Prime Farmland and Farmland of Statewide Importance by the Important Farmlands Mapping Program.

Natural Resources Conservation Service (NRCS) Land Capability Class System. Land Capability Classes (LCC) rate soils according to their characteristics and slopes. These classifications range from a 'high' of I-1 to a 'low' of VIIIs-1. Classes I and II are generally considered to be of prime agricultural significance. The NRCS also assigns a Storie Index Rating to soils, which is based exclusively on soil characteristics only. Lands which qualify for a Storie Index Rating of 80 to 100 are considered agriculturally significant.

NRCS Classification. Based on this system's criteria, approximately 561 acres are considered prime agricultural land due to their Capability Class I and II rating (Table 4.2-1).

Cortese-Knox Local Government Reorganization Act of 1985. The Cortese-Knox Act, defines "prime agricultural land" as an area of land, whether a single parcel or contiguous parcels, which has not been developed for a use other than agriculture and which meets any of the following qualifications identified below.

The Cortese-Knox Act

1. Land which qualifies for rating as class I or class II in the Soil Conservation Service land use capability classification and that qualifies for rating 80 through 100 Storie Index Rating.
2. Land which is used to maintain livestock for commercial purposes, which has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture in the National Handbook on Range and Related Grazing lands.
3. Land planted with fruit or nut-bearing trees, vines, bushes, or crops which have a nonbearing period of less than five years and which will return during the commercial bearing period on an annual basis for the production of unprocessed agricultural plant production not less than two hundred dollars ($200) per acre.
4. Land which has returned from the production of unprocessed agricultural plant products an annual gross value of not less than two hundred dollars ($200) per acre for three of the previous five calendar years.

Cortese-Knox Capability Classification. Three of the four criteria above apply to classifying prime lands within the project site. Approximately 500 acres meet criteria #1 exclusively, approximately 430 acres meet criteria #3, and the total potentially irrigated land area of 760 acres (actively cropped plus recently fallowed) could meet criteria #4. It should be noted that the City General Plan EIR provides an assessment of land in and around Soledad and acknowledges that almost all of the soils surrounding the urban area of the City meets at least one of these qualifications and, therefore, can be considered prime agricultural land with the exceptions of GhC (Gloria sandy loam 2 to 9 percent slopes) and Xb (Xerorthents, sandy).

California Agricultural Land Evaluation and Site Assessment

In 1993, Senate Bill 850 directed the State Resources Agency, in consultation with the Governor's Office of Planning and Research, to "…develop an amendment to Appendix G to provide lead agencies with an optional methodology to ensure that significant effects on the environment of agricultural land conversions are quantitatively and consistently considered in the environmental review process." The

result was the formulation of the California Agricultural Land Evaluation and Site Assessment Model (LESA). LESA is a point-based approach to assessing the relative value of agricultural land resources that relies on two separate sets of factors: land evaluation, which are primarily soil-based qualities of land, and site assessment factors that are intended to measure social, economic, and geographic attributes.

The California Agricultural LESA Model is composed of six different factors. Two Land Evaluation factors are based upon measures of soil resource quality. Four Site Assessment factors provide measures of a given project's size, water resource availability, surrounding agricultural lands, and surrounding protected resource lands (e.g. open space, conservation easement, or Williamson Act contract). For a given project, each of these factors is separately rated on a 100 point scale. The factors are then weighted relative to one another and combined, resulting in a single numeric score for a given project, with a maximum attainable score of 100 points. It is this project score that becomes the basis for making a determination of a project's potential significance, based upon a range of established scoring thresholds.

Buchanan Associates prepared a LESA model for this project site (included as Technical Appendix T-1). The California LESA Model is weighted so that 50 percent of the total LESA score of a given project is derived from the Land Evaluation factors and 50 percent from the Site Assessment factors. Individual factors are weighted with the sum of the factor weights required to equal 100 percent. A score of 80 to 100 points is considered significant under the California LESA Model Scoring Thresholds for Significance. A score between 60 to 79 points is also considered significant unless either the Site Assessment or Land Evaluation subtotals are less than 20. As indicated below, neither subtotal is less than 20 points.

LESA Evaluation Rating: The results of the LESA model determined that the proposed project would result in a significant rating, as shown in Table 4.2-3. This is largely due to the predominance of prime soils and large land area of the project site, as well as, a high percentage of agricultural land in the Zone of Influence surrounding the project site.

Table 4.2-3
LESA Model Project Score Results

Land Evaluation Factors	**Weighted Rating**
Land Capability Classification	18.25
Storie Index Rating	15.95
Land Evaluation Subtotal	**34.2**
Site Assessment Factors	
Project Size	15.0
Water Resource Availability	12.1
Surrounding Agricultural Lands	14.25
Surrounding Protected Resource Lands	0.0
Site Assessment Subtotal	**41.4**
Total LESA Score	**75.6**
Source, Buchanan Associates, August, 2007 Agricultural Resources Report and LESA model	

Monterey County Agricultural Commissioner

In addition to qualitative and quantitative methods used to determine potential impacts of agricultural land conversion, Monterey County also relies on the Agricultural Commissioner to assess the potential for development activities to impact the agricultural productivity of a given site. Among the criteria used by the Commissioner are the soil type(s) and their suitability for agriculture as defined by the USDA Natural Resources Conservation Service (NRCS); present and past agricultural use of the site; size, shape, and

slope of the site in question; availability and use of irrigation and agricultural practices on surrounding properties.

According to the USDA Soil Survey for Monterey County, total potential irrigated land within the project site is approximately 82 percent of the total project site or 760 acres. According to the 1998 Monterey County Important Farmlands Map (see Figure 4.2-1), these 760 acres of potentially irrigated soils are classified as Prime Farmland and Farmland of Statewide Importance by the California Department of Conservation Important Farmlands Mapping Program.

Monterey County Agricultural Resources

Monterey County is one of the primary agricultural regions in the State of California. The total value of agricultural products produced has been increasing steadily in real dollars (accounting for inflation) since 1990. Monterey County ranked third in the state in the value of crops produced in 2002 and as of 2005 was ranked fourth. Table 4.2.4 shows important crop revenues for Monterey County in 2002 and 2005. The data reflect the continuing importance of leaf lettuce and strawberries, as well as, the increasing importance of wine grapes and nursery crops. Conversely, the recent significant expansion of spinach production may be tempered in the near term. The gross value of agricultural production is multiplied by a factor of two to three times through the local economy due to the involvement of other sectors of the economy, including industry, retail trade, and commercial services. Table 4.2.4 also identifies changes in the value of selected Monterey County crops between 2002 and 2005.

Table 4.2-4
Changes In Value of Selected Monterey County Crops
Between 2002 and 2005

Crop	Value	
	2002	2005
Leaf lettuce	$429,400,000	$600,800,000
Head lettuce	$309,150,000	$311,800,000
Broccoli	$265,900,000	$156,100,000
Strawberries	$226,850,000	$385,750,000
Nursery	$218,700,000	$276,200,000
Grapes	$147,100,000	$254,600,000
Spinach	$49,100,000	$164,800,000
Spring Mix	$119,320,000	$132,277,000
Source: Monterey County Crop Report, 2002 and 2005		

Regulatory Framework

Williamson Act Contract

The California Environmental Quality Act requires the review of projects that would convert Williamson Act contract land to non-agricultural uses. The main purposes of the Williamson Act are to preserve agricultural land and to encourage open space preservation and efficient urban growth. The Williamson Act provides incentives to landowners through reduced property taxes to deter the early conversion of agricultural and open space lands to other uses.

According to CEQA Guidelines Section 15206 cancellation of Williamson Act contracts for parcels exceeding 100 acres is considered to be "of statewide, regional, or areawide significance," and thus

subject to additional noticing and review requirements under CEQA. The Williamson Act of 1965 is the state's principal policy for the preservation of agricultural and open-space land. The program encourages landowners to work with local governments to protect important farmland and open-space. Landowners can enroll parcels for a minimum of 10 years. This program helps local governments to restrict land to agricultural and compatible open space use. In doing so, land is assessed for property taxes at a rate consistent with its actual use, rather than the potential value of the land. The main purposes of the Williamson Act are to preserve agricultural land and to encourage open space preservation and efficient urban growth.

City of Soledad General Plan

The City of Soledad General Plan provides policies for the protection of agricultural resources. Please refer to Table 4.9-2 of the Land Use section for a detailed analysis of the project's consistency with the City's General Plan agricultural policies. There are a number of policies and programs in place that attempt to limit the loss of farmland. As the City of Soledad is largely surrounded by agricultural land, the City may have limited options other than conversion of farmland if it is to grow to meet population and housing demand. The policies of the City of Soledad and policies in the current and draft County of Monterey General Plans strongly encourage new development to occur only within areas that are within the City's urbanizing area and discourage the conversion of agricultural lands to urban uses where urban services are not available.

The Agricultural Resources section of the Soledad General Plan contains goals and policies that seek to limit adverse impacts to agricultural operations due to new development and, further, to protect and preserve agricultural land. The following are relevant:

Policy C/OS-1 The City shall discourage "leapfrog" development and development in peninsulas extending into agricultural lands to avoid adverse effects on agricultural operations.

Policy C/OS-2 The City shall retain the agricultural land use designation on lands within its planning area until the land is needed for urban development.

Policy C/OS-3 The City shall ensure that new development and public infrastructure projects do not encourage expansion of urban uses outside the general plan area into areas designated Agriculture by the Monterey County General Plan.

Policy C/OS-4 The City shall support the agricultural economy by encouraging the location of agricultural support industries in the City, establishing and promoting marketing of local farm products, and providing its regional fair share of adequate housing to meet the needs of agricultural labor.

Policy C/OS-5 The City shall require a right-to-farm condition to all future subdivision maps adjacent to farmlands.

Policy C/OS-6 The City shall require development within or adjacent to designated agricultural areas to minimize conflicts with adjacent agricultural uses.

The impacts to agricultural lands due to development accommodated by the Land Use Element was identified as a Class I unavoidable significant impact due to the conversion of state-identified prime agricultural land including the project site.

Environmental Impact Report on the Soledad General Plan. The General Plan EIR evaluated potential agricultural impacts associated with the adoption and implementation of the Soledad General Plan. This program-level EIR focused on general impacts associated with implementation of the General Plan, rather than project-specific impacts associated with individual development projects, such as the Miravale III project. According to the General Plan EIR, the following agricultural impacts were identified:

- Development as contemplated in the General Plan would result in the permanent conversion of 2,750 acres of Prime and Farmland of Statewide Importance. This impact was identified as significant and unavoidable.

- Expansion of urban uses as envisioned in the General Plan would generate potential land use incompatibilities between urban and agricultural land uses. This impact was identified as significant unless mitigated.

Miravale III Specific Plan

Section 6.0 "Implementation" of the Specific Plan identifies policies and implementation measures to identify conservation of a portion of the agricultural resources in the plan area during the first phases of the project and provides implementation policies for agricultural conflicts. Section 6.0 Implementation of the Specific Plan has the following implementation proposed:

Policy 6.2.1 Williamson Act Contracts. Under the California Land Conservation Act of 1965 local governments could enter into contractual agreements with private landowners for the purposes of restricting land use on a property to agriculture or related open space use. Properties under Williamson Act Contracts are assessed at their consistent usage, rather than their potential market value, substantially reducing the amount of owed property taxes. Contracts are subject to a rolling 10-year term whereby agreements are automatically renewed yearly, unless either party files a "notice of non-renewal." Once such a notice has been filed, a 10-year non-renewal process commences; at the end of the non-renewal process, the contract terminates. There is one Williamson Act Contract within the Plan Area. The contract, consisting of 2 parcels located within the urban reserve area at the northwestern property boundary, has a notice of non-renewal filed against it. These parcels shall not be developed until the contract is terminated.

Policy 6.2.3 Agriculture Interface. New residential units will abut the existing Urban Expansion and Agriculture zones. Within a small portion of the east side of the Specific Plan Area and on portions of the north and west boundaries some agricultural operations may take place. It is the declared policy of the County of Monterey, the governing jurisdiction to these parcels, to conserve, enhance, and encourage Agricultural Operations within the County and to minimize potential conflict between agricultural and nonagricultural land uses within the County.

The Monterey County Code Chapter 16.40 - Protection of Agricultural Activity states "Where nonagricultural land uses, especially residential development, extend into agricultural lands or are located in the vicinity of agricultural lands, Agricultural Operations may be the subject of complaints. Such complaints may cause the curtailment of Agricultural Operations and discourage investments for the improvement of agricultural land to the detriment of the economic viability of the agricultural industry of the County. It is the purpose and intent of this Chapter (16.40) to prevent the loss to the County of its agricultural resources by limiting the circumstances under which

Agricultural Operations may be considered a nuisance. This policy can best be implemented by educating residents about the laws protecting Agricultural Operations and Farm Operations from conflicts with non-agricultural uses and by notifying residential users of property adjacent to or near Agricultural Operations and Farm Operations of circumstances relative to agricultural activities which may be objectionable to owners and/or users of non-agricultural properties. These potentially objectionable circumstances may include, but are not limited to, the noises, odors, dust, chemicals, smoke, and extended hours of operation that may accompany Agricultural Operations."

It is the intention of the developer to disclose potential agricultural activities to future owners in keeping with intention of the Monterey County code. In addition, a 60' minimum landscaped buffer including a trail will be constructed along the west boundary of the Specific Plan area in order to buffer residences from potential agriculture uses.

Relevant Project Characteristics

The project proposes a primarily residential development consisting of residential, commercial, public facility, recreational and visitor serving uses and will include recreational trails, remainder parcels of open space, and agricultural buffers, as well as some agricultural use and recreation areas. The proposed site will be located on approximately 929 acres of which 430 acres are currently being used for the production of irrigated row crops. Total development of the site will be phased over a 15- to 20-year period with buildout occurring between 2027 and 2028.

The 760 acres of potentially irrigated land have soils classified as Prime Farmland and Farmland of Statewide Importance by the Important Farmlands Mapping Program. According to the *NRCS Land Capability Classification* criteria, approximately 561 acres are considered prime agricultural land due to their Capability Class I and II rating. Under Cortese-Knox, three of the four criteria apply to classifying prime lands within the project site.

Within the Specific Plan area, two parcels totaling approximately 107 acres are under Williamson Act contract, but are currently in non-renewal status with cancellation pending in 2016.

The Specific Plan states that there is "a 60' minimum landscaped buffer including a trail will be constructed along the west boundary of the Specific Plan area in order to buffer residences from potential agriculture uses." The Vesting Tentative Map identifies a buffer of varying width along this boundary.

Thresholds of Significance

A project that would convert prime agricultural land to non-agricultural use or impair the agricultural productivity could have a significant effect on the environment. No set acreage threshold of prime farmland conversion has been determined by case law or regulatory framework that would constitute a significant impact.

In accordance with CEQA Guidelines, a project impact would be considered significant if the project would:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;

- Conflict with existing zoning for agricultural use, or a Williamson Act contract; or

- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use.

Impacts and Mitigation

Conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance

The proposed project will convert a total of 929 acres of agricultural and grazing land to residential and commercial uses. Of this total, the project would convert approximately 760 acres of Prime Farmland to non-agricultural use. As the City of Soledad is largely surrounded by agricultural land, the City may have limited options other than conversion of farmland. City of Soledad policies in the General Plan strongly encourage new development to occur only within areas that are within the City's urbanizing area and discourage the conversion of agricultural lands to urban uses where urban services are not available.

The project site is contiguous to the City's current boundaries and part of "expansion areas" identified in the General Plan, which are considered appropriate areas for accommodation of the City's planned growth over the next 25 to 50 years. The impacts to agricultural lands due to development accommodated by the Land Use Element of the General Plan was identified as a Class I unavoidable significant impact due to the conversion of state-identified prime agricultural land including the project site.

Impact **The proposed project would include the conversion of state-identified prime agricultural land.** ***This impact to conversion of agricultural lands due to proposed development is considered significant and unavoidable.***

Conflict with Existing Zoning for Agricultural Use or Williamson Act Contract

Two parcels totaling approximately 107 acres (APN 257-001-026 and APN 257-001-027) and located on the northwestern portion of the Plan Area are currently under Williamson Act contract. The California Land Conservation Act (Williamson Act), California Government Code Section 51290 et seq., encourages conservation of agricultural lands by providing a tax incentive to land owners who contract with the County to restrict land uses to agriculture and compatible uses. Williamson Act contracts remain in effect for 10 years (minimum) unless the property owner files for a "Notice-of Non-Renewal" with the County. A notice of non-renewal has been filed and approximately 9 years (as of 2007) remain on the contract unless it can be cancelled prior to the expiration of this term.

Impact **Development of land designated for urban development as part of Phase 4 of the Specific Plan will require the cancellation of Land Conservation Act Contract 73-25 within the project site.** ***This is considered a significant and unavoidable impact due to the conversion of state-identified prime agricultural land.***

Conversion of Farmland Due to Changes in Existing Environment

The single most important factor in the decline of agricultural acreage in Monterey County has been the rapid spread of urban development. In the South Monterey County area, significant development pressures have resulted in the conversion of agricultural land to urban uses.

According to a study by the California Department of Conservation, conversions of farmland to urban uses adversely affect the efficiency of remaining farming operations in the area. For example, agricultural production decreases as a result of increased air pollution, livestock predation by pets, crop diseases resulting from inadequate care of off-farm ornamental plants, restriction on pesticide use and burning, and

requirements to set aside on-farm buffer zones. Production costs increase because of rising land costs, water scarcity, theft and vandalism of farm equipment, crop pilferage, road congestion, and personal injury liability associated with farm trespass.

Additionally, the conversion of agricultural land to urban uses can cause increases in land use compatibility problems and nuisance complaints due to urban uses being sited adjacent to agricultural uses. For example, farmers have to deal with vandalism, increased traffic on urban roads, and potential restrictions on the use of pesticides or the operation of certain equipment. Urban residents, on the other hand, are impacted by noise, odors, slow moving farm equipment on local roads, and pesticide or herbicide spray drift. As identified in the Specific Plan (6.0 Implementation), it is the developers intent to conform to Monterey County Code Chapter 16.40 - Protection of Agricultural Activity in order to minimize potential land use conflicts.

To further minimize potential conflicts, including human health concerns, between urban and agricultural uses, the Monterey County Agricultural Commissioner generally recommends at least a 200 foot buffer between agricultural and non-agricultural uses. The inclusion of an agricultural buffer is necessary to protect the public health, safety, and welfare of people and protect the economic viability of agricultural production. Buffers are required to lessen public and animal exposure to agricultural chemicals, dust, noise, and odors and protect agricultural uses from vandalism, pilferage, trespassing, and complaints against standard legal practices. For the purpose of this analysis, the Monterey County Agricultural Commissioner's recommended buffer distance is considered the minimum distance to ensure appropriate separation between agricultural and non-agricultural uses.

As currently proposed, the project includes a 60 foot landscaped buffer including a trail along the west boundary of the Specific Plan area to buffer residences from existing agriculture uses. The Buchanan Agricultural Report (Technical Appendix T-1), as summarized below, discusses areas of buffer and agricultural uses in the project site.

> **Western Boundary Buffer** - All of the land on the western edge and southwest corner of the project site adjoins row crop lands used for vegetable production. Routine and on-going operations will typically generate dust and noise, and require application of pesticides (likely ground applied). The current access road immediately adjacent to this boundary has heavy agricultural equipment traffic and is used for temporary storage of field equipment, as well as two surface impoundments for irrigation close to the project boundary. Prevailing wind direction and duration will increase the likelihood for potential conflict between agricultural and residential land uses during application of pesticides in this area.
>
> Therefore, an adequate buffer shall require some type of physical barrier combined with adequate distance in areas where residential and commercial structures are to be located. This is required to minimize the potential liabilities related to safety and potential injury, theft, and vandalism. The proposed Urban Reserve and golf course fairways in the northwest area (currently Williamson Act contract lands) would provide adequate buffer distance as long as access to adjacent fields can be restricted. Vegetation in the area will need to be managed to be consistent with agricultural pest and food safety management requirements for leafy green and vegetable crops. As previously identified, the proposed project includes a 60' agricultural buffer along the residential areas adjacent to existing agricultural uses.

Northern Boundary Buffer - Most of the land on the northern edge of the project site adjoins rural residential and grazing lands or non-agricultural land owned by the City of Soledad. Routine operations on these lands are less likely to generate conflicts between land uses, therefore adequate buffer could be achieved with physical barriers and a minimum 50 foot distance from residential structures. As a significant portion of the northern boundary towards the east will be park open space, this should serve as an adequate buffer as long as public access to adjacent private lands is restricted.

Eastern Boundary Buffer - All of the land on the eastern edge of the project site adjoins rural residential and grazing lands. Routine operations on these lands are less likely to generate conflicts between land uses, therefore adequate buffer could be achieved with physical barriers and a minimum 50 foot distance from residential structures.

Although the proposed 60 foot western buffer does not meet the minimum distance recommended by the Agricultural Commissioner's office, additional measures such as vegetative/landscaped berms, screening, and other similar measures can be incorporated to achieve similar results. Moreover, as identified in the Buchanan Agricultural Report, the requirements for and attributes of functional buffers may differ depending on the nature of routine and on-going agricultural operations and practices. Generally agricultural buffers can include constructed fences or walls, earthen berms, roadways, drainage ditches, parking areas, landscaped or other vegetated areas. To ensure that adequate measures, such as those identified above, are incorporated into the proposed buffer area, project-specific mitigation measures have been incorporated to reduce project impacts to a less-than-significant level. Implementation of the following mitigation measures would not result in any new environmental impact beyond those identified in this EIR.

Impact **The proposed project will be sited adjacent to existing agricultural uses located on the boundary of the project footprint. This has the potential to cause an increase in land use compatibility problems and nuisance complaints due to urban uses being sited adjacent to agricultural uses. In order to minimize these potential land use conflicts, the project has been designed with a minimum 60' buffer zone between the residential and agricultural uses along the western boundary of the project site. Additional buffers, however, are warranted along the northern and eastern project boundaries. Moreover, as currently proposed, the 60' buffer does not meet the minimum buffer distance recommended by the Monterey County Agricultural Commissioner. To ensure that residential uses are adequately buffered from agricultural uses, additional measures are necessary to protect human health and the environment resulting from potential conflicts between agricultural and urban uses.** ***This impact can be reduced to less-than-significant with the following mitigation.***

Mitigation

4.2-1 Adequate buffer areas between urban and agricultural uses, including a minimum 50' buffer along the northern and eastern boundary of the project site, shall be incorporated into the proposed project. Prior to the recordation of any final map, the project applicant shall submit evidence in the form of agricultural setbacks delineating buffer locations consistent with the recommendations contained in the Agricultural Resources Report, subject to the review and approval of the City of Soledad.

4.2-2 In order to ensure the adequacy of the proposed 60' agricultural buffer located along the western boundary of the project site, the project applicant shall submit a detailed landscape plan that includes vegetative screening in addition to physical barriers, such as fences, walls, or similar to protect human health and safety. One or more of the following options may also be used in combination with landscaping requirements to create an average 60 foot buffer between the agricultural parcel property line and habitable structures within the Plan area:

a. Public or private road right-of-ways;
b. Landscaped islands and planting areas;
c. Recreational trail corridors; and/or
d. Placing dwellings in the rear portion of lots.

Prior to the recordation of any final map along the western project boundary, an agricultural buffer setback shall be delineated on the final map, subject to the review and approval of the City of Soledad.

4.2-3 Prior to the issuance of any certificate of occupancy for residences adjacent to on-going agricultural uses on the western project boundary, the project applicant shall provide documentation demonstrating that adequate screening and landscaped improvements have been installed and/or constructed within the 60' agricultural buffer, subject to the review and approval of the City of Soledad.

Impact **The proposed project has the potential to impact routine and on-going agricultural activities on the areas adjacent to the northern, eastern, and western boundaries of the project site.** ***The following mitigation measures are recommended to reduce these impacts to the extent possible, project related impacts, however, are considered significant and unavoidable.***

4.2-4 Access for agricultural equipment and vehicles to the adjoining row crop land on the western boundary shall continue to be provided from the ramp to Highway 101 North (see Figure 2 in Technical Appendix T-1, Agricultural Report). The current access road to the Braga property should remain at the current width to allow for passing and ensure adequate turnaround space for field equipment. Implementation of this measure would reduce impacts to routine and on-going agricultural operations on lands west of the proposed project site.

4.2-5 Prior to the issuance of any permit, the project applicant shall have recorded a right-to-farm notice on parcels adjacent to existing and on-going agricultural uses consistent with the requirements of the City of Soledad General Plan, subject to the review and approval of the City of Soledad.

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4.3 AIR QUALITY

Introduction

This section presents the potential air quality impacts associated with construction and operation of the proposed Miravale III Specific Plan project. It is based on an air quality analysis prepared for the project by Illingworth & Rodkin, Inc (June 26, 2007; Revised August 29, 2007). The analysis of regional operational emissions using the Urbemis 2007 model and the analysis of greenhouse gas and climate change issues was completed by DD&A in December 2007. The sources of information for this analysis are: 1) Monterey Bay Unified Air Pollution Control District, CEQA Air Quality Guidelines (February 2008), and 2) Monterey Bay Unified Air Pollution Control District, 2008 Air Quality Management Plan (June 2008). The air quality analysis calculation sheets and air quality consistency determination are provided in Appendix E. A copy of the Air Quality Study prepared by Illingworth & Rodkin, Inc. is included as Technical Appendix T-2 and is included in Volume II of this DEIR.

The proposed project is located in the North Central Coast Air Basin (NCCAB), which includes Monterey, Santa Cruz, and San Benito counties. Although the NCCAB is in attainment of all federal air quality standards, it is designated as nonattainment with respect to the more stringent state PM_{10} standard and the state eight-hour ozone standard. Plans to attain these standards already accommodate the future growth projections available at the time these plans were prepared. Any development project capable of generating air pollutant emissions exceeding regionally-established criteria is considered significant for purposes of CEQA analysis, whether or not such emissions have been accounted for in regional air planning. Furthermore, any project that would directly cause or substantially contribute to a localized violation of an air quality standard would generate substantial air pollution impacts. The same is true for a project that generates a substantial increase in health risks from toxic air contaminants, or introduces future occupants to a site exposed to substantial health risks associated with such contaminants.

In response to the Notice of Preparation (NOP) for this EIR, the Monterey Bay Unified Air Pollution Control District (MBUAPCD) made recommendations for the scope of work for the EIR's air quality analysis. The City has followed those recommendations.

Setting

Regional and Local Climate and Topography[1]

Climatological conditions, an area's topography, and the quantity and type of pollutants released commonly determine ambient air quality. The proposed project is located in the NCCAB, which covers an area of 5,159 square miles along the central California coast. The northwest sector of the NCCAB is dominated by the Santa Cruz Mountains. The Diablo Range marks the northeastern boundary. The Santa Clara Valley extends into the northeastern tip of the basin. Further south, the Santa Clara Valley becomes the San Benito Valley, which runs northwest-southeast, with the Gabilan Range as its western boundary. To the west of the Gabilan Range is the Salinas Valley, which extends from Salinas at the northwest end to south of King City. The coastal Santa Lucia Range defines the western side of the valley.

Climate, or the average weather condition, affects air quality in several ways. Wind patterns can remove or add air pollutants emitted by stationary or mobile sources. Inversion, a condition where warm air traps cooler air underneath it, can hold pollutants near the ground by limiting upward mixing (dilution).

[1] The greenhouse gas and global climate change environmental setting is included in **5.0 CEQA Considerations** in this Draft EIR.

Communities with cold climates may burn wood or other fuels for residential heating, whereas areas with hot climates may have higher emissions or some pollutants from automobiles. Topography also plays a part, as valleys often trap emissions by limiting lateral dispersal.

A semi-permanent high pressure cell in the eastern Pacific, the Pacific High, is the basic controlling factor in the climate of the NCCAB. In the summer, the high pressure cell is dominant and causes persistent west and northwest winds over the entire California coast. Air descends in the Pacific High, forming a stable temperature inversion of hot air over a cool coastal layer of air. The onshore air currents pass over cool ocean waters to bring fog and relatively cool air into the coastal valleys. The warmer air aloft acts as a lid to inhibit vertical air movement. The generally northwest-southeast orientation of mountainous ridges tends to restrict and channel the summer onshore air currents. Surface heating in the interior portion of the Salinas and San Benito Valleys creates a weak low pressure that intensifies the onshore air flow during the afternoon and evening. In the fall, the surface winds become weak, and the marine layer grows shallow, dissipating altogether on some days. The air flow is occasionally reversed in a weak offshore movement, and the relatively stationary air mass is held in place by the Pacific High pressure cell, which allows pollutants to build up over a period of a few days. It is most often during this season that the north or east winds develop to transport pollutants from either the San Francisco Bay Area or the Central Valley into the NCCAB.

During the winter, the Pacific High migrates southward and has less influence on the NCCAB. Air frequently flows in a southeasterly direction out of the Salinas and San Benito Valleys, especially during night and morning hours. The general absence of deep, persistent inversions and the occasional storm systems usually result in good air quality for the basin as a whole in winter and early spring.

The project site is located east of Highway 101 on the eastern border of the City of Soledad, about 35 miles southeast of Monterey Bay, and about 25 miles south of Salinas. Winds from the northwest are most common in Soledad and the rest of the Salinas Valley. In general, wind flow is aligned along the valley orientation. In the winter, winds tend to flow down the Salinas Valley from the southeast toward Monterey Bay, averaging about 2.6 miles per hour (mph). In the spring, winds tend to blow from the west (on-shore) averaging about 6.5 mph. In the fall, winds flow from the southeast during the night, and switch to the west and northwest by about 10 a.m., and average about 2.4 mph.[2] Rainfall in the area averages about 13.4 inches per year, with almost all substantial precipitation occurring between November and April. The presence or absence of winter storms and rainfall affect dust generation on plowed fields, wildfires, and other factors influencing local air quality. Temperatures are generally mild, with little winter frost, and summer maxima rarely exceeding 100 F.

Regulatory Context

Federal

Criteria Air Pollutants. The Federal Clean Air Act (CAA) authorized the establishment of federal air quality standards and set deadlines for their attainment. The CAA identifies specific emission reduction goals, requires both a demonstration of reasonable further progress and attainment, and incorporates more stringent sanctions for failure to meet interim milestones. The U.S. EPA is the federal agency charged with administering CAA and other air quality-related legislation. The North Central Coast Air Basin is classified as in attainment for all federal air quality standards since the revocation of the federal 1-hour ozone standard in June of 2005. The most recent Federal Plan prepared by Monterey Bay Unified Air Pollution Control District to maintain the federal 8-hour ozone standard is the 2007 Federal Maintenance

[2] *California Surface Wind Climatology,* California Air Resources Board, Modeling and Meteorology Branch, June 1989.

Plan for Maintaining the National Ozone Standard in the Monterey Bay Region (March 2007). This plan was prepared pursuant to the Clean Air Act because the North Central Coast Air Basin had an approved Maintenance Plan for the 1-hour ozone standard that has since been revoked, and the basin is in attainment of the 8-hour ozone standard.

The CAA of 1970, as amended, establishes air quality standards for several pollutants. National Ambient Air Quality Standards (NAAQS) are established for six "criteria" air pollutants: carbon monoxide (CO), nitrogen oxides (NO_x), ozone (O_3), respirable particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), sulfur oxides (SO_x), and lead. Pursuant to the California Clean Air Act, the State of California has also established ambient air quality standards, the California Ambient Air Quality Standards (CAAQS). These standards are generally more stringent than the corresponding federal standards and incorporate additional standards for sulfates, hydrogen sulfide, vinyl chloride and visibility reducing particles. Table 4.3-1 identifies the characteristics, health effects and typical sources of the six federal air pollutants.

Hazardous Air Pollutants (HAPs). One means by which the U.S. EPA addresses HAP exposure is through the National Emission Standards for Hazardous Air Pollutants (NESHAPS)[3] that include source-specific regulations that limit allowable emissions of such pollutants.

State

The California Air Resources Board (CARB) coordinates and oversees both state and federal air pollution control programs in California. As part of this responsibility, CARB monitors existing air quality, establishes state air quality standards, and limits allowable emissions from vehicular sources. Regulatory authority within established air basins is provided by local air pollution control agencies, which control stationary-source and most categories of area-source emissions and develop regional air quality plans. The project is located within the jurisdiction of the Monterey Bay Unified Air Pollution Control District.

The state and federal standards for the criteria pollutants are presented in Table 4.3-2. These standards are designed to protect public health and welfare. The "primary" standards have been established to protect the public health. The "secondary" standards are intended to protect the nation's welfare and account for air pollutant effects on soils, water, visibility, materials, vegetation and other aspects of general welfare.

Criteria Air Pollutants. California has established its own set of ambient air quality standards that are generally more stringent than the corresponding federal standards. The California Clean Air Act, effective January 1, 1989, provides a planning framework for attaining the state standards. Nonattainment areas in the state were required to prepare plans for attaining these standards. Attainment plans are required to demonstrate a five percent per year reduction in the emissions of nonattainment pollutants or their precursors, unless all feasible measures are being employed. The attainment status of the NCCAB with respect to these criteria pollutants is described under the section titled: "Air Pollutant Concentrations, Standards Violations and Risk Levels" below.

Toxic Air Contaminants (TACs). The state regulates TACs primarily through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). The Tanner Act institutes a formal procedure for designating substances as TACs. The procedure includes research, public participation, and scientific peer review before CARB designates a substance as a TAC.

[3] The NESHAPS are promulgated under Title 40 of the Code of Federal Regulations (CFR), Parts 61 & 63.

Table 4.3-1
Criteria Pollutants

Pollutant	Characteristics	Health Effects	Major Sources
Ozone (O_3)	A highly reactive photochemical pollutant created by the action of sunshine on ozone precursors (primarily reactive hydrocarbons and oxides of nitrogen). Often called photochemical smog. Highest concentrations of ozone are found downwind of urban areas.	▪ Respiratory function impairment.	Sources of ozone precursors (nitrogen oxides and reactive hydrocarbons) are combustion sources, such as factories and automobiles, and evaporation of solvents and fuels.
Carbon Monoxide (CO)	Carbon monoxide is an odorless, colorless gas that is highly toxic. It is formed by the incomplete combustion of fuels. CO concentrations are highest in the winter, when radiation inversions over large areas can limit vertical dispersion.	▪ Impairment of oxygen transport in the bloodstream. ▪ Aggravation of cardiovascular disease. ▪ Fatigue, headache, confusion, dizziness. ▪ Can be fatal in the case of very high concentrations.	Automobile exhaust, combustion of fuels, combustion of wood in woodstoves and fireplaces.
Nitrogen Dioxide (NO_2)	Reddish-brown gas that discolors the air, formed during combustion. Nitrogen dioxide levels in California have decreased in recent years due to reduced power plant and improved automobile emissions. Ambient standards are typically not exceeded in NCCAB.	▪ Increased risk of acute and chronic respiratory disease. ▪ Also, it is an ozone precursor.	Automobile and diesel truck exhaust, industrial processes, fossil-fuel powered plants. Also formed via atmospheric reactions.
Sulfur Dioxide (SO_2)	Sulfur dioxide is a colorless gas with a pungent, irritating odor. Ambient standards for sulfur dioxide are rarely exceeded in the NCCAB.	▪ Aggravation of chronic obstruction lung disease. ▪ Increased risk of acute and chronic respiratory disease.	Diesel vehicle exhaust, oil-powered power plants, industrial processes.
PM_{10} & $PM_{2.5}$	Solid and liquid particles of dust, soot, aerosols and other matter which are small enough to remain suspended in the air for a long period of time. PM_{10} is particulate matter with diameter less than 10 microns. $PM_{2.5}$ is particulate matter with diameter less than 2.5 microns. $PM_{2.5}$ has been found to be more harmful to humans.	▪ Aggravation of chronic disease and heart/lung disease symptoms.	Combustion, automobiles, field burning, factories and unpaved roads. Also, formed secondarily by photochemical processes of combustion emissions. $PM_{2.5}$ is primarily a secondary pollutant.

Table 4.3-2
Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	State Standard	Federal Standard	
			Primary	Secondary
Ozone	1-Hour 8-Hour	0.09 ppm (180 µg/m^3) 0.07 ppm (137 µg/m^3)	- - 0.08 ppm (157 µg/m^3)	- - 0.08 ppm (157 µg/m^3)
Carbon Monoxide	8-Hour 1-Hour	9.0 ppm (10 mg/m^3) 20 ppm (23 mg/m^3)	9.0 ppm (10 mg/m^3) 35.0 ppm (40 mg/m^3)	- - - -
Nitrogen Dioxide	Annual 1-Hour	0.030 ppm (56 µg/m^3) 0.18 ppm (338 µg/m^3)	0.053 ppm (100 µg/m^3) - -	0.053 ppm (100 µg/m^3) - -
Sulfur Dioxide	Annual 24-Hour 3-Hour 1-Hour	- - 0.04 ppm (105 µg/m^3) - - 0.25 ppm (655 µg/m^3)	0.03 ppm (80 µg/m^3) 0.14 ppm (365 µg/m^3) - - - -	- - - - 0.5 ppm (1,300 µg/m^3) - -
PM_{10}	Annual 24-Hour	20 µg/m^3 50 µg/m^3	- - 150 µg/m^3	- - 150 µg/m^3
$PM_{2.5}$	Annual 24-Hour	12 µg/m^3 no separate state standard	15 µg/m^3 35 µg/m^3	15 µg/m^3 35 µg/m^3
Lead	Calendar quarter	- -	1.5 µg/m^3	1.5 µg/m^3
	30-day	1.5 µg/m^3	- -	- -
Sulfate	24-Hour	25 µg/m^3	- -	- -
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m^3)	- -	- -
Vinyl Chloride	24-Hour	0.010 ppm (26 µg/m^3)	- -	- -
Visibility Reducing Particles	8-hours (10 am - 6 pm)	Extinction coefficient of 0.23 per km - visibility of ≥ 10 miles due to particles when relative humidity is < 70%.	- -	- -

mg/m^3 = milligrams per Cubic Meter
µg/m^3 = micrograms per Cubic Meter
Annual = annual arithmetic mean
ppm = parts per million

Source: http://www.arb.ca.gov/research/aaqs/aaqs2.pdf

CARB adopts an Airborne Toxics Control Measure for sources that emit designated TACs. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure below the threshold. If there is no safe threshold, the measure must incorporate Best Available Control Technology (BACT) to minimize emissions. For source categories under the regulatory jurisdiction of the individual air districts (as previously described), those air districts adopt and enforce the control measure locally.

Within California, the Office of Environmental Health Hazard Assessment (OEHHA) works with CARB to address health risk issues associated with TACs. The OEHHA establishes Reference Exposure Levels (RELs) as indicators of potential adverse health effects. An REL is a concentration level of a TAC at or below which no adverse health effects are anticipated. The OEHHA has published health *Risk Assessment Guidelines* for the Air Toxics Hotspots program. Within California, those guidelines are commonly referenced in the adoption of general health risk policies, assessment guidelines and thresholds at the regional level. OEHHA representatives have indicated that a comprehensive update to these guidelines is currently in the late stages of internal development, and is expected to include more specific guidance on addressing cancer risk in the context of relatively short-term exposures. OEHHA staff hopes to release the draft update and have the public review phase completed sometime in 2008. The published chronic inhalation REL for diesel particulate matter is 5 $\mu g/m^3$.

In August 1998 CARB listed "Particulate Matter Emissions from Diesel-Fueled Vehicles" as a TAC. In 2000, CARB developed a Risk Reduction Plan (RRP) to address this source of TACs, and is currently in the process of implementing this Plan. The RRP estimated cancer risk levels from diesel particulate matter (DPM) emissions associated with various source categories, including freeways, stationary engines, distribution (trucking) centers, truck stops and locations with concentrations of school bus idling. The RRP contains the following three components:

1) New regulatory standards for all new on-road, off-road, and stationary diesel-fueled engines and vehicles to reduce DPM emissions by about 90 percent overall from 2000 levels;

2) New retrofit requirements for existing on-road, off-road, and stationary diesel-fueled engines and vehicles where determined to be technically feasible and cost-effective; and

3) New Phase 2 diesel fuel regulations to reduce the sulfur content levels of diesel fuel to no more than 15 ppm to provide the quality of diesel fuel needed by the advanced DPM emission controls.

According to the RRP, "the projected emission benefits associated with the full implementation of this plan, including proposed federal measures, are reductions in DPM emissions and associated cancer risks [relative to a year 2000 baseline] of 75 percent by 2010 and 85 percent by 2020." Since adoption of the RRP, CARB has conducted regulatory activities to implement all three plan components. Examples include the "Diesel Particulate Matter Control Measure for On-road Heavy-duty Diesel-fueled Residential and Commercial Solid Waste Collection Vehicles" and Airborne Toxic Control Measures for stationary compression ignition engines; portable engines rated at 50 horsepower and greater; in-use diesel-fueled transport refrigeration units (TRU) and TRU generator sets, and facilities where TRUs operate; and diesel-fueled commercial motor vehicle idling.

In July of 2007, CARB approved a new regulation to reduce emissions from existing off-road diesel vehicles in California in construction, mining and other industries. The regulations requires vehicle fleets to either meet a set of fleet average targets for NOx and particulate matter or to turn over and apply exhaust retrofits to a certain percent of the fleets' horsepower (hp) per year. The first compliance date for large fleets is 2010, and for small fleets is 2015. This regulation is relevant to future construction under the Miravale III plan that would occur in 2010 or later depending upon the size and type of fleet of the relevant contractor(s).

In 2005, CARB published their *Air Quality and Land Use Handbook: A Community Health Perspective* (referred to hereafter as "Air Quality and Land Use Handbook"). This document includes various siting recommendations for proposed sensitive land uses relative to localized air pollution sources. Some of its recommendations are driven by exposure to TACs in general and DPM in particular. The *Air Quality and Land Use Handbook* recommends avoiding the siting of "new sensitive land uses within 500 feet of a

freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day." This recommendation is driven largely by the contribution of DPM to the overall air pollution impact from such transportation sources.

Regional

The MBUAPCD regulates air quality in the NCCAB, is responsible for attainment planning related to criteria air pollutants, and conducts district rule development and enforcement. It also reviews air quality analyses prepared for CEQA assessments and has published the *CEQA Air Quality Guidelines* document for use in evaluation of air quality impacts.

Criteria Air Pollutants. The California Clean Air Act, effective January 1, 1989, provides a planning framework for attaining the state standards. Nonattainment areas in the state were required to prepare plans for attaining these standards. Attainment plans are required to demonstrate a five percent per year reduction in the emissions of nonattainment pollutants or their precursors, unless all feasible measures are being employed. The North Central Coast Air Basin's designation with respect to the state ozone and PM_{10} standards is nonattainment. The County (and the remainder of the North Central Coast Air Basin) is designated as attainment with respect to the state CO and $PM_{2.5}$ standards. Therefore, the two key regional criteria pollutants in the North Central Coast Air Basin are ozone and PM_{10}. The California Clean Air Act (Health & Safety Code sections 40910 et seq.) requires each nonattainment district to adopt an Air Quality Management Plan showing how the California Ambient Air Quality Standards for ozone would be met in their area of jurisdiction. The fifth and most recent update to the original (1991) Air Quality Management Plan was adopted by Monterey Bay Unified Air Pollution Control District in June of 2008.

MBUAPCD have not recorded violations of the federal or state CO standard at monitoring stations. In connection with proposed land development projects, the MBUAPCD addresses potential CO exposure issues primarily through guidance on how and under what conditions local ambient CO "hot-spot" analysis should be performed in the context of air quality assessments for documents prepared pursuant to the CEQA.

MBUAPCD planning related to attainment of the state's PM_{10} standard was addressed in the *2005 Report on Attainment of the California Particulate Matter Standards in the Monterey Bay Region* (which updated corresponding 1995, 1996, and 1998 reports), *(Senate Bill 656 Implementation Plan).* This plan describes the greater vulnerability of coastal locations within the NCCAB to PM_{10} standard violations, due largely to the contribution from sea salt. It focuses primarily on controlling particulate sources related fugitive dust and smoke related to combustion, but also addresses NO_x- and ROG-related particulate formation. Consistent with the requirements of SB 656, and with the difficulty in estimating future ambient concentrations of particulate matter substantially influenced by fugitive dust sources (even disregarding unusual burn events), this plan concentrates on identification of and implementation scheduling for available PM emission control measures.

MBUAPCD regulates the creation of air pollutant emissions that would cause public nuisances while operating within the District under Rule 402. This rule states: "No person shall discharge from any source whatsoever such quantities of air contaminants or other materials which cause injury, detriment, nuisance, or annoyance to any considerable number of person or to the public; or which endanger the comfort, repose, health or safety of any such person or the public; or which cause, or have a natural tendency to cause, injury or damage to business or property." (HSC Section 41700)

Toxic Air Contaminants. MBUAPCD Rule 1000 (Permit Guidelines and Requirements for Sources Emitting Toxic Air Contaminants) addresses exposure issues for TACs in general. It applies to stationary

sources for which the state has not adopted an Air Toxics Control Measure (ATCM). It considers new and modified TAC source review and risk assessment requirements. The MBUAPCD's CEQA Air Quality Guidelines provide the following guidance to evaluate the potential significance of project-related TAC impacts:

> "Construction, equipment or processes not subject to Rule 1000 that emit noncarcinogenic TACs could result in significant impacts if emissions would exceed the threshold that is based on the best available data [i.e., acute (1-hour) REL, chronic (annual) REL, PEL/420] In addition, temporary emissions of a carcinogenic TAC that can result in a cancer risk greater than one incident per 100,000 population are considered significant.
>
> Likewise, a project which would be located adjacent to a source of TACs unregulated by Rule 1000 may also result in significant impacts to air quality and human health and require modeling. Common sources of TACs include diesel fueled internal combustion engines."

The MBUAPCD assumes that diesel particulate matter is the key element of diesel exhaust with respect to cancer risk. In November 2007, the Office of Environmental Health Hazard Assessment (OEHHA) released a draft document titled, Air Toxics Hot Spots Program Technical Support Document (TSD) for the Derivation of Noncancer Reference Exposure Levels for public review. This revised draft TSD presents methodology revised to reflect scientific knowledge and techniques developed since the previous guidelines were prepared, and to explicitly consider effects on the health of infants, children and other sensitive subpopulations, in accordance with the mandate of the Children's Environmental Health Protection Act (Senate Bill 25, Escutia, chapter 731, statutes of 1999, Health and Safety Code Sections 39669.5 et seq.). The MBUAPCD Board suspended application of the reference exposure level (REL, i.e., threshold) for acute impacts of acrolein in June 2007. MBUAPCD staff had planned to return to the Board in September 2007 with a recommendation regarding reinstatement. Due to the ongoing delay by the OEHHA in adopting a revised REL (expected in the fall of 2008 at the earliest), MBUAPCD suspension of the acute acrolein REL will continue through the end of 2008.

Local

The City of Soledad's Municipal Code Section 17.30.240.C Air Pollutants specifies a process whereby the City intends to ensure air pollution control "No emission of fly ash, dust, fumes, vapors, gases, or other forms of air pollution which can damage the health of humans or animals, or to vegetation or other forms of property is permitted."

Existing Ambient Air Quality

Air quality in the region is controlled by the rate of pollutant emissions and meteorological conditions. Meteorological conditions such as wind speed, atmospheric stability, and mixing height may all affect the atmosphere's ability to mix and disperse pollutants. Long-term variations in air quality typically result from changes in air pollutant emissions, while frequent, short-term variations result from changes in atmospheric conditions. While the City of Soledad enjoys air quality that meets most State and Federal standards, other parts of the air basin do not. Surface winds often move pollutants from their emission source to other areas where an impact may be felt. The primary determinant of concentrations of non-reactive pollutants (such as CO and PM_{10}) is proximity to major sources. As previously discussed, ambient CO levels usually closely follow the spatial and temporal distributions of vehicular traffic.

CARB (occasionally with the assistance of private sector partners) and relevant air pollution control districts operate a number of ambient air quality monitoring stations throughout the County and the remainder of the NCCAB. The MBUAPCD monitors air quality at 10 monitoring stations in the NCCAB. The National Park Service also operates a station at Pinnacles National Monument. The closest monitoring stations in the project vicinity are in Salinas (855 E. Laurel Dr.) and King City (at 750 Metz Road, and beginning in 2007, at 415 Pearl Street). Pollutants monitored on a continuous basis at the Salinas site include ozone, PM_{10} and $PM_{2.5}$, CO, and $NO_X - NO_2$, and at the King City sites include ozone and PM_{10}.

Areas that do not violate ambient air quality standards are considered to have attained the standard. Violations of ambient air quality standards are based on air pollutant monitoring data and are judged differently for each air pollutant. The NCCAB as a whole does not meet state ambient air quality standards for PM_{10} and ground level O_3. The U.S. EPA considers the region to be a maintenance area for the federal ozone standards since the 8-hour ozone standard has been attained. For all other standards, the U.S. EPA and the State have classified the region as attainment.

For three recent monitoring years (2005 – 2007), there was only one recorded exceedance of the state 8-hour ozone standard (0.078 ppm on July 22, 2006) at the King City monitoring station. There were no other exceedances of a state or national air quality standards for ozone at the King City or Salinas monitoring stations recorded during that period. In addition, there were no exceedances of the CO, $PM_{2.5}$, and NO_2 standards at the Salinas Station and King City did not measure those pollutants. The exceedances of the state PM_{10} standard and highest concentrations measured at the Salinas and King City monitoring stations are shown in Table 4.3-3. The highest measurements and the only exceedance were reported at the Salinas monitoring station in 2006.

Table 4.3-3
Exceedances of the State PM_{10} Air Quality Standard*

Year	King City Monitoring Station	Salinas Monitoring Station
2005	0 days (38 $\mu g/m^3$)	0 days (37 $\mu g/m^3$)
2006	0 days (50 $\mu g/m^3$)	1 days (51 $\mu g/m^3$)
2007	0 days (25 $\mu g/m^3$)	0 days (39 $\mu g/m^3$)
*Number of days (highest concentration in micrograms/cubic meter, $\mu g/m^3$)		

Sensitive Receptors

Sensitive receptors or populations are more susceptible to the effects of air pollution than are the general population. Sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, and convalescent and retirement homes. The receptors that should be considered in the analysis of carbon monoxide levels include the following, as set forth in the MBUAPCD CEQA Air Quality Guidelines:

- Sidewalks where general public has access on a continuous basis (1-hour)
- Parking lots where pedestrians have continuous access (1-hour)
- Property lines of hospitals, rest homes, schools, playgrounds (1-hour and 8-hour)
- Property lines of residences where continuous outdoor exposure is expected (1- and 8-hour)
- Setbacks of residences where continuous exposure is expected (1-hour and 8-hour)

Existing sensitive receivers in the project vicinity include the Rose Farrero School and existing residences within the City of Soledad that abut the project site along most of its south-facing boundary.

Emissions

Criteria Air Pollutants. Table 4.3-4, summarizes the most recent emissions inventories for Monterey County and the NCCAB as a whole. As shown in Table 4.3-4, on-road motor vehicles represent only one of many categories of emissions sources within the County and NCCAB. However, such vehicles account for nearly half of total human-generated CO and NO_x emissions. Both area-wide and mobile sources contribute substantially to emissions of ROG. For PM_{10}, emissions from "miscellaneous processes" are dominant. Construction-related activities also contribute to regional air pollutant emissions. Such activities account for an estimated six percent of County- and Basin-wide PM_{10} emissions under the "Area-Wide Sources: Miscellaneous Processes" category, a large proportion of the approximately six percent of "Area-Wide Sources: Solvent Evaporation" emissions of ROG attributed to the application of architectural coatings and asphalt paving, and a small proportion of the estimated emissions in the "Mobile Sources: Other Mobile" category.

TABLE 4.3-4
2006 Estimated Annual Average Emissions Of Selected Criteria Air Pollutants For The NCCAB And Monterey County (NCCAB Portion)

EMISSIONS IN NCCAB (IN TONS PER DAY)

	TOG	ROG	CO	NO_X	PM_{10}	$PM_{2.5}$
STATIONARY SOURCES						
FUEL COMBUSTION	2.9	0.9	12.5	15.5	1.1	1.1
WASTE DISPOSAL	230.8	1.5	0.3	0	0	0
CLEANING AND SURFACE COATINGS	4.3	3.4	-	-	-	-
PETROLEUM PRODUCTION AND MARKETING	3.2	2.5	0	0	-	-
INDUSTRIAL PROCESSES	1.1	0.9	13.3	2.6	3	0.9
** TOTAL STATIONARY SOURCES*	*242.3*	*9.2*	*26.1*	*18.1*	*4.2*	*2*
AREAWIDE SOURCES						
SOLVENT EVAPORATION	17.2	16.3	-	-	-	-
MISCELLANEOUS PROCESSES	57.6	11.2	164.4	5.7	69.1	24
** TOTAL AREAWIDE SOURCES*	*74.8*	*27.4*	*164.4*	*5.7*	*69.1*	*24*
MOBILE SOURCES						
ON-ROAD MOTOR VEHICLES	21.7	19.8	203.1	44.6	1.9	1.4
OTHER MOBILE SOURCES	10.8	9.9	65.8	14.5	1.1	1
** TOTAL MOBILE SOURCES*	*32.5*	*29.6*	*268.9*	*59.1*	*3*	*2.4*
NATURAL/NON-ANTHROPOGENIC SOURCES	*82*	*73.4*	*43.5*	*1.5*	*4.5*	*3.8*
GRAND TOTAL FOR NCCAB	**431.5**	**139.6**	**502.9**	**84.4**	**80.7**	**32.3**

EMISSIONS IN MONTEREY COUNTY - NCCAB PORTION (IN TONS PER DAY)

	TOG	ROG	CO	NO_X	PM_{10}	$PM_{2.5}$
STATIONARY SOURCES						
FUEL COMBUSTION	1.9	0.6	11.6	12.5	0.9	0.9
WASTE DISPOSAL	127.1	0.8	0.1	0	0	0
CLEANING AND SURFACE COATINGS	1.9	1.6	-	-	-	-
PETROLEUM PRODUCTION AND MARKETING	2.3	1.8	0	0	-	-
INDUSTRIAL PROCESSES	0.4	0.4	0	0	0.9	0.3
** TOTAL STATIONARY SOURCES*	*133.6*	*5*	*11.7*	*12.5*	*1.8*	*1.2*
AREAWIDE SOURCES						
SOLVENT EVAPORATION	11.1	10.6	-	-	-	-

MISCELLANEOUS PROCESSES	33.9	6.7	106.2	3.6	42.2	15.2
** TOTAL AREAWIDE SOURCES*	*45*	*17.2*	*106.2*	*3.6*	*42.2*	*15.2*
MOBILE SOURCES						
ON-ROAD MOTOR VEHICLES	11.7	10.6	117.5	24	1	0.8
OTHER MOBILE SOURCES	7.9	7.2	45.2	24.9	2	1.9
** TOTAL MOBILE SOURCES*	*19.6*	*17.8*	*162.7*	*49*	*3.1*	*2.7*
NATURAL/NON-ANTHROPOGENIC SOURCES	*58.2*	*51.1*	*40.7*	*1.4*	*4.2*	*3.6*
GRAND TOTAL FOR MONTEREY COUNTY	**256.4**	**91.2**	**321.3**	**66.5**	**51.4**	**22.7**
NOTES: TOG = Total Organic Gases; ROG = Reactive Organic Gases SOURCE: CARB, "Almanac Emission Projection Data" (http://www.arb.ca.gov/ei/maps/basins/abnccmap.htm)						

Toxic Air Contaminants. Table 4.3-5 summarizes estimated County-wide emissions of TACs relevant to the project. (No data were available for asbestos from this reference.) While Table 4.3-4 reported emissions estimates in units of tons per day, this table reports such estimates in units of tons per year. Note that "Other Mobile" sources are estimated to account for more than half of County-wide emissions of DPM, while County-wide lead emissions are attributed primarily to area-wide sources (which, for the latter, could include demolition-related activities).

Table 4.3-5
2004 Estimated Daily Average Emissions Of Selected Toxic Air Contaminants for Monterey County

Pollutant	Emissions (tons/year) by Source Category					
	Stationary	**Area-wide**	**On-road Mobile**	**Other Mobile**	**Natural**	**Total**
Diesel engine exhaust, particulate matter (DPM)	21.28	--	104.76	187.64	--	313.68
Lead	0.00	2.96	0.01	0.12	--	3.10
SOURCE: ARB, California Toxics Inventory (CTI), 2004. (http://www.arb.ca.gov/toxics/cti/cti.htm)						

For TACs, impacts are often evaluated ultimately in terms of cancer risk or (for non-cancer effects) in terms of proportions of applicable risk exposure levels (RELs). At the present time, one can infer from the cancer risk mapping published by the ARB's Emission Inventory Branch that areas within the City of Soledad – including all of the designated land use areas within the proposed project site – are exposed to average inhalation cancer risk levels between 50 and 250 cases per million people, based on a lifetime of breathing air toxics. While this range is wide, it puts into context the incremental cancer risk thresholds that are discussed later in this section.

Greenhouse gas emissions and climate change existing conditions are discussed in 5.0 CEQA Considerations of this Draft EIR.

City of Soledad General Plan

The Conservation/Open Space Element of the General Plan guide the City's future appearance and protection of natural resources. Numerous goals and policies of the General Plan are intended to protect and conserve natural resources. The following air quality policies apply to development within the project area.

Policy C/OS-13 The City will encourage the improvement of air quality in Soledad and in the region by implementing the measures described in the Monterey County Air Quality Management Plan. Such measures include, but are not limited to, measures to reduce dependence on the automobile and encourage the use of alternate modes of transportation such as buses, bicycles and walking.

Policy C/OS-14 The City shall, to the extent feasible, separate sensitive land uses from significant sources of air pollution.

Policy C/OS-16 The City shall promote and encourage the use of alternate modes of transportation by incorporating public transit, bicycle, and pedestrian modes in City transportation planning and by requiring new development to provide adequate pedestrian and bikeway facilities.

Environmental Impact Report on the Soledad General Plan. The General Plan EIR evaluated potential air quality impacts associated with the adoption and implementation of the General Plan, including future development within the project area. This program level EIR focused on general impacts associated with implementation of the General Plan, rather than project-specific impacts associated with individual development projects, such as the Miravale III Specific Plan project. According to the General Plan EIR, the following air quality impacts were identified:

- The General Plan accommodates a considerable increase in the City's population over the next twenty or more years which may hamper the efforts to achieve and maintain federal and state air quality standards. This impact was identified as adverse but not significant.

- Motor vehicle trips associated with buildout of the General Plan will contribute to a cumulative adverse impact on regional air quality. This impact is considered significant, adverse and unavoidable.

- Buildout of the General Plan will degrade the operation of intersections within the City's Plan area which may lead to CO "hotspots" where the sate or federal standard may be violated. This impact is considered adverse but not significant.

Miravale III Specific Plan

The project incorporates many policies that act as mitigation measures consistent with *CEQA Guidelines* recommendations. Such measures include the following Specific Plan Circulation policies:

- Traffic calming devices may be implemented on collector roads to discourage excessive traffic speeds.

- Bus stops linking to the MST (Monterey-Salinas Transit) system shall be provided at logical locations within the Plan Area.

- Bus service connecting the Plan Area to the proposed train station shall be explored.

- Bike lanes and paths shall be designed and maintained to improve bicycling safety, convenience, and encourage people to use bicycles to commute to work or school.

- New development shall provide bike lanes and paths, secure bicycle storage and parking facilities.

Relevant Project Characteristics

The Miravale III Specific Plan proposes a mixed-use development including 1,470 single-family residential units, 2,730 multi-family residential units (includes affordable housing, workforce housing, and senior housing units), 120 hotel rooms, 275,000 square feet of retail commercial space and an 18-hole golf course.

Construction of the project is anticipated to begin in 2008 and be completed no later than 2028. Approximately 2.05 million cubic yards of earthmoving is anticipated to occur on site with no import or export of soil.

Thresholds of Significance

The project site is located within the jurisdictional boundary of the Monterey Bay Unified Air Pollution Control District (MBUAPCD). Based on the *CEQA Air Quality Guidelines* adopted by the MBUAPCD, significant impacts would occur when: [4],[5]

- Specific plans or projects conflict with or obstruct implementation of the applicable air quality plan.
- Projects affect the attainment and maintenance of regional ozone levels by emitting 137 pounds per day (lb/day) or more of an ozone precursor air pollutant, which are VOC or NO_x.
- Projects locally affect particulate matter levels by emitting greater than 82 lbs/day of PM_{10} on site and cause an exceedance of the State PM_{10} standard at an existing or reasonably foreseeable receptor as averaged over 24 hours.
- Specific plans or projects cause or contribute to an exceedance of a CO standard as measured by Level of Service (LOS) degradation at a project-effected intersection and confirmed by dispersion modeling. This applies to project-affected intersections with substantial traffic that are degraded from a LOS of E or worse.
- Specific plans or projects expose sensitive receptors or the general public to substantial levels of toxic air contaminants.
- Specific plans or projects create or expose a substantial number of people to objectionable odors or nuisances.

The MBUAPCD emissions thresholds apply to projects and not specific plans. Since the project includes a vesting tentative map, the MBUAPCD thresholds would apply to each phase. For cumulative impacts, the MBUAPCD recommends that the project be assessed for consistency with the 2008 Air Quality Management Plan for the North Central Coast Air Basin. This was done by requesting a formal consistency determination from the Association of Monterey Bay Area Governments (AMBAG). In their letter dated February 21, 2007, AMBAG determined that the proposed project is consistent with the Monterey Bay area AQMP. A copy of this determination is included in Appendix E..

The specific plan does not include siting of sensitive receptors (e.g. residences) near roadways with sufficient volumes to expose sensitive receptors to unhealthy air pollution levels. CARB recommends a

[4] *CEQA Air Quality Guidelines,* Monterey Bay Unified Air Pollution Control District, 1995, with revisions through February 2008.
[5] Letter from MBUAPCD, dated September 19, 2006, commenting on the NOP for Miravale III Specific Plan from Jean Getchell to Mr. Don Fleming, City of Soledad.

buffer of 500 feet between sensitive receptors and freeways or rural roads with an average of 50,000 vehicles or more per day.[6]

Greenhouse Gas Emissions/Global Climate Change Significance Thresholds

No air districts have approved significance thresholds for greenhouse gas (GHG) emissions or a methodology for analyzing air quality impacts related to greenhouse gas emissions. With the adoption of AB 32, the state has set a goal of reducing GHG emissions to 1990 levels by 2020. It has been acknowledged by previous EIRs addressing this issue that it is not always possible to determine if a project would be consistent with the AB 32 goals. CO_2 emissions do not create environmental effects; rather it is the cumulative increased concentration of CO_2 (and other GHGs) in the atmosphere that results in global climate change and associated consequences. While it is possible to estimate the project's CO_2 emissions, it is typically not possible to determine whether those emissions (however small) would manifest into significant environmental impacts. The complexity of global and regional-scale physical, chemical, atmospheric, terrestrial, and aquatic systems preclude a meaningful determination of whether the CO_2 emitted by a single project would result in a measurable or even, non-negligible change in climate. A quantitative standard of significance is not used in this EIR because of the global nature of the analysis required. This Draft EIR addresses global climate change issues within the cumulative section (see 5.0 CEQA Considerations). The discussion in 5.0 CEQA Considerations, states that the Specific Plans contribution to cumulative global climate change (and associated significant cumulative impacts) may be considered significant if, due to the size or nature of the project, it would generate a substantial increase in GHG emissions relative to existing or cumulative conditions. In addition, the discussion in 5.0 CEQA Considerations considers whether or not the project would result in greenhouse gas emissions that would hinder or delay the State's ability to meet the reduction targets contained in AB 32.

Impacts and Mitigation

Construction Period Impacts –PM_{10} from Fugitive Dust

Construction would primarily be accomplished using diesel powered heavy equipment. Dust is generated from a variety of project construction activities that include grading, import/export of fill material, and vehicle travel on unpaved surfaces. Dust from construction includes PM_{10}. Soil can also be tracked-out onto paved roads where it is entrained in the air by passing cars and trucks. Additionally, dust can be generated by wind erosion of exposed areas. The rate of dust emissions is related to the type and size of the disturbance, meteorological conditions, and soil conditions. Construction activities can result in localized high concentrations of PM_{10} and affect regional levels of PM_{10}. High levels of PM_{10} can lead to adverse health effects, nuisance concerns, and reduced visibility.

The MBUAQMD CEQA Guidelines consider on-site emissions of 82 pounds per day or greater of PM_{10} from construction activity to be significant. Due to the variables that affect construction emissions, quantification of construction period emissions is difficult. The initial phases of construction that generate the highest emissions of PM_{10} from fugitive dust would be of most concern. The site would be constructed in four phases, each lasting about 5 years and assumed to begin in 2008.

Detailed grading plans were not available, although total cut and fill has been estimated. Therefore, detailed construction emissions cannot be quantified. During other construction phases, additional material would be imported to the site. This would include base rock, select soil/gravel for trenches and building pads, concrete, and asphalt for paving. Building materials would also be imported to the site.

[6] *Air Quality and Land Use Handbook: A Community Health Perspective*, California Air Resources Board, April 2005

Fugitive dust emissions would occur during each of the construction phases. The greatest amount of dust emissions would be generated during the initial grading phase where the soil disturbance activities would be the most intense (i.e., cut and fill activities involving scrapers and other equipment). The other construction phases would generate dust emissions, but of a lesser degree than grading since the intensity of soil disturbance activities would be reduced.

Uncontrolled daily fugitive dust emissions can be approximated for grading construction activities using emission factors developed as part of a study conducted for the South Coast Air Quality Management District (MRI, 1996). This study developed fugitive dust (PM_{10}) emission factors for construction activities at seven sites in Las Vegas, Coachella Valley, the South Coast area, and in the San Joaquin Valley. A general overall emission factor of 0.11 tons per acre per month would represent typical daily emissions. On the most active days during grading, emissions may be higher. The identified worst-case overall emission factor that would apply to the most intense construction sites was 0.42 tons per acre per month. The study developed specific emission factors that require specific construction information such as the amount of earthwork and the detail of control measures. Since that type of information is generally not available, overall emission factors were used to estimate daily emissions.

One of the sites studied in the MRI report was in the San Joaquin Valley, a 40-acre commercial development in Fresno (Site 5.2). This site was the most similar to the proposed project site, and therefore, those emission factors were applied to this project. For the Fresno site, an overall typical worst-day construction emission factor of 4.1 pounds per acre per work hour was developed. This emission factor includes emissions associated with general construction activities, as well as those from intensive earth-moving activities. Using this emission factor for the proposed project would result in emissions of 82 pounds per day if 2.5 acres were actively graded in one day with some dust control measures. Grading activity that encompasses more than 2.5 acres in a single day could result in on-site PM_{10} emissions exceeding 82 pounds per day without additional mitigation. When specific project details and grading activities are known, better emission estimates could be made to refine construction plans and possibly remain below the 82 pound per day threshold with a larger area of disturbance.

In addition, PM_{10} emissions would occur as a result of wind erosion over disturbed areas during dry windy conditions and from vehicle track out. These emissions are not accounted for in the emission factors applied to grading and construction activities. Ordinarily, these emissions would be considerably small in comparison with grading activities. Emissions from wind erosion are difficult to predict since one has to know the area that is disturbed enough so that wind could cause erosion and then a wind speed above a certain threshold has to occur for a known duration. Wind erosion emissions would vary considerably, but could be controlled through active watering of the site throughout the construction period, including days that construction is not occurring, but soils are disturbed.

Given the size of the project sites likely to be built out under the specific plan and the possibility that construction could occur simultaneously on different areas throughout the site, grading activity areas could exceed 2.5 acres per day. This would result in a significant impact to air quality. Implementation of the following mitigation measure would not result in any new environmental impacts beyond those identified in this EIR.

Impact **Construction activities, such as clearing, excavation and grading operations, construction vehicles traffic on unpaved ground, and wind blowing over exposed earth would generate dust and particulate matter.** ***This is a significant and unavoidable impact.***

Mitigation

4.3-1 Prior to start of construction, the project applicant or contractor shall submit to the City of Soledad Public Works Department a construction dust mitigation plan. This plan shall specify the methods of dust control that would be utilized, demonstrate the availability of needed equipment and personnel, use reclaimed water for dust control, and identify a responsible individual who, if needed, can authorize implementation of additional measures. The construction dust mitigation plan shall, at a minimum, include the following measures:

- Limit grading activity to a maximum of 2.5 acres daily. As more detailed construction information becomes available, emissions from grading activities could be reassessed to determine if the area of grading could be increased. Such an assessment would have to be conducted using appropriate assumptions and mitigation measures.
- Water all active construction areas at least twice daily and more often during windy periods. Active areas adjacent to existing businesses should be kept damp at all times. If necessary, during windy periods, watering is to occur on all days of the week regardless of onsite activities.
- Cover all trucks hauling trucks or maintain at least two feet of freeboard.
- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.
- Sweep daily all paved access roads, parking areas and staging areas at construction sites.
- Sweep streets daily if visible soil material is deposited onto the adjacent roads.
- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).
- Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles.
- Limit traffic speeds on unpaved roads to 15 mph.
- Replant vegetation in disturbed areas as quickly as possible.
- Suspend excavation and grading activity when hourly-average winds exceed 15 mph and visible dust clouds cannot be contained within the site.

The combined effect of the above measures, including the use of a dust suppressant, which represent Best Management Practices, and limiting the size of the grading area would reduce project impacts to a l*ess-than-significant* level only if emissions can be limited to 82 pounds per day or subsequent dispersion modeling of construction activities demonstrates that PM_{10} concentrations from construction activity would not cause an exceedance of the State ambient air quality standard, as averaged over 24 hours. Since limits to construction activities are probably not feasible for this project and dispersion modeling conducted at this time (due to lack of detailed construction plans), the impact is considered to remain **significant with mitigation.**

Construction Period Impacts –Diesel exhaust from equipment

The California Air Resources Board has identified diesel particulate matter as a toxic air contaminant. It is one of many toxic air contaminants; however, it is estimated to contribute about 70% to the overall potential inhalation cancer risk. Improved diesel engines technologies along with reformulated diesel fuel are expected to substantially lower the risk from diesel exhaust.

The heavy construction equipment utilized to construct this project would be diesel fueled. Grading of the site is expected to result in the highest emissions of diesel particulate matter during the construction period. Grading plans are not known at this time, therefore, the amount and types of equipment and their schedule cannot be determined. The projects could be constructed in a series of projects over many years.

There are typically two different periods of grading: a "rough" grading phase that requires excavators and a dozers and then a "fine" grading phase that may include motor graders, rollers, scrapers, and loaders. This equipment is typically used from 4 to 8 hours per day. Other phases of construction use smaller sized equipment (e.g., some loaders, forklifts, etc.), but include numerous heavy-duty truck deliveries for cement, asphalt, building materials, and landscape materials.

The Miravale III site is fairly open and flat. There are residential neighborhoods bounding the southern project border. Since the projects are likely to be constructed in phases, new occupants of earlier phases of the project could become sensitive receptors affected by construction.

Construction equipment can emit substantial amounts of NOx that could have a small, but potentially cumulative affect on ozone concentrations or other health effects. The MBUAPCD CEQA guidelines do not have thresholds that apply to these emissions. Therefore, the impact is considered less-than-significant if reasonable and feasible measures to reduce emissions are employed.

Diesel exhaust includes air contaminants that can cause health effects. The increased health risk from these types of emissions (i.e., increased cancer risk) are calculated over a 70-year continuous exposure period at locations of sensitive receptors. Truck travel and construction equipment exhaust may result in elevated levels of diesel particulate matter for short time periods. However, these activities would occur for such a relatively short period that the impact would be considered as less-than-significant provided that mitigation measures are implemented to minimize exposure to sensitive receptors. Implementation of the following mitigation measure would not result in any new environmental impacts beyond those identified in this EIR.

Impact **Construction activities would involve use of the heavy-duty off-road equipment and large trucks that use diesel fuel resulting in emissions of diesel particulate matter and NOx.** ***This is a significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation.***

Mitigation

4.3- 2 Projects developed under the specific plan should be evaluated for individual construction period air quality impacts. Project-specific mitigation measures would be identified at that time. However, the following mitigation measures should be implemented for all projects to reduce diesel particulate emissions from on-site construction equipment:

- All off-road construction vehicles/equipment greater than 100 horsepower that will be used on site for more than one week shall: 1) be manufactured during or after 1996, and 2) shall meet the NOx emissions standard of 6.9 grams per brake-horsepower hour. Alternatively, the project shall implement a combination of the following emission reduction measures on some or all of the above described vehicles equipment, subject to approval by the MBUAPCD:
  - Use alternative fuels (such as biodiesel blends),
  - Require diesel particulate matter filters on equipment,
  - Require diesel oxidation catalyst on equipment.
- The contractor shall install temporary electrical service whenever possible to avoid the need for independently powered equipment (e.g. compressors).
- Diesel equipment standing idle for more than five minutes shall be turned off. This would include trucks waiting to deliver or receive soil, aggregate or other bulk materials. Rotating drum concrete trucks could keep their engines running continuously as long as they were onsite and staged away from residential areas.

- Properly tune and maintain equipment for low emissions.
- Stage large diesel powered equipment at least 200 feet from any active land uses (e.g., residences).
- Limit the pieces of equipment used at any one time.
- Minimize the use of diesel-powered equipment (i.e., wheeled tractor, wheeled loader, roller) by using gasoline-powered equipment.
- Limit the daily hours of operation for heavy-duty equipment.

Plan Generated Operational Impacts

Regional Pollutants

The Specific Plan proposes development of 1,470 single-family residences and 2,730 multi-family residences, in addition 120-room hotel, 275,000 square feet of retail, an 18-hole golf course as well as schools and parks. The project's traffic analysis forecasts that the Miravale III specific plan would generate about 35,504 daily vehicle trips. Emissions from these trips would affect regional air quality in terms of contributing to possible exceedances of ambient air quality standards for ozone. Direct and indirect emissions from each phase of the proposed specific plan were calculated using the latest available version of the URBEMIS model (i.e., URBEMIS 2007 ver. 9.2.2) distributed by Rimpo Associates through www.urbemis.com and the updated model template provided through the MBUAPCD website. Specific Plan related emissions were calculated in accordance with the proposed phasing schedule.

The model predicts daily emissions associated with the land use developments. The model combines predicted daily traffic activity associated with the different land use types, with emission factors from the State's mobile emission factor model (i.e., EMFAC2007). The project sizes and estimated traffic generation were input to the URBEMIS 2007 model to predict daily emissions of ROG, CO, NOx and PM_{10}. Specific plan traffic generation provided by Hexagon Transportation Consultants, Inc. for the DEIR, was used in the model to provide daily traffic generation estimates based on selected land uses. The URBEMIS 2007 model default for passby trips was used as a worst-case estimate, rather than trip reduction percentages provided by the traffic engineer. In addition, the mix of uses mitigation and local serving retail mitigation were used based on the reduction of internal trips due to proposed mixed uses.

The URBEMIS 2007 model also predicted area source emissions associated with the build out of the specific plan uses. Area source emissions of CO were predicted for winter in accordance with the MBUAPCD CEQA Guidelines. The project emissions were predicted for a normal weekday representative of the traffic generated used for the traffic study. Daily emissions from the build out of the specific plan are reported in Table 4.3-6. Complete model output is provided in the Air Quality Report contained in Technical Appendix T-2. Emissions from the project would vary over time as the project is built out and emission rates change due to improvements in overall vehicle emission controls. MBUPAPCD does not have quantifiable thresholds that apply to specific plans. The emissions information provided are for informational purposes.

Table 4.3-6
Daily Project Emissions based on URBEMIS2007 Modeling

Scenario	Volatile Organic Compounds (VOC) - Summer	Nitrogen Oxides (NOx) – Summer	Carbon Monoxide (CO) – Winter	Respirable Particulates (PM_{10}) - Summer
Phase 1 (2008 – 2013)				
Area Emissions	27 lbs.	7 lbs.	24 lbs.	>1.0
Operational Emissions	48 lbs.	64 lbs.	509 lbs.	71 lbs.
Total	75 lbs.	71 lbs.	534 lbs.	71 lbs.
Phase 2 (2013 – 2018)				
Area Emissions	133 lbs.	26 lbs.	73 lbs.	>1.0
Operational Emissions	122 lbs.	160 lbs.	1304 lbs.	278 lbs.
Total	255 lbs.	187 lbs.	1377 lbs.	278 lbs.
Phase 3 (2018 – 2023)				
Area Emissions	167 lbs.	32 lbs.	91 lbs.	>1.0
Operational Emissions	106 lbs.	116 lbs.	1049 lbs.	337 lbs.
Total	274 lbs.	149 lbs.	1139 lbs.	337 lbs.
Phase 4 (2023 – 2028)				
Area Emissions	252 lbs.	46 lbs.	116 lbs.	>1.0
Operational Emissions	112 lbs.	109 lbs.	1061 lbs.	426 lbs.
Total	364 lbs.	155 lbs.	1178 lbs.	426 lbs.

Source: URBEMIS2007 Air Emissions From Land Use Ver. 9.2.2

Note: These numbers reflect URBEMIS "mitigated emissions" which are proposed design features of the project.

Emissions from the project would vary over time as the project is built out and emission rates change due to improvements in overall vehicle emission controls. During the interim build-out period, NOx emissions would be highest after build out of Phase 2, which is assumed to occur in 2018. Future total NOx emissions after 2023, with buildout of Phases 3 and 4, would be less than combined Phase 1 and 2 emissions. Combined build out of Phase 1 through 4 would have NOx emissions below the combined build out of Phase 1 and 2 even though additional traffic trips would be generated. This is due to the implementation of more stringent vehicle emissions standards and fleet turnover. Turnover occurs when older, more polluting vehicles, are replaced with newer and cleaner vehicles that have durable emission control systems.

On the other hand, VOC emissions are affected by use of consumer products and new motor vehicle trips. Substantial VOC emissions would occur from increased emissions of consumer products associated with new residential development in the air basin. A wide variety of consumer products that include air fresheners, household cleaners, automotive products, and personal care products result in VOC emissions. CARB does develop requirements for consumer products aimed at reducing VOC emissions. Current CARB estimates used to develop the countywide emissions inventory indicate that these emissions may be lower than reported in Table 4.3.7. In any event, emissions of ROG/VOC would be expected to

exceed the MBUAPCD thresholds when projects under this specific plan are developed. This would continue to be mostly attributable to the use of consumer products by new residences. As a result, significant impacts to regional air quality, with respect to emissions of ozone precursors are predicted.

The MBUAPCD thresholds for PM_{10} only apply to onsite emissions of PM_{10}. These would include wood smoke emissions. The addition of new residences for all phases could result in significant emissions from wood burning in open-type fireplaces. Use of low-emitting wood burning devices or elimination of wood burning stoves and fireplaces would mitigate this impact and should be considered in the Specific Plan.

Since build-out of the Miravale III Specific Plan would result in emissions of NOx and VOCs that exceed MBUAPCD thresholds, the impact is considered significant. Implementation of the following mitigation measure would not result in any new environmental impacts beyond those identified in this EIR.

Impact **Implementation of the proposed specific plan would result in increases in long-term operational emissions of ozone precursor pollutants. These emissions would exceed significance thresholds established by the MBUAPCD.** ***This represents a significant and unavoidable impact since these emissions could contribute to potential exceedances of ambient air quality standards for ozone.***

Mitigation

4.3- 3 The project shall apply the following measure to the extent appropriate for the specific land uses proposed:

- Develop a Transportation Demand Management Program with the intent of reducing vehicle trips and vehicle miles traveled associated with build out of the specific plan. Components of this plan may include:
  - Develop parking strategies for commercial and retail uses that reduce single occupant vehicle trips.
  - Provide bicycle storage/parking facilities.
  - Provide shower/locker facilities in light industries and office uses.
  - Provide onsite or near site child care centers for large employment centers.
  - Develop park-and-ride lots.
  - Provide opportunities to include or increase transit service to plan area.
- Include plans to incorporate safe and efficient modes of bicycle and pedestrian transportation. Bicycle routes and pedestrian paths should include amenities such as signs and traffic signal activation (e.g., loop activators).
- Identify energy efficiency goals for new developments that would conserve energy beyond requirements of the State Title 24 building code.
- Provide exterior electrical outlets on new buildings that encourage use of electrical landscape equipment.
- Prohibit open wood burning stoves or fireplaces in new residences unless they are EPA certified wood heaters that meet EPA's particulates matter emission standard of 7.5 grams per hour.

<u>Local Carbon Monoxide Concentrations</u>

Emission thresholds established for carbon monoxide apply to direct or stationary sources. Emissions of carbon monoxide (CO) emitted from traffic generated by the project are first evaluated by assessing the

impacts of specific plan-generated traffic on existing and future traffic conditions. The MBUAPCD guidelines require CO hotspot analysis under the following project conditions:

- Intersections where the Level of Service (LOS) would degrade below D
- Volume to capacity ratio increases by 0.05 at LOS E or F intersections
- The delay at LOS E or F intersections increases by 10 seconds or more
- Reserve capacity at unsignalized LOS E or F intersection decrease by 50 or more

Highest CO concentrations typically occur during the winter where traffic congestion occurs. Congested intersections with high volumes of traffic could cause CO "hot spots", where localized high concentrations of CO occur. This specific plan area is located in a fairly rural setting where traffic volumes are much lower than urban settings such as Salinas. The highest CO level measured in the District, which is representative of more urban settings, is well below the state standard.

The traffic study for the specific plan evaluated operations at intersections in the area. Several intersections with stop sign controls were predicted to have LOS E or F conditions in the future. However, these intersections would not have large enough volumes to warrant a CO "hot spot". The degraded LOS is the result of a single approach being delayed by a stop sign. Mitigation measures were identified by the Traffic Engineer to improve the LOS to an acceptable level. As a result, modeling of CO concentrations was not conducted to analyze the specific plan impacts. CO impacts associated with acceptable intersection operation would not exceed State or federal ambient quality standards. As a result, the impacts are considered **less-than-significant**.

Project Stationary Sources

Stationary sources of air pollutants that could be associated with uses of the light industrial or commercial uses have not been identified. Light industrial or commercial uses could include sources of air pollution that may adversely affect sensitive receptors such as nearby proposed residences. Such common sources are emergency generators that use diesel fuel, dry cleaning operations, gas stations, and truck loading areas. The exact nature of possible on-site stationary sources cannot be determined at this time; thus specific air impacts from these potential sources to future occupants of project cannot be estimated. However, these types of sources may require construction and operational permits from MBUAPCD, which would include new source review and possible application of Best Available Control Technology emission control measures. Since they would need to comply with all applicable MBUAPCD regulations, regulated stationary on-site sources are generally not considered to have significant air quality impact. Stationery sources that are exempt from MBUAPCD permit requirements because they fall below emissions thresholds for permitting would not be considered to have a significant air quality impact. For this reason, this impact is considered *less-than-significant.*

The Miravale III project does not include any known light industrial or commercial uses with potential air pollutants sources that could adversely impact adjacent or nearby residences proposed as part of the project. **This would be a less-than-significant impact.**

Nuisances and Odors

Typical sources of objectionable odors include chemical plants, sewage treatment plants, large composting facilities, rendering plants, and other large industrial facilities that emit odorous compounds. This specific plan would not include any such activities and thus would not create objectionable odors. The project is not considered to create significant odors.

Land uses near the specific plan area are generally vacant undeveloped land or lands used for agricultural uses. Vacant or undeveloped lands with no approved future uses do not pose a potential for nuisances caused be odors or dust generation. The plan would include residences along the western boundary that would be adjacent to active farming lands. Agricultural activities could result in short-term nuisances that could affect these lands. The most common nuisance could be blowing dust. The project would lie downwind of these fields most of the time, especially during spring and summer when northwest winds are persistent. New residences may experience frequent episodes of dust blowing across their property. This would result in conflicts between existing agricultural and new residential uses. With adequate buffers to reduce wind blown dust to new residences, this impact would be reduced to **less–than-significant impact.** For more information regarding agricultural buffers, please refer to **Section 4.2 Agricultural Resources.**

Greenhouse Gas Emissions/Global Climate Change

The environmental impact and mitigation measures discussions regarding greenhouse gas emissions and global climate change issues are provided in 5.0 CEQA Considerations of this Draft EIR.

4.4 BIOLOGY

Introduction

This section assesses the existing biological conditions within the proposed project, identifies the potential occurrence of special-status plant species, wildlife species, and sensitive habitats at the project site, and discusses potential project-related impacts to those resources. In addition, this section recommends mitigation measures to avoid or reduce any potential impacts that have been identified.

This section provides the results of the *Preliminary Biological Assessment Report for the Proposed Miravale Phase III Specific Plan, City of Soledad, CA.* prepared by Denise Duffy & Associates, Inc. (Preliminary BA, DD&A June 2008), field reconnaissance surveys, a wetland assessment, and special-status species assessments and surveys conducted by Denise Duffy & Associates, Inc. (DD&A) and subconsultants. A copy of these reports are included as Technical Appendix T-3 in Volume II of this EIR.

Based on the data collected from these surveys and a review of applicable laws and policies, this section includes the following: 1) description of applicable policies, regulations, and agency permits that may be required (Regulatory Environment); 2) identification of the special-status botanical and wildlife species and sensitive habitats that occur or may occur within the project site; and 3) assessment of the impacts to biological resource and identification of avoidance and mitigation measures to reduce impacts in accordance with CEQA. A discussion of consistency with local policies protecting biological resources is contained in **Section 4.9 Land Use**.

Regulatory Environment

Federal Endangered Species Act

Provisions of the federal Endangered Species Act (ESA) of 1973 (16 USC 1532 *et seq.*, as amended) protect federally listed threatened or endangered species and their habitats from unlawful take. Listed species include those for which proposed and final rules have been published in the Federal Register U.S. Fish and Wildlife Service or NOAA Fisheries (formerly known as the National Marine Fisheries Service). The ESA is administered by the USFWS and NOAA Fisheries. In general, NOAA Fisheries is responsible for the protection of ESA-listed marine species and anadromous fish, whereas other listed species are under USFWS jurisdiction.

Federal Candidate species are "taxa for which (USFWS) has on file sufficient information on biological vulnerability and threats to support issuance of a proposed rule to list, but issuance of the proposed rule is precluded." Federal Candidate species are not afforded formal protection, although USFWS encourages other federal agencies to give consideration to Candidate species in environmental planning. In 1996, the USFWS discontinued the Category 3 and 4 classifications for federal Candidate species (USFWS, 1996). Species either are identified as Candidate species with a listing priority classification, designated as federal "species of concern" or are no longer given any federal status.

Section 9 of ESA prohibits the take of any fish or wildlife species listed under ESA as endangered. Take, as defined by ESA, is "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." Harm is defined as "any act that kills or injures the species, including significant habitat modification." In addition, Section 9 prohibits removing, digging up, and maliciously damaging or destroying federally listed plants on sites under federal jurisdiction. Section 9 does not prohibit take of federally listed plants on sites unless those sites are under federal jurisdiction. If there is the potential for take of a federally listed species, a Section 7 (federal agency) or Section 10 (private land owner) USFWS Incidental Take Permit may be required to authorize the "incidental take" of

that species. Federal agency actions include activities that are on federal land, conducted by a federal agency, funded by a federal agency, or authorized by a federal agency (including issuance of federal permits).

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918 prohibits killing, possessing, or trading migratory birds except in accordance with regulation prescribed by the Secretary of the Interior. Most actions that result in "take" or in permanent or temporary possession of a protected species constitute violations of the MBTA. The USFWS is responsible for overseeing compliance with the MBTA.

Wetlands and Waters of the U.S.

Natural drainage channels and wetlands are considered Waters of the United States (Waters). The U.S. Army Corps of Engineers (USACOE) regulates the filing or grading of such Waters under Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. The extent of jurisdiction within drainage channels is defined by Ordinary High Water (OHW) marks on the banks of the feature. Jurisdictional wetlands are delineated by the presence of hydrophytic soils, hydrology, and vegetation. Activities that involve discharge or fill into jurisdictional waters are subject to the permit requirements of the ACOE. Discharge permits are typically issued on the condition that the project proponent provides mitigation which results in no net loss of wetland function or value. In addition to individual discharge permits, the ACOE issues nationwide permits applicable to certain activities. Under the nationwide permits, discharge of fill must be minimized to the extent practicable. No discharge permit can be issue until the Regional Water Quality Control Board (RWQCB) issues a certification (or waiver) that the proposed activity will meet state water quality standards. The RWQCB is also responsible for enforcing National Pollutant Discharge Elimination System (NPDES) permits, including the General Construction Activity Storm Water Permit.

State Laws and Regulations

California Endangered Species Act

The California Endangered Species Act (CESA) was enacted in 1984. The California Code of Regulations (Title 14, Section 670.5) lists animal species considered endangered or threatened by the state. Section 2090 of CESA requires state agencies to comply with endangered species protection and recovery and to promote conservation of these species. Section 2080 of the Fish and Game Code prohibits "take" of any species that the commission determines to be an endangered species or a threatened species. "Take" is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." It does not include habitat destruction in the definition of take. A Section 2081 Incidental Take Permit from the CDFG is required to "take" any state listed species.

Native Plant Protection Act

The California Native Plant Protection Act (NPPA) of 1977 directed the CDFG to carry out the legislature's intent to "preserve, protect, and enhance rare and endangered plants in the state." The Act prohibits importing rare and endangered plants into California, taking rare and endangered plants, and selling rare and endangered plants. The CESA and NPPA authorized the California Fish and Game Commission to designate endangered, threatened, and rare species and to regulate the taking of these species (§2050-2098, Fish and Game Code). Plants listed as rare under the NPPA are not protected under CESA.

California Fish and Game Code

CDFG has jurisdiction over the bed and bank of natural drainages according to provisions of Section 1601 and 1603 of the California Fish and Game Code. Activities that would disturb these drainages are regulated by CDFG via a Streambed Alteration Agreement. Such an agreement typically stipulates certain measures that will protect the habitat values of the hydrologic feature being impacted.

Raptors (e.g., eagles, hawks, and owls) and their nests are protected under both federal and state laws and regulations. Section 3503 of the CDFG Code prohibits the killing, possession, or destruction of bird eggs or bird nests. Section 3503.5 and 3513 prohibit the killing, possession, or destruction of all nesting birds (including raptors and passerines). Section 3503.5 states that it is "unlawful to take, possess, or destroy the nest or eggs of any such bird except otherwise provided by this code or any regulation adopted pursuant thereto." Section 3513 prohibits the take or possession of any migratory non-game birds designated under the federal MBTA. Section 3800 prohibits take of non-game birds.

The classification of Fully Protected was the state's initial effort in the 1960's to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish (Section 5515), mammals (Section 4700), amphibians and reptiles (Section 5050), and birds (Section 3511). Most Fully Protected species have also been listed as threatened or endangered species under the more recent endangered species laws and regulations. Fully Protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation for the protection of livestock.

The CDFG also maintains a list of animal "species of special concern," most of which are species whose breeding populations in California may face extirpation if current population trends continue. Although these species have no legal status, the CDFG recommends considering these species during analysis of proposed project impacts to protect declining populations and avoid the need to list them as endangered in the future.

The Natural Heritage Division of the CDFG administers the state Rare Species Program. The CDFG maintains lists of designated endangered, threatened, and rare plant and animal species. Listed species either were designated under the NPPA or designated by the Fish and Game Commission. In addition to recognizing three levels of endangerment, the CDFG can afford interim protection to Candidate species while they are being reviewed by the CDFG Commission.

Other State Conservation Programs

Under provisions of Section 15380(d) of CEQA, the project lead agency and CDFG, in making a determination of significance, must treat non-listed plant and animal species as equivalent to listed species if such species satisfy the minimum biological criteria for listing. In general, the CDFG considers plant species on List 1 or 2 of the California Native Plant Society's (CNPS) *Inventory of Rare and Endangered Vascular Plants of California* (Tibor 2001) as qualifying for legal protection under this CEQA provision. Species on CNPS List 3 or 4 may, but generally do not, qualify for protection under this provision.

City of Soledad General Plan

The Conservation and Open Space Elements of the General Plan guide the City's future physical and spatial form, and appearance. Numerous goals and policies of the General Plan are intended to protect sensitive biological resources. The following "Plant, Animal, and Related Habitat Protection" and "Tree Preservation/Landscaping" resource policies apply to development within the proposed project area.

Policy C/OS-10 The City shall support State and federal laws and policies to preserve populations of rare, threatened, and endangered species by ensuring development does not adversely affect such species in a significant way or by fully mitigating adverse effects.

Policy C/OS-11 The City shall require that significant natural, open space, and cultural resources be identified in advance of development and incorporated into site-specific development project design to the extent feasible.

Policy C/OS-17 When considering the approval of activities that result in the removal of mature trees, the following factors shall be considered:

a. The size, age, health and species of tree(s) to be removed.
b. Whether or not the removal of the tree(s) is necessary for the reasonable development and use of the site.
c. Whether the tree(s) to be removed is (are) a native or introduced species.

Policy C/OS-18 The City shall institute and promote a vigorous program of tree planning in new development areas and in older portions of the City to increase the number and density of tree cover.

Policy C/OS-19 When mature trees are removed to accommodate new development, they shall be replaced at a ratio of at least two new trees for every one tree removed, or such additional number and size.

In addition, the following Programs are recommended in the General Plan:

Program 8.7 The City shall work toward the public acquisition as open space of areas with significant ecological resources where such resources cannot be effectively preserved through the regulatory process. Public protection may take the form of free acquisition and/or open space easements and may be carried out in cooperation with other local, State and federal agencies, and private entities.

Program 8.8 The City shall develop and adopt an ordinance requiring the dedication of open space lands, or the payment of open space mitigation fees, to provide and maintain open space. The ordinance shall further define geographic areas of benefit.

Environmental Impact Report on the Soledad General Plan. The General Plan EIR evaluated potential biological impacts associated with the adoption and implementation of the Soledad General Plan, including future development within the project area. This program-level EIR focused on general impacts associated with implementation of the General Plan, rather than project-specific impacts associated with individual development projects, such as the Miravale Phase III project. The General Plan EIR identified significant impacts due to the permanent conversion of 3,500 acres of potential foraging habitat for certain special status animal species. The EIR also cited potential disturbance of special status plant or animal species (nesting raptors, burrowing owls, etc.) and increased erosion potential as a potential significant impact. The EIR concluded that urbanization will result in long-term indirect impacts, including light, and noise, and would contribute to the cumulative loss of foraging areas for special status species within the Salinas Valley.

Miravale Phase III Specific Plan

Section 4.0 of the Miravale Phase III Specific Plan identifies Parks, Recreation, and Open Space goals and policies regarding the physical development of the proposed project site. For instance, approximately

28 percent of the 920 acre Plan Area is devoted to parks, open space, and recreation including a golf course, public parks, and natural open space. Four neighborhood parks, six village parks, a linear park, and a trail system are also available to serve Plan Area residents. Finally, approximately 62 acres of passive open space have been designated to preserve viewsheds and provide a recreational trail system.

Although the proposed project requires open space and parkland, proposed open spaces and parks are not designed or intended to conserve existing biological conditions of the site. Specific guidance for the preservation and/or protection of sensitive habitats and/or special-status plant and wildlife species are not presented in the Miravale Phase III Specific Plan. However, the "Hillside Development Standards & Guidelines" present the following general guidelines:

> "The City of Soledad is situated in the mid-Salinas Valley at the base of the Gabilan Mountains. The mountains provide a backdrop to the City of Soledad. It is the intent to preserve this natural asset by assuring that development on the hillside:"

- Maintains the existing open rural character;
- Is in harmony with the natural setting;
- Conserves land forms and other features of the natural landscape;
- Preserves wildlife habitat and movement corridors;
- Protects and preserves viewsheds of the mountains; and
- Promotes the establishment of native trees and shrubs.

Relevant Project Characteristics

The majority of the lowland portion of the project site is currently in active agricultural production or fallow but typically dedicated to agricultural production. Active and fallow agricultural areas represent appropriate foraging and dispersal habitat for a variety of wildlife species and limited habitat for special-status plant species. The grassland portions of the site associated with the Gabilan foothills are relatively undeveloped and are not currently grazed; these areas provide valuable plant and wildlife habitat and habitat connectivity. The Specific Plan calls for the replacement of the existing agricultural and grazing uses with a mixed-use urban development consisting of new roads and infrastructure, single-family and multi-family residential units, retail commercial space, a golf course, school and public safety sites, and open space and recreation areas. The project would require extensive grading on the site to facilitate construction of proposed uses. According to the project applicant's engineer, proposed grading would occur throughout most of the site and would involve approximately 2.05 million cubic yards (CY) of cut/fill.

The proposed project would result in direct impacts to the vast majority of available onsite plant and wildlife habitat through grading and conversion to a residential area. The proposed project would remove a linear arrangement of Eucalyptus and Tamarisk trees along San Vicente Road, and several oak trees in the northeast corner of the site. The proposed project would also result in the removal of an onsite reservoir and agricultural basin that represent sensitive habitats. Although substantial grading to pre-project conditions is planned, proposed "open space" portions of the site (including the 62 acres of grasslands) are not designed or suitable as plant and wildlife habitat conservation areas. The pedestrian trail proposed in the grassland portion of the site would result in ongoing disturbance to any wildlife utilizing this area.

Description of the Existing Conditions

Biological Assessment

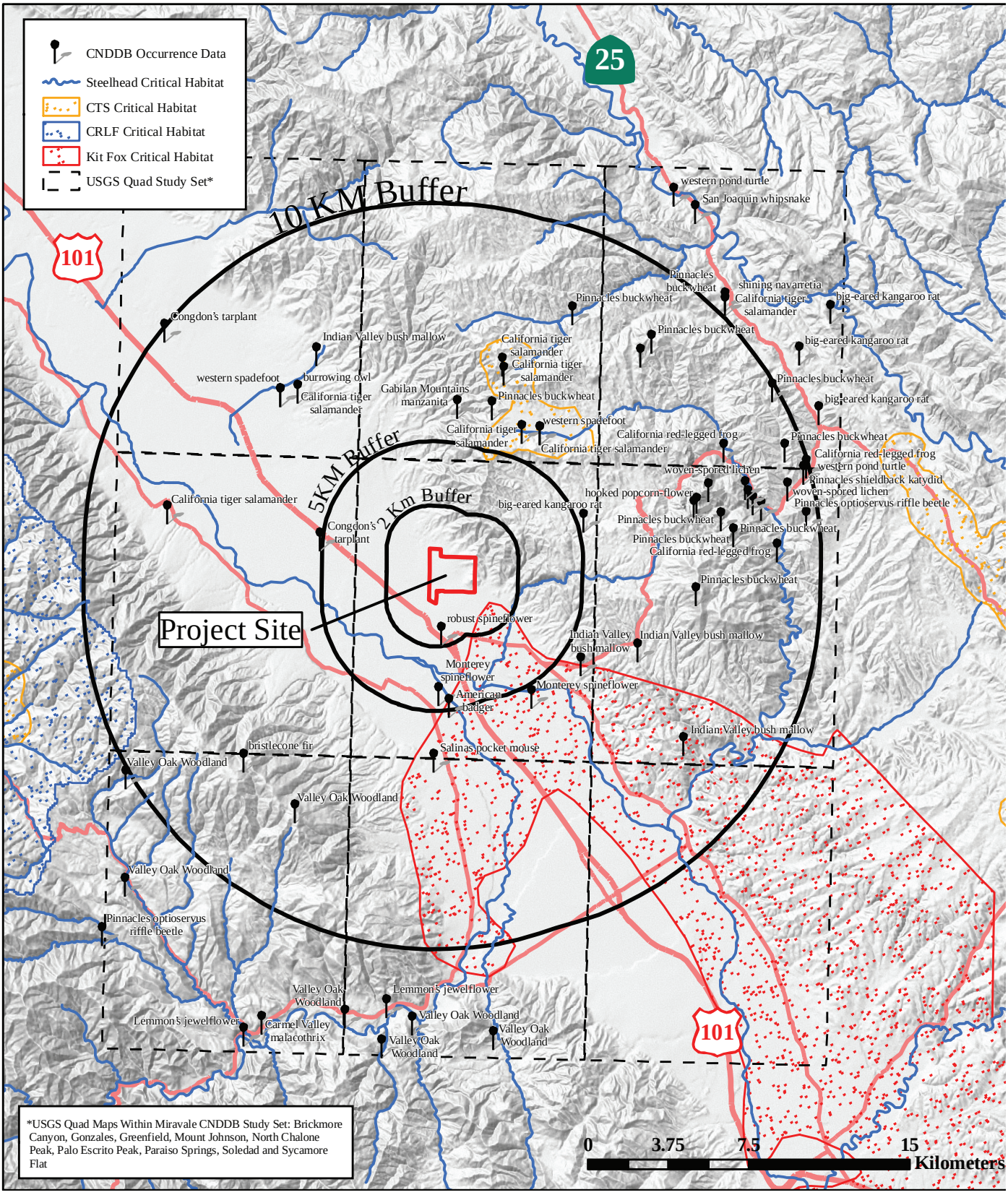
DD&A was contracted to assess the potential presence of special-status plants, animals, and/or habitats within the proposed Miravale III residential development in the City of Soledad, CA, and prepared the Preliminary BA in June 2008. Please refer to the Preliminary BA for a thorough presentation of methods, surveying personnel (including subconsultants), general site characteristics, and vegetative communities. As presented within the Preliminary BA, the project site supports seven generalized habitat types; active agriculture (461.7 acres), fallow agriculture (314.8 acres), mixed grasslands (141.3 acres), rocky outcrops, reservoir (1.2 acres), agricultural basins (< 0.5 acres each), and disturbed areas (home sites). Please refer to Figure 4.4-1 for a presentation of special-status species occurrences in the vicinity of the Miravale III project site as reported by the California Natural Diversity Database (CNDDB, CDFG 2007). Please refer to Figure 4.4-2 for aerial imagery and habitat mapping of the project site, and to Figures 4.4-3a and 4.4-3b for representative site photos.

Sensitive Habitats

Based on a review of the CNDDB in combination with the DD&A site assessments, the following sensitive habitat types are present: aquatic resources (reservoir and agricultural basins) and federal and state listed wildlife species habitat.

No wetland delineations were undertaken at the Miravale III project site, but a wetland assessment was completed that documented the presence of fringe wetlands. A small vegetated fringe wetland exists adjacent to the onsite reservoir. In addition, fringe wetlands are associated with the agricultural basins to the east of San Vicente Road. A total of approximately 0.17 acres of fringe wetlands of marginal habitat value were documented on site. Please note that these types of fringe wetlands are not typically USACOE jurisdictional given current regulations regarding Section 404 of the Clean Water Act. Moreover, existing on-site wetlands are not hydrologically or geographically linked with other bodies of water or jurisdictional wetlands and are therefore not considered jurisdictional for the purposes of this analysis. Although only the USACOE can determine whether on-site wetlands are considered jurisdictional, the onsite fringe wetlands are not considered to be jurisdictional for the purposes of this analysis for the reason provided above. Impacts to these areas would also be regulated by ESA if any listed or special-status wildlife species utilize these areas as breeding habitat.

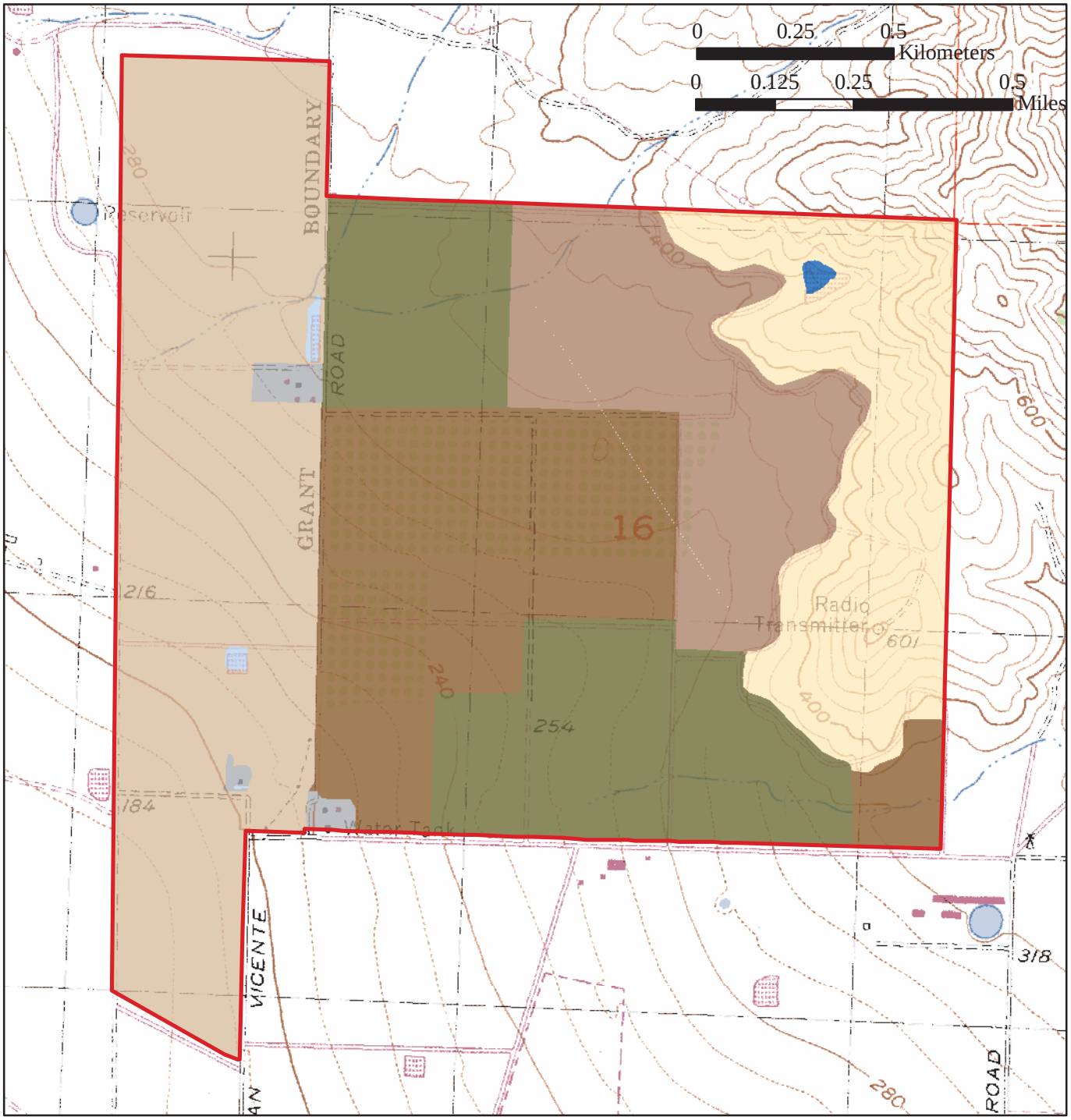
Although mixed grassland habitats are not typically considered a "sensitive habitat," San Joaquin kit fox are known or assumed present within project boundaries, particularly in the mixed grassland portions of the site. Any impact to a habitat which is known or assumed to support a federally listed wildlife species may represent "take" under the Endangered Species Act. In addition to the known federally listed wildlife species in the grassland portions of the site, these areas were documented to support the following California species of special concern: American badger (*Taxidea taxus*), Salinas pocket mouse (*Perognathus inornatus psammolphilus*), western burrowing owl, loggerhead shrike (*Lanius ludovicianus*), northern harrier (*Circus cyaneus*), and white-tailed kite (*Elanus leucurus*). As such, impacts to grassland habitat would impact a variety of federal and/or state protected species and this habitat; mixed grasslands represent a sensitive habitat under CEQA.



N

CNDDB Occurrence Data Map

Figure 4.4-1



Habitat Classification

- Active Agriculture - Row Crops
- Active Agriculture - Vineyard
- Agricultural Basin
- Disced Fallow Agriculture
- Homeland
- Mixed Grasslands
- Reservior
- Un-disced Fallow Agriculture

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Miravale Project Habitat Map

Figure 4.4-2



Photo 1. Active Agriculture on West Side of San Vicente Road



Photo 2. Northeast View of Mixed Grasslands



Photo 3. Northern View of Fallow Agriculture



Photo 4. Southeast View from Grasslands, Fallow and Active Agriculture



Photo 5. Typical Active Agricultural Lands East of San Vicente Road (Vineyard)



Photo 6. Typical Disced Fallow Agcriculture

	Site Photos	Figure 4.4-3A



Photo 7. Central Agricultural Basin on West Side of San Vicente Road



Photo 8. Northern Agricultural Basin West of San Vicente Road



Photo 9. Southern Agricultural Basin on West Side of San Vicente Road



Photo 10. View of Reservoir from Mixed Grasslands



Photo 11. View of Reservoir With Grasslands and Rocky Outcrops

	Site Photos	Figure 4.4-3B

Special-status Plant Species

The CNDDB reports an occurrence of robust spineflower (*Chorizanthe robusta* var. *robusta*) approximately 2 km south of the project site. In addition, the CNDDB reports occurrences of Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*), Indian valley bush mallow (*Malacothamnus aboriginum*), and Gabilan Mountains manzanita (*Arctostaphylos gabilanensis*) within 5 miles of the project site. The CNDDB also reports that Monterey spineflower (*Chorizanthe pungens* var. *pungens*) critical habitat is present within 2 km of the project site. However, appropriate habitat does not exist on site to support any of these species. Lemmon's jewelflower (*Caulanthus coulteri* var. l*emmoni*) is known to occur approximately 10 miles from the project site. Jolon's clarkia (*Clarkia jolonensis*) has been reported to occur within 1.25 miles of the project site. The CNDDB does not report the presence of any special-status plant species within or immediately adjacent to the proposed project boundaries and none were identified by DD&A biologists during any of the site visits. The only plant species with the potential to occur within the project boundaries, Lemmon's jewelflower, is discussed below. Please note that no other special-status plant species are anticipated within project boundaries for the species-specific reasons provided in Appendix F of this EIR.

Lemmon's jewelflower

Lemmon's jewelflower is a CNPS List 1B species. Lemmon's jewelflower is an annual herb associated with open, grassy areas; on hillside slopes and in fields, canyons, and arroyos. Typical soils include alkaline, shaley clay, sandstone talus, and decomposed serpentine. As this species is associated with valley grassland communities, and was not identifiable at the time of the site assessments, it is possible that this species occurs within project boundaries but was not identified. For this reason, it is recommended that a Spring-time (March-May) floristic survey of appropriate portions of the site be conducted to assess the presence/absence of this species within project boundaries.

Special-status Wildlife Species

The CNDDB reports occurrences of the following species within 10 km of the project site: big-eared kangaroo rat (*Dipodomys elephantinus*), American badger, Salinas pocket mouse, Western spadefoot (*Spea hammondii*), San Joaquin whipsnake, Western burrowing owl, California tiger salamander, California red-legged frog (*Rana draytonii*), and a variety of bat and raptor species. The following species are assessed for their potential presence/absence within project boundaries. Please note that no other special-status wildlife species are anticipated within project boundaries for the species-specific reasons provided in Appendix F.

American badger

The American badger is a California State Species of Special Concern. The CNDDB reports an occurrence of this species approximately 3.5 km south of the project site. DD&A and Biosearch biologists observed a badger emerge from an onsite den on July 11, 2007. In addition, DD&A and Biosearch observed badger, burrows/dens in multiple locations of the grassland portions of the site and noted the presence of "badger diggings" in both grassland and fallow agricultural portions of the site. Therefore, American badger are known to be present within project boundaries.

Salinas pocket mouse

The Salinas pocket mouse is a California state Species of Special Concern. The CNDDB reports an occurrence of Salinas pocket mouse approximately 6.5 km south of the project site. Presence of this species was confirmed on September 1, 2006 when a male Salinas pocket mouse was trapped at the site.

Therefore, Salinas pocket mouse are known to occur in the mixed grassland/foothill portions of the project site.

San Joaquin kit fox

The San Joaquin kit fox (SJKF) is a federally Endangered and state Threatened species. The kit fox typically inhabits valley alkaline scrub, valley and foothill grasslands, and open oak woodlands of low to moderate relief. Kit foxes are largely dependent on rodent burrows, such as those of California ground squirrel, which they enlarge as den sites. Home ranges vary in size, depending on prey availability, however average home range is approximately 500 hectares. The CNDDB reports several occurrences of SJKF approximately 10 km east of the project site (Figure 4.4-1). In addition, the CNDDB reports the presence of SJKF critical habitat within 10 km of the Miravale III site. One active "natal den" was identified onsite by the Biosearch biologists.

The Miravale III project site is located within the historic distribution of SJKF and represents an encroachment in the foothills of the Gabilan Range (a known corridor for this species). Biosearch wildlife biologists prepared a "San Joaquin Kit Fox Early Evaluation Report" of the project site for USFWS review. Based on USFWS Ventura review of this early evaluation report, protocol-level SJKF northern-range protocol-level surveys were recommended (pers. comm. Roger Root, USFWS). A determination of SJKF absence from the proposed project site could only be supported by completing the protocol for this species and having a negative finding. Rather than completing protocol-level surveys for this species, the City of Soledad is assuming SJKF presence.

Pallid bat

The pallid bat (*Antrozous pallidus*) is a California Species of Special Concern. The CNDDB does not report any occurrences of this species within 10km of the project site, although they are known to occur at Pinnacles National Park, approximately 17 km northwest of the Miravale III project site. DD&A biologists did not observe or identify any pallid bats while onsite, however, this species is considered potentially present within and/or adjacent to the Miravale III project site given the mixed availability of appropriate foraging and roosting habitat.

Townsend's big-eared bat

Townsend's big-eared bat (*Corynorhinus townsendii townsendii*) is a California Species of Special Concern. The CNDDB does not report any occurrences of this species within 10km of the project site, however big-eared bats are considered potentially present within and/or adjacent to the Miravale III project site given the mixed availability of appropriate foraging and roosting habitat.

Western mastiff bat

Western mastiff bats (*Eumops perotis*) are a California Species of Special Concern. The CNDDB presents occurrences of this species approximately 8-10 km east to northeast of the Miravale III project site. DD&A biologists did not observe this species at the project site, but Mastiff bats are considered potentially present within and/or adjacent to the Miravale III project site given the availability of appropriate foraging and roosting habitat.

Western spadefoot

Western spadefoot is a California State Species of Special Concern. The CNDDB reports an occurrence of this species approximately 5km northwest of the project site. DD&A biologists did not observe any

adult spadefoot within the project boundaries however the project site is within the range of spadefoot and marginally appropriate breeding habitat is present at the onsite reservoir and associated fringe wetlands. As such, spadefoots are potentially present within project boundaries.

California tiger salamander

California tiger salamander is a federally Threatened and is also a designated California state Species of Special Concern. Critical Habitat for CTS (70 FR 49379-49458) went into effect on September 22, 2005. CTS is a large, stocky salamander that inhabits grasslands and oak savanna habitats in the valleys and low hills of central and coastal California. Adults spend most of their lives underground, typically in burrows of small mammals. During winter rains between November and February, adults emerge from underground retreats to breed. Adults have been found more than 2 km (1.24 miles) from breeding sites. Eggs are laid singly or in clumps on both submerged and emergent vegetation and on submerged debris in shallow water.

The CNDDB reports several occurrences of this species approximately 4.5 km north of the project site. In addition, the CNDDB reports the presence of CTS critical habitat within 4.5 km of the project site. Upland grassland habitats surrounding the pond represent appropriate estivation habitat for CTS. Tiger salamander larvae and paedomorphs were routinely detected at the onsite reservoir in the course of protocol-level surveys (aquatic sampling only) for this species (see below).

Brad Shaffer of U.C. Davis reports that multiple introductions on non-native tiger salamanders occurred in the nearby city of Gonzales, and that this portion of the Salinas Valley is a known "epicenter" of non-native genes in Monterey County (David Keegan, pers. comm.). The Shaffer Lab conducted genetic testing on 23 larval CTS tissue samples collected at the reservoir and reports that these animals range between highly hybridized to completely non-native (note: only 22 samples were successfully analyzed). The "nativeness" of these animals is summarized by the Shaffer Lab Report (Appendix E of the June 2008 Preliminary BA) via a Hybrid Index Score (HIS). HIS can range from 0.00 (pure native) to 1.00 (pure non-native). For the samples collected from the onsite reservoir, HIS values ranged from 0.8889-1.00 (i.e., 89-100% non-native). No genotyped individual can be described as "pure native." As such, coordination with USFWS regarding ESA jurisdiction over onsite hybrid/non-native tiger salamanders was initiated by DD&A on November 6, 2007. USFWS Ventura subsequently determined that tiger salamanders present at Miravale Pond 1 (onsite reservoir) are not subject to regulation under ESA and are therefore not within the regulatory jurisdiction of USFWS regulation (USFWS concurrence letter issued February 26, 2008 and presented in Appendix I of the June 2008 Preliminary BA).

California red-legged frog

California red-legged frogs (CRLF) are federally Threatened and are a state species of special concern. Critical Habitat for CRLF was designated by USFWS in April 2006 (FR 71 19243). The CNDDB reports several occurrences of this species approximately 8 km northeast of the project site. In addition, the CNDDB reports the presence of CRLF critical habitat approximately 10 km west of the project site. DD&A biologists did not observe any CRLF within project boundaries; however, given the presence of potential breeding habitat at the onsite reservoir and associated upland/estivation habitat, combined with the fact that the project site is located within the historic range of this species, CRLF are considered potentially present within project boundaries.

Coast horned lizard

The coast horned lizard (*Phrynosoma coronatum frontale*) is a California Species of Special Concern. The CNDDB does not report any occurrences of this species within 10 km of the project site. However,

given the availability of relatively undisturbed appropriate habitat for this species in the foothill portions of the site, it is anticipated that this species may be present at the project site.

Black-legless lizard

The black legless lizard (*Anniella pulchra ssp. nigra*), is a California Species of Special Concern. The CNDDB does not report any occurrences of this species within 10 km of the project site, however appropriate habitat for this species is present in the foothill/grassland portions of the site, particularly where sandy and/or friable soils are supported. Therefore, it is anticipated that this species may be present at the project site.

San Joaquin coachwhip

The San Joaquin coachwhip (a.k.a. whipsnake) is a California Species of Special Concern. The CNDD reports an occurrence of this species approximately 8 km south of the Miravale III project site. Appropriate habitat for this species is present within project boundaries, and it is therefore anticipated that this species may be present at the project site.

Western burrowing owl

Burrowing owls are a California Species of Special Concern. Burrowing owls are a year round resident of open, dry grasslands and shrublands with perches and burrows. Burrowing owls use rodent burrows (often California ground squirrel) for roosting and nesting cover. The CNDDB reports an occurrence of this species approximately 5 km northwest of the project site. DD&A and Biosearch biologists documented the presence of 3 burrowing owls and multiple active dens/burrows in the grassland/foothill and fallow agricultural portions of the site during the non-breeding season. Although an onsite grower related that burrowing owls had been observed in active agricultural portions of the site during the breeding season as recently as June 2006, the recent removal of grazing from grassland portions of the site may have reduced overall breeding season habitat quality for this species. Based on these observations, Western burrowing owls are known to utilize various habitats within the Miravale III project site during the non-breeding season.

White-tailed kite

The white-tailed kite is listed as a California Fully Protected species. In addition, this species is protected under both federal and state laws and regulation, including the Migratory Bird Treaty Act (1918, as amended) and CDFG Fish and Game Code Section 3503.5. The CNDDB does not report any occurrences of this species within 10 km of the Miravale III location; however, this species certainly occurs within that offset. Appropriate foraging habitat for this species is present throughout the mixed grassland and fallow agricultural portions of the site; however, typical nesting habitat is sparse. DD&A and BioSearch biologists have consistently observed white-tailed kites foraging over mixed grassland and fallow agricultural portions of the site during site assessments conducted in preparation of this report. White-tailed kites are assumed present, or occasionally present, within project boundaries.

Northern harrier

The northern harrier is a California Species of Special Concern. The CNDDB does not report any occurrences of this species within 10km of the Miravale III location; however, northern harriers certainly occur within that offset. DD&A and BioSearch biologists consistently observed Northern harriers foraging over the mixed grassland, fallow agricultural, and active agricultural portions of the site during our site assessments and field surveys. Appropriate foraging habitat for this species is present throughout

the site, and this species is assumed present, or occasionally present, within project boundaries. Potential nesting habitat for this species is present in the grassland portions of the site.

Golden eagle

Golden eagles (*Aquila chrysaetos*) are a California Fully Protected species and are an uncommon permanent resident and migrant throughout California, except in the center of the Central Valley. The CNDDB does not report any occurrences of this species within 10 km of the project site. However, Biosearch biologists monitor a known golden eagle nest in Stonewall Canyon, 3.9 km (2.4 miles) east of the site (Laabs, pers. com.). Appropriate foraging habitat for this species is present throughout the site (particularly the grasslands), and this species is anticipated to occur (or occasionally occur) within project boundaries. Nesting eagles are not anticipated within project boundaries given the lack of appropriate nesting habitat for this species.

Merlin

The merlin (*Falco columbarius*) is a California Species of Special Concern. This bird is a rare to uncommon spring and fall transient and winter visitor. They do not nest in California. The CNDDB does not report any occurrences of this species within 10 km of the project site and DD&A biologists did not observe this species during any site assessments. Although this species does not breed in Monterey County, appropriate wintering hunting/foraging habitat for this species is present throughout the project site. No resident merlins are present at the project site, but it is anticipated that this species may occasionally hunt/forage within project boundaries during the winter.

Prairie falcon

The prairie falcon (*Falco mexicanus*) is a California Species of Special Concern. The CNDDB does not report any occurrences of this species within 10 km of the project site and DD&A biologists did not observe this species during any site assessments. Although appropriate nesting habitat is not present within or immediately adjacent to the Miravale III project site, appropriate hunting/foraging habitat for this species is present throughout the project site (particularly the grasslands and fallow agricultural portions). While nesting falcons are not anticipated within or adjacent to project boundaries, this species may occasionally hunt/forage within project boundaries.

Loggerhead shrike

The loggerhead shrike is a California Species of Special Concern. The CNDDB does not report any records of this species within 10km of the project site, however the project site supports appropriate nesting and foraging habitats. Two loggerhead shrikes were observed foraging at the site on several occasions by DD&A and BioSearch biologists. Loggerhead shrikes are known to occur within project boundaries. Project build-out would result in the loss of all available foraging and nesting habitat for this species. Mitigation is presented to reduce impacts on nesting shrikes.

California horned lark

California horned larks (*Eremophila alpestris*) are a California Species of Special Concern. The CNDDB does not report any occurrences of this species within (or immediately adjacent to) the project boundaries, however appropriate nesting and foraging habitat for this species is present within the project boundaries. No horned larks have been observed onsite during site visits thus far. Given the presence of appropriate habitat, however, this species is deemed potentially present within the project boundaries.

Thresholds of Significance

In accordance with CEQA Guidelines, a project impact would be considered significant if the project would:

- have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service;
- have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service;
- have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance;
- conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan; or
- impede the use of native wildlife nursery sites or directly harm nesting species protected under the provisions of the Migratory Bird Treaty Act.

Impacts and Mitigations

Development of the proposed project has the potential to adversely impact a number of special-status and sensitive species as defined by CDFG and USFWS through habitat modification and the subsequent introduction of new urban features on a predominately undeveloped 920 acre project site. In addition, the transformation of the project site in accordance with the Miravale III Specific Plan would also directly interfere with the movement of a number of wildlife species and impede the movement of wildlife through a portion of the Gabilan Range, which is a known wildlife corridor for a number of protected and/or sensitive species as discussed above. Development of the proposed project is also anticipated to result in a number of direct and potentially significant impacts to wildlife species, including the San Joaquin kit fox, California red-legged frog, American badger, Salinas pockey mouse, black-legless lizard, coast horned lizard, San Joaquin coachwhip, and western spadefoot, as discussed in greater detail below. In addition, the proposed project also has the potential to impact special-status plant species, such as Lemmon's jewelflower. The purpose of the following analysis is to identify potential impacts associated with the development of the proposed project site and identify feasible mitigation to minimize the extent of impacts in accordance with the analysis contained in the Preliminary BA prepared by DD&A. For a more detailed analysis of project-related impacts, please refer to the Preliminary BA and supporting analysis, which is included as Technical Appendix T-3 in Volume II of the DEIR.

As discussed in greater detail below, the proposed project would represent a significant and unavoidable impact to San Joaquin kit fox. Hybridized/non-native tiger salamanders known to occur at Pond 1 (onsite reservoir) are not jurisdictional under ESA (USFWS concurrence letter issued February 26, 2008 and presented in Appendix I of the Preliminary BA). If it is determined that California red-legged frog are present onsite (protocol-level surveys required below), the project would represent a significant and unavoidable impact to this species.

The proposed project would represent a significant and unavoidable impact to several California species of special concern: American badger, Salinas pocket mouse, black-legless lizards (if present), coast-horned lizard (if present), San Joaquin coachwhip (if present), and western spadefoot (if present).

The proposed project would represent a potentially significant impact to several other California species of special concern, but these impacts can be reduced to less-than-significant with implementation of the measures presented below. These species include: nesting birds and raptors, bats (pallid and Townend's big-ear), burrowing owl (offsite mitigation), golden eagle, merlin, white-tailed kite, northern harrier, loggerhead shrike, California horned lark and Lemmon's jewelflower.

Wetlands/Sensitive Habitats

According to the Preliminary BA prepared by DD&A, development of the proposed project has the potential to directly impact sensitive habitat types, including 0.17 acres of wetlands. According to the US Army Corps of Engineer's Wetland Delineation Manual (1987), wetlands are defined as "[t]hose areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." As detailed in the Preliminary BA and discussed above, a wetlands assessment was conducted to determine whether on-site aquatic features (i.e. agricultural ponds) contained characteristics consistent with wetlands. The wetlands identified on-site exist as a thin band of emergent vegetation on the fringe of four small man made reservoirs/ponds used in conjunction with routine agricultural operations. It is assumed that this resource satisfies the soils, vegetation and hydrologic criteria set forth by the U.S. Amy Corps of Engineers (USACOE) for wetlands. However, the USACOE does not regulate wetlands that are hydrologically isolated and geographically distinct from other jurisdictional resources in the vicinity. The individual aquatic features are not contiguous with other jurisdictional wetlands and/or waters of the U.S and do not have any hydrologic connectivity or abut any permanent water body. As a result, the fringe wetlands identified on site are not under the Jurisdiction of the USACOE. Further, impacts to these wetlands would not be in conflict with federal regulation.

The function and value of these man-made wetland resources are marginal as a result of ongoing disturbance from agricultural uses. In addition, the value of the existing reservoir located in the uplands portions of the site as wildlife habitat is limited as it supports a non-native predatory amphibian: the barred tiger salamander. This salamander is known to prey on native special status amphibian species such as the California tiger salamander and the California red-legged frog when present. In addition, hybridization between the non-native barred salamander and the native tiger salamander has been identified by the U.S. Fish and Wildlife Service as a significant threat to the native California tiger salamander.

Although development of the proposed project would impact approximately 0.17 acres of fringe wetlands of marginal habitat value, impacts are considered to be less-than-significant as development of the proposed project would entail the construction of a number of aquatic resources as a component of golf course development, and storm water drainage facilities. More specifically, as identified in Section 5.1.3 of the Specific Plan, two of the existing retention ponds would be converted to storm water facilities as part of project development. While formal plans have not been submitted at this time for development of the golf course, future on-site ponds and other resources would significantly exceed the size of the existing on-site aquatic resources.

In summary, development of the proposed project would result in the removal of existing on-site agricultural ponds and reservoirs to facilitate new urban uses on the predominately undeveloped project site. These wetlands are not considered to be jurisdictional for the reasons identified above and the

project would provide suitable replacement wetlands through the construction of various stormwater drainage facilities and ponds associated with the golf course. Impacts to wildlife and other sensitive species associated with the removal of on-site aquatic features are addressed in greater detail below. **Based on this analysis, development of the proposed project would result in a less-than-significant impact on a wetland.**

Vegetation

Impact **The proposed project would represent temporary and permanent impacts to all habitats and the vast majority of vegetation within project boundaries, and will result in the removal of 3 or more oak trees plus all Eucalyptus and/or Tamarisk trees lining San Vicente Road. Temporary impacts to vegetation included grubbing and grading associated with development of the site; permanent impacts include the conversion of open vegetated areas to urban housing through placement of structures, homes, roads, driveways, etc.** ***This is a less-than-significant impact with implementation of the following measures.***

Mitigation

4.4-1 A Forest Management Plan shall be prepared for the project due to proposed tree removals. The City approved Forest Management Plan (and associated replanting plan) shall be incorporated as a condition of project approval to satisfy General Plan Conditions C/OS 17-19. Prior to the issuance of any grading and/or building permit, the project applicant shall submit a Forest Management Plan, subject to the review and approval of the City of Soledad.

4.4-2 Trees and vegetation not planned for removal shall be protected during construction to the maximum extent feasible. This shall include the use of exclusionary fencing of herbaceous and shrubby vegetation, such as hay bales and protective wood barriers for trees. Only certified weed-free straw shall be used to avoid the introduction of non-native, invasive species.

4.4-3 Following construction, the disturbed areas that are proposed as parks and native landscaping areas shall be restored to pre-project contours to the maximum extent feasible and revegetated using locally-occurring native species and native erosion control seed mix.

4.4-4 Protective fencing shall be placed so as to keep construction vehicles and personnel from impacting vegetation adjacent to the project site outside of work limits.

4.4-5 Grading, excavating, and other activities that involve substantial soil disturbance shall be planned and carried out in consultation with a qualified hydrologist, engineer, or erosion control specialist, and shall utilize standard erosion control techniques to minimize erosion and sedimentation to native vegetation.

4.4-6 No construction equipment shall be serviced or fueled outside of designated staging areas.

Special-Status Plant Species

Lemmon's jewelflower, a California species of special concern, is the only special-status plant species deemed potentially present within project boundaries. All other special-status plant species are eliminated for the species-specific reasons provided within this document and the Preliminary BA presented in Technical Appendix T-3.

Impact **The presence/absence of jewelflower has not been determined at this time, but appropriate habitat is present within project boundaries. This species could be permanently impacted by proposed grading, excavation, and other activities that may result in the permanent loss or disturbance of individual jewelflowers and/or jewelflower habitat.** ***This impact is considered less-than-significant given implementation of the mitigation below.***

Mitigation

4.4-7 A qualified botanist shall be retained to conduct preconstruction surveys for Lemmon's jewelflower during the typical flowering season of this species (March-May), to determine the presence/absence of this species. If no Lemmon's jewelflower is present, no additional mitigation is required. If Lemmon's jewelflower is present, a qualified biologist shall prepare a mitigation plan to be approved by CDFG prior to initiation of construction. The City of Soledad Planning Department shall be provided verification of CDFG concurrence and satisfaction prior to issuance of grading permits.

Special-Status Wildlife Species

Based on a review of project plans, background literature, and extensive field surveys, one listed species is assumed present; San Joaquin kit fox (federally endangered). In addition, appropriate habitat is present for the federally threatened California red-legged frog, and the project site is within the historic range of the species.

One California fully protected species is known to occur onsite: white-tailed kite. In addition, the following California species of special concern may occur, or are known to occur onsite: American badger; Salinas pocket mouse; pallid bat; Townsend's big-eared bat; Western Mastiff bat, black legless lizard; Western spadefoot; coast horned lizard; San Joaquin coachwip, burrowing owl; Golden eagle; merlin; prairie falcon; white-tailed kite; northern harrier; loggerhead shrike; Coopers hawk, and California horned lark.

Impact **Project development would fragment (i.e., divide and disrupt) the vast majority of the existing wildlife habitat on the site, and would represent an urban encroachment into the foothills of the Gabilan Range (an important wildlife corridor). The ongoing presence of homes, roads, cars, people, firearms, pets, etc. would adversely impact any wildlife currently utilizing the site, particularly in the grassland portions of the site (i.e. deer, coyote, fox, jackrabbits, squirrels, and raptors). Comparable development is present immediately south of the proposed project, but does not extend into the grassland/foothill portions of the site.** ***This fragmentation of habitat is considered a significant impact that can be partially reduced by implementation of the required mitigation below; however, cannot be fully mitigated without project redesign. Therefore, the fragmentation of habitat is considered a significant, unavoidable impact of the project as currently designed.***

Mitigation

4.4-8 Prior to approval of each final map, the applicant shall prepare and submit draft Covenant, Conditions, and Restrictions (CC&Rs) applicable to that phase that shall include the following:

a) restrict installation fencing to the immediate vicinity of residences, and where fencing is placed adjacent to open space areas and areas of natural, undisturbed habitat, fences shall be installed such that a six inch space is left between the bottom of the fence and the surface of the ground;
b) prohibit off-road vehicle use;
c) prohibit illegal discharge of firearms;
d) prohibit the installation of road medians throughout the development.

These CC&Rs shall be reviewed and approved by the City of Soledad prior to approval of each final map.

Impact **Suitable foraging/dispersal habitat for San Joaquin kit fox is present throughout project boundaries, with potential denning habitat present in the annual grassland, rocky outcrop, and fallow agricultural portions of the site. The vast majority of the habitats present within project boundaries would be directly impacted by the proposed project (grubbing and grading, construction phase impacts, permanent placement of structures and impermeable surfaces, etc.). Impacts proposed in the grassland portions of the site will likely result in kit fox abandonment of the property due to ongoing disturbance. For this reason, the project is assumed to have a significant and unavoidable adverse affect on San Joaquin kit fox (i.e. direct mortality, loss of habitat, loss of dens, etc.).** ***This impact may be reduced by implementation of the following mitigation measures; however, the impact will not be reduced to a less-than-significant level without USFWS consultation. Please note that the following measures are consistent with direction from USFWS on other projects, but greater or lesser measures may be required by the regulatory agencies (possibly including completion of protocol-level surveys to determine utilization of the site and/or project redesign).***

Mitigation

4.4-9 The applicants shall enter into consultation with USFWS and CDFG and shall provide evidence of their compliance with applicable requirements of the federal Endangered Species Act and California Endangered Species Act prior to the issuance of building permits.

4.4-10 Pre-construction surveys for kit fox dens shall be required for all development phases of the future project. Pre-construction surveys shall be conducted by a qualified biologist no less than 14 days and no more than 30 days prior to the start of any ground disturbing activities to locate kit fox den sites. In addition to pre-construction surveys, a qualified biologist, meeting the required qualifications described in the *U.S. Fish and Wildlife Service Standardized Recommendations for the Protection of the San Joaquin Kit Fox Prior to Ground Disturbance*, June 1999 (USFWS Recommendations for SJKF), shall be on-site to monitor construction activities for the San Joaquin kit fox. In the event that an active kit fox den is found, then the standard mitigation actions outlined in the USFWS Recommendations for SJKF, are recommended to avoid possible take of kit fox during future construction activities. These actions are general in nature; therefore, site specific strategies for the project site shall be based upon consultation with USFWS and CDFG, as stated above in Mitigation Measure #4.4-10. If active kit fox den sites are found and/or kit fox individuals are observed during the survey, the applicant will be required to comply with all mitigation actions required by USFWS and CDFG and the City shall monitor implementation of those actions.

Impact **Multiple badger dens and badger diggings were observed in the vicinity of the onsite reservoir and within other portions of the annual grassland habitat. An adult badger was observed emerging from an onsite den by Biosearch biologists. Badger diggings were also observed in fallow agricultural portions of the site, demonstrating badger utilization of these areas as foraging habitat. Therefore, construction activities in grassland portions of the site have the potential to impact badger dens, and construction within fallow agricultural portion of the site will impact badger foraging habitat. Project-related construction activities (i.e. grading, excavation, development, etc.) may result in a permanent loss or disturbance of American badgers and their habitat.** ***Given the proposed build-out of the project site and impacts to the vast majority of the grassland habitat, impacts to this species are considered significant and unavoidable impact. Mitigation is presented to reduce these impacts as much as feasible; greater or lesser measures may be required by CDFG.***

Mitigation

4.4-11 The applicant shall retain a qualified biologist to conduct focused preconstruction surveys for potential American badger dens. These surveys shall be conducted no sooner than 2 weeks prior to the start of construction. Surveys for badger dens may be conducted at the same time as burrowing owl surveys. Please refer to the mitigation measures in the Preliminary BA (June 2008) for measures that may be implemented based on the results of these surveys.

Impact **Two special-status bat species may be present onsite (pallid bat and Townsend's big-eared bat); several other bat species may also be present. Removal of onsite trees, removal of onsite buildings, and development of the site (including encroachment/disruption of rocky outcrops) may result in direct impacts to bats and/or bat roosts (day, night, foraging, and maternity) and would remove the vast majority of onsite foraging habitat for these species.** ***This impact is considered less-than-significant with implementation of the following mitigation.***

Mitigation

4.4-12 A qualified bat specialist shall conduct site surveys to characterize bat utilization of the site and species composition present (techniques utilized to be determined by the biologist). Please refer to the mitigation measures in the Preliminary BA (June 2008) for measures that may be implemented based on the results of these surveys.

Impact **Salinas pocket mouse is known to occur onsite; presence was confirmed in September 2006. As the vast majority of the onsite grassland habitat will be converted to residential usage and the remaining portions will be fragmented from surrounding habitat and subject to ongoing disturbance (cars, lights, noise, sound, vibration, etc.), significant impacts to this species are anticipated (direct and indirect mortality).** ***This would represent a significant and unavoidable impact. The following mitigation is presented to reduce this impact as much as feasible.***

Mitigation

4.4-13 The applicant shall contract a qualified biologist to coordinate with CDFG and prepare a mitigation and monitoring plan for Salinas pocket mouse. Verification of CDFG concurrence/approval shall be submitted to the City of Soledad prior to initial grubbing and grading of the site.

Special-Status Avian Species

The following special-status avian species were observed foraging within the project site: Western burrowing owl, Northern harrier, white-tailed kite, loggerhead shrike, and Northern harrier. In addition, golden eagle, merlin, prairie-falcon, Cooper's hawk, and horned lark have the potential to utilize the site for foraging. Golden eagles, merlins, and prairie falcons have specific nesting habitat requirements (e.g., sheltered cliffs and/or large trees supporting cavities) or are known to only nest in certain geographic regions of California outside of the Monterey Bay region (e.g., Merlins), which are not present within the project site. Therefore, no suitable nesting habitat for these species occurs within the project site. However, suitable breeding habitat is present for burrowing owl, northern harrier, white-tailed kite, and loggerhead shrike. The project would result in the loss of foraging and/or nesting habitat for these species.

Raptors and their nests are protected by both federal and state regulations (MBTA and CDFG Code Sections 30503 and 3503.5), which protect birds of prey and their eggs and nests. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "take" by CDFG. Any loss of fertile raptor eggs or nesting raptors, or any activities resulting in raptor nest abandonment, will constitute a significant impact. Construction activities such as tree removal or site grading that disturb any nesting raptors (or other avian species) on-site or immediately adjacent to the site will constitute a significant impact.

Impact **Tree removal (i.e., Eucalyptus and Tamarisk trees lining San Vicente Road and oaks present in the northeast corner of the site) and disturbance associated with construction of the proposed project would likely impact any nesting birds and/or raptors present within project boundaries (harassment, stress, brood-less, nest abandonment, injury, mortality). Per the CDFG Guidelines, impacts to burrowing owls are defined as disturbance or harassment within 160 feet of occupied burrows, destruction of burrows and burrow entrances, and degradation of foraging habitat adjacent to occupied burrows. In addition, the project would require grading, grubbing, tree removal, excavation, and other activities that may result in a permanent loss or disturbance of raptors and migratory birds and their habitat. *This would represent a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation measures.***

Mitigation

4.4-14 Burrowing owls are known to occupy burrows in mixed grassland, active agricultural, and fallow agricultural portions of the Miravale site during the non-breeding season (breeding season utilization not observed in the course of protocol-level surveys). A qualified biologist shall conduct preconstruction surveys to locate active breeding and/or wintering burrowing owls (depending on season) no more than 30 days prior to the start of construction. If ground disturbing activities are delayed or suspended for more than 30 days after the preconstruction survey, the site shall be resurveyed. The survey shall conform to the CDFG 1995 Staff Report protocol. Wherever burrows are identified, impact avoidance and mitigation measures shall be implemented (previously mapped burrow locations may not be occupied and/or new burrows may be occupied). Please refer to the mitigation measures regarding burrowing owl in the Preliminary BA (June, 2008) for avoidance and mitigation measures that may be implemented based on the results of these surveys.

4.4-15 If project activities will initiate during the typical avian nesting season (February 15– August 1), a qualified biologist shall conduct focused preconstruction surveys no more than 14 days prior to initiation of construction activities for nesting birds, including (but not limited to) white-tailed kite, northern harrier, loggerhead shrike, and horned lark, in all areas that may provide suitable nesting habitat within 300 feet of the construction area. If active nests are found, a suitable construction buffer shall be established by a qualified biologist, and no work shall occur within that buffer until August 1 when young are assumed fledged. Alternatively, a qualified biologist can conduct weekly nest checks to gauge nestling/fledgling status, and construction may proceed once fledglings have dispersed from the nest provided written concurrence from CDFG. No active nest shall be impacted or removed without a depredation permit from CDFG, and a depredation permit will not be issued for impacts to Fully Protected Species such as the white-tailed kite. For activities that occur outside of the nesting season (generally September 1 through February 14), preconstruction surveys are not required. If construction is initiated outside of the nesting season and continues into the nesting season, preconstruction surveys are required if construction will occur in areas not previously accessed and/or disturbed (>300 feet from previous construction activities).

4.4-16 A preconstruction survey shall be conducted no more than 14 days prior to modification, demolition, or removal of onsite buildings. If no owls or other nesting birds are observed, then demolition or removal may proceed. If barn owls (or any other nesting birds) are observed during the preconstruction survey, a determination shall be made on whether birds are roosting or nesting. If a single owl is roosting, demolition or removal of the structure can proceed after the owl has been persuaded to move from the roost area. Non-invasive techniques include light shining into the roost space for one or two nights and days. If barn owls (or other nesting avian species) are found to be actively nesting in the barn, work on or demolition of the structure shall be postponed until one of the following conditions have been met: 1) a qualified biologist monitoring the nest determines that the owls have abandoned the nest without any outside interference or 2) a qualified biologist monitoring the nest has determined that the young have fledged and are capable of relocating and using another roost site. Once the young have fledged, non-invasive techniques may be used to encourage the owls to leave the barn. Under either scenario, the monitor shall ensure that all owls have left the building prior to construction or demolition activities. The barn owl nesting period is typically between February 15 and July 15.

Special Status Reptiles and Amphibians

Protocol-level aquatic surveys began in May 2007 to determine the presence or absence of CTS at the onsite aquatic resources. The onsite reservoir was documented to support tiger salamander larvae on May 8, 2007 (personal observation, David Keegan). Genetic testing of tissue collected from onsite tiger salamander larvae and/or paedomorphs was conducted by the Shaffer Lab of U.C. Davis; onsite tiger salamanders are highly hybridized to completely non-native (89-100% non-native). Coordination with USFWS regarding ESA jurisdiction over hybrids/non-native was initiated by DD&A in November of 2007; USFWS subsequently concurred that tiger salamanders known to occur at Pond 1 (onsite reservoir) are not the regulated species "California tiger salamander" and are not subject to the jurisdiction of USFWS (USFWS concurrence later issued February 26, 2008 and presented in Appendix I of the June 2008 Preliminary BA). However, given the presence of marginally appropriate habitat, both California red-legged frog and Western spadefoot may be present within project boundaries; these species would be associated with the same aquatic resources and surrounding upland habitats as the non-native/invasive tiger salamander.

Impact **The presence of California red-legged frog and/or Western spadefoot has not been determined at this time. The project as currently designed would fill the onsite reservoir to establish home-sites, removing a potential breeding resource for these species. Pond 3 would likewise be permanently filled as a result of the proposed project. If CRLF or spadefoot are present, proposed impacts to onsite agricultural basins (particularly the reservoir) would result in direct impacts to these species including "take." (i.e. loss of individuals and habitat, loss of a breeding resource, direct mortality, etc.). In addition, grading and other earthmoving activities proposed would represent an adverse affect on upland estivation habitat for these species, if present.** ***Therefore, the proposed project would represent a significant and unavoidable impact to federal and state regulated wildlife species (if present,) as currently designed. However, implementation of the mitigation measures identified below will reduce these impacts as much as feasible; greater or lesser measures may be required by USFWS.***

Mitigation

4.4-17 Protocol-level CRLF surveys (USFWS, August 2005) shall be completed at each aquatic resource present within project boundaries. Protocol-level CRLF surveys would likely detect Western spadefoot, if present. If it is determined that CRLF are present, the applicant shall coordinate with the USFWS to determine the appropriate course of action per the requirements of the federal ESA (e.g., applying for an Incidental Take Permit [Section 7 and/or 10 depending on lead agency]) and implementing the permit requirements. Any mitigation and avoidance measures required by USFWS for potential impacts to CRLF (if applicable) would likewise reduce impacts to Western spadefoot given their overlapping habitat characteristics. If it is determined that spadefoot are present, but CRLF are not, coordination with CDFG regarding appropriate mitigation to reduce impacts to this species shall be required.

Impact **Proposed development of the majority of the onsite grassland habitat and fragmentation of remaining grassland habitat represents a significant impact to coast horned lizards and black-legless lizards (and other wildlife species).** ***Given the lack of unaffected portions of the grassland habitat for conservation of these species, this is considered a significant and unavoidable impact. The following mitigation is presented to reduce this impact as much as feasible; greater or lesser measures may be recommended by CDFG.***

Mitigation

4.4-18 The applicant shall retain a qualified biologist to conduct a construction monitoring program for black legless lizards, coast horned lizards, and San Joaquin coachwip which shall include procedures for capture and release. The biologist shall remain on-site during initial grading activities to salvage and relocate these species that may be uncovered during earthmoving activities. Recovered individuals shall be placed in appropriate habitat outside of the project site in accordance with the MOU with CDFG. The biologist shall walk alongside the grading equipment in each new area of disturbance and shall have the authority to halt construction temporarily if necessary to capture and relocate an individual. Any individual captured in the grading zone shall be relocated as soon as possible to adjacent suitable habitat outside of the area of impact, pursuant to the MOU.

4.4-19 The applicant shall conduct an employee education program for construction crew and City staff prior to construction activities. A biological monitor shall meet with the construction crew at the onset of construction to educate the construction crew on the following: 1) the appropriate access route in and out of the construction area; 2) how biological monitor will examine the area and agree upon a method which will ensure the safety of the monitor during such activities, 3) the special-status species that may be present; 4) the specific mitigation measures that will be incorporated into the construction effort; and 5) the proper procedures if a special-status animal or any other animal is encountered within the project site.

4.4-20 A representative shall be appointed by the City who will be the contact source for any employee or contractor who may inadvertently kill or injure a special-status species or find one dead, injured, or trapped. The representative shall be legally responsible to notify USFWS and CDFG immediately in the event that "take" of any special-status wildlife species occurs. The representative shall be identified during the Employee Education Program and his/her contact information shall be provided to USFWS and CDFG. It is imperative that this individual will be present onsite every day and will be accessible to regulatory agency personnel.

4.4-21 All food-related and other trash shall be disposed of in closed containers and removed from the project area at least once a week during the construction period or more often if trash is attracting avian or mammalian predators. Construction personnel shall not feed or otherwise attract wildlife to the area. These instructions to the construction crew shall be reiterated during the employee education program and during update meetings with construction crews. The instructions shall also be posted conspicuously on the site.

Impacts to Wildlife Movement and Nursery Sites

The General Plan EIR identifies "adverse but not significant" impacts to wildlife movement based on the availability of the Salinas River and Arroyo Seco corridors in the project area. However, the General Plan EIR requires that portions of the Gabilan Range above 400-feet elevation be conserved as open space. Development above 400-feet elevation is proposed as a portion of the Miravale III project, significantly encroaching into an area proposed for conservation and impacting an upland wildlife movement corridor. As stated in the Preliminary BA, Miravale III "proposed 'open space' portions of the site (including the 62 acres of grasslands) are not designed or suitable as plant and wildlife conservation areas." An increase in the total number of roadways in the project site could be expected to result in an increase in the number of animals killed by vehicular traffic. The permanent onsite presence of homes, roads, and infrastructure would further fragment habitats surrounding the project site and represents an urban encroachment into the foothills of the Gabilan Range. As such, development of the proposed project, particularly above the 400' elevation contour, would result in a significant impact to wildlife movement. Existing mitigation measures identified elsewhere in this section would minimize project-induced impacts to the greatest extent feasible, but not to a less-than-significant level. ***This represents a significant and unavoidable impact.***

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4.5 CULTURAL RESOURCES

Introduction

The following discussion is based on a Preliminary Archaeological Reconnaissance prepared for the project by Archaeological Consulting (September 2006). A Phase One Historic Review was prepared by Kent Seavey (October 2006) to evaluate the historical significance of an existing farmhouse. A CEQA Impacts Analysis and Mitigation Report was also prepared by JRP Historical Consulting (July 2007) to identify impacts and identify appropriate mitigation for the existing farmhouse. These reports are included as Technical Appendix T-4, which is included in Volume II of this EIR.

The Preliminary Archaeological Reconnaissance (hereafter referred to as "Archeological Report") included an archival search of existing records, a field reconnaissance of the project site, and an assessment of potential effects on cultural resources. The Phase One Historic Review Evaluation was used to analyze the historical significance of existing buildings located on the project site. Those services included a review of Monterey County building records, taking photographs of the subject property, research on the original ownership including a full literature search, examination of photo archives, and preparation of required California DPR 523 documentation. The CEQA Impact Analysis and Mitigation Report discussed potential impacts and mitigation for the historical resources found at the project site.

Setting

Site History

The project site lies outside the city limits, along the northern edge of the City of Soledad. This area may include archeological resources from the prehistoric era (ranging from around 8000 B.C. to 1770 A.D.) and historic resources dating from 1770 to 1897 or later. The project area is located within the ethnographic territory of the Esselen linguistic group. These people roamed the land leaving little physical traces of their existence and were most likely members of the Costanoan tribe. The historical distribution of the Esselen linguistic group extended from Monterey to San Mateo County as well as the inland portions of San Benito and Santa Clara Counties prior to the first European explorers constructing the presidio in Monterey and missions in Carmel, Soledad, San Juan Bautista, and the San Antonio Valley. Sedentary occupation sites are most often found near the convergence of streams and near other sources of water such as the Salinas River.

Primary land uses changed from cattle ranching to farming around 1865, after years of flooding covered the valley floor with rich topsoil. Recent use of the project site includes row crop cultivation and grazing lands. Most of the western portion of the project site is fallow with remnants of former vineyards in some areas. There are also two existing structures on the southwest corner of Section 16 of the project site. These structures have historically been used to support farming operations on the project site.

Archaeological Resource Investigation

As part of the Archaeological Report, Archaeological Consulting conducted a records search of the files at the Northwest Regional Information Center and reviewed existing files to identify any recorded historic or prehistoric sites in the project area. There were no previously listed archaeological sites found, but one historical resource is located within one kilometer of the project area. The California Inventory of Historical Resources, California Historical Landmarks, and the National Register of Historic Places were also reviewed to identify historic resources in the project area, and no recorded resources were found.

Several historic maps were also examined for evidence of structures or other historic resources on the project site. A field survey of the project site was conducted in early September 2006. The survey consisted of a general surface reconnaissance of all visible areas. Site conditions were not consistent with typical prehistoric cultural resource site conditions, such as dark midden soil, fire altered rocks, bone fragments, flaked stone, and shell fragments. Contour transects for sloped areas and straight line transects for flatter areas were walked at regular intervals over the entire project site. Some glass and ceramics were found, but they were not consistent with historical trash sites. The remnant of a historical fence containing square cut nails was found along the northeast quadrant of the property; however, most of the fencing has been replaced with modern materials. No other materials associated with prehistoric cultural resources were identified. The existing farmhouse and barn were recommended for historical review. See Figure 4.5-1 for a map of the location of the structures.

Regulatory Environment

City of Soledad General Plan

The Conservation/Open Space Element of the General Plan provides policies for protection of cultural resources. The following policies are applicable to the project site and its potential historic, cultural, and architectural resources:

Policy 8.5 The City shall amend the zoning ordinance to include the following or similar language: The demolition or remodel of buildings considered to be of historic, cultural, or architectural significance shall not occur unless the following findings can be made.

- Remodel or Alteration. The proposed remodel or alteration does not adversely affect the historic, cultural, or architectural significance of the building or site.

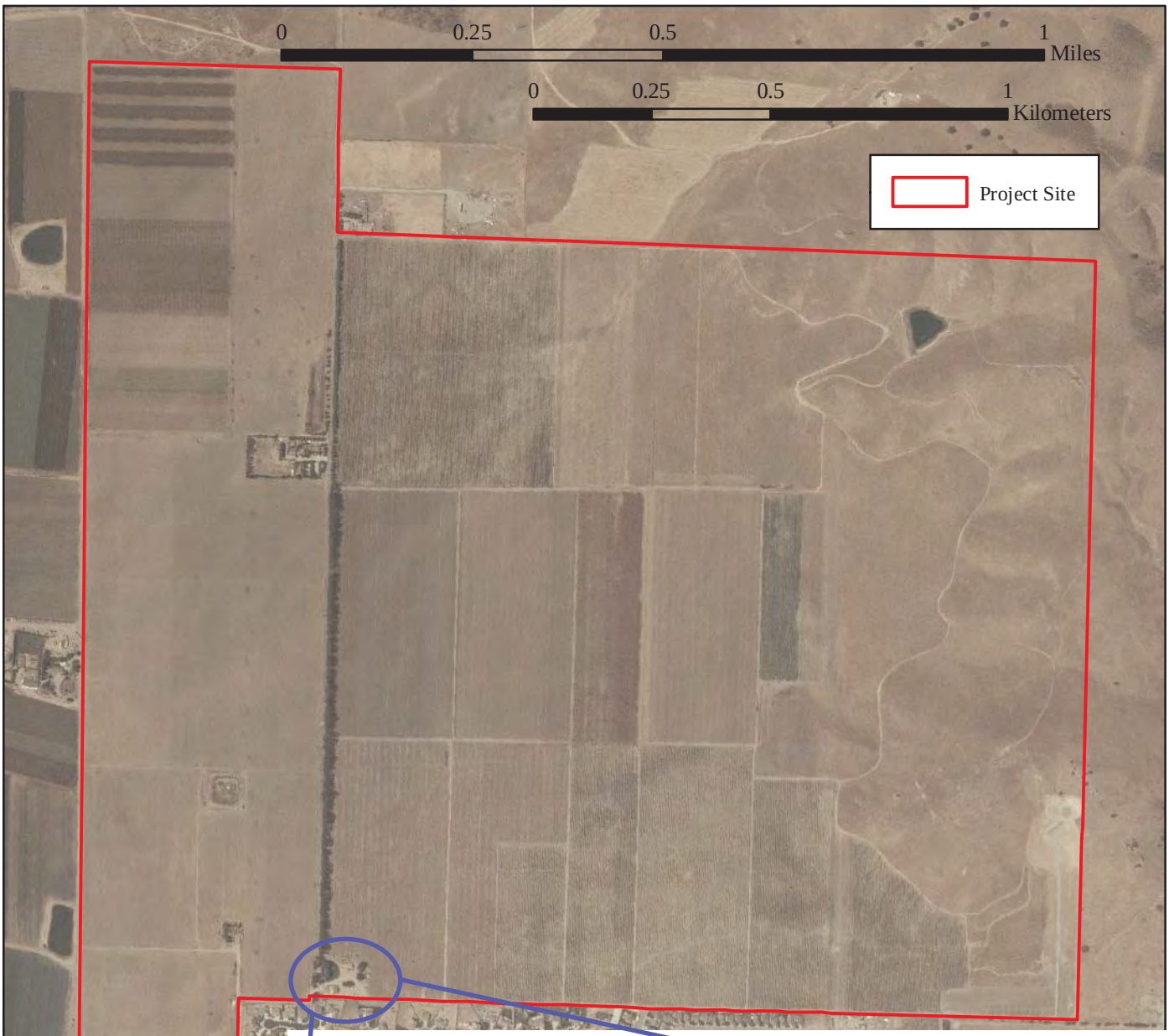
- Demolition. The Demolition of the building does not adversely affect the historic, cultural, or architectural character of the City of Soledad, or the building presents a clear hazard to occupants or to the public, which can not be feasibly corrected through restoration.

Policy C/OS23 If development of a site uncovers cultural resources, the recommendations of Appendix K of the Guidelines for Implementation of the California Environmental Quality Act (Public Resources Code Section 15000 et seq.) shall be followed for identification, documentation, and preservation of the resource.

Policy C/OS24 The City shall document and record data or information relevant to prehistoric and historic cultural resources which may be impacted by proposed development. The accumulation of such data shall act as a tool to assist decision makers in determinations of the potential development effects to prehistoric and historical resources located within the City.

The Land Use Element also includes specific guidelines and policies regarding the city's historic and cultural resources.

Policy L52 Historically or architecturally significant buildings shall not be demolished or substantially changed in outward appearance in a way that diminishes the historical character, unless doing so is necessary to remove a threat to health and safety and other means to avoid the threat are infeasible.





Front - Lorentzen House



Back- Lorentzen House

Source: CEQA Impact Analysis and Mitigation Report, JRP Historical Consulting, July 2007.

N

Historic Resources

Figure 4.5-1

Cultural and archaeological resources policies which apply to development within the project area include requirements for preservation of cultural and archaeological resources. Please refer to Table 4.9-2 of the Land Use section for a detailed analysis of the project's consistency with the City's General Plan cultural and archeological resource policies.

Environmental Impact Report on the Soledad General Plan. The General Plan EIR evaluated potential cultural and historic impacts associated with the adoption and implementation of the Soledad General Plan, including future development within the project area. This program-level EIR focused on general impacts associated with implementation of the General Plan, rather than project-specific impacts associated with individual development projects, such as the proposed project. According to the General Plan EIR, the following cultural and historic impacts were identified:

- Development of the land uses contemplated by the draft Plan could unearth or disturb previously undiscovered resources of cultural or historic significance. This impact was identified as significant unless mitigated.

- Development in accordance with the draft Plan could alter the historic character of the City. This impact was also identified as significant unless mitigated.

Miravale III Specific Plan

The Miravale III Specific Plan does not include any provisions or policies concerning archaeological, cultural, or paleontological resources.

Thresholds of Significance

In accordance with CEQA Guidelines, a project impact would be considered significant if the project would:

- cause a substantial adverse change in the significance of a historical resource as defined in §15064.5;

- cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5;

- directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or

- disturb any human remains, including those interred outside of formal cemeteries.

Impacts and Mitigation

Historic Resources

A farmhouse located along the southern property border at the intersection of San Vicente Road and the proposed H Street was identified as a potential historical resource. See Figure 4.5-1, Historic Resource Location Map, for site photos of the structure. A historic evaluation of the house was prepared by Kent Seavy, Preservation Consultant, and also by Meta Bunse, JRP Historical Consulting, to determine the significance of this resource. Their evaluations used the criteria for listing on the California and National Registers, as well as criteria set forth in Section 15064.5 of the CEQA Guidelines. These criteria are as follows:

California Register of Historical Places

In order for a resource to be eligible for the California Register, it must be significant at the local, state, or national level under one or more of the four criteria of significance listed below. These are essentially the same as National Register criteria with more emphasis on California history.

1. The resource is associated with events or patterns of events that have made a significant contribution to the broad patterns of local or regional history and cultural heritage of California or the United States.

2. The resource is associated with the lives of persons important to the nation or to California's past.

3. The resource embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values.

4. The resource has the potential to yield information important to the prehistory or history of the local area, state or the nation (this applies primarily to archaeological sites).

National Register of Historic Places

Specific criteria are used to evaluate a historic property's eligibility for the National Register. To meet the National Register standards, a resource must satisfy at least one of the below criteria, be associated with an important historic context, and retain the historic integrity of features that conveys its significance.

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, as well as:

A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
B. That are associated with the lives of persons significant in our pasts; or
C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinctions; or
D. That have yielded, or may be likely to yield, information important in prehistory or history.

Local Register

In addition to the above criteria, under CEQA Section 15064.5 a significant historic resource may include those resources identified in a local register or survey, or identified by the lead agency as significant based on substantial evidence. This could be “any object, building, structure, site, area, place, record or manuscript which a lead agency determines, based on substantial evidence in light of the whole record, to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military or cultural annals of California.”

Summary of Evaluation

The house and barn in the southwest corner of the project site, east of San Vicente Road, were evaluated for historical significance as recommended in the Archeological Report prepared for the project. A Phase One Historical Evaluation determined that the existing house, referred to as the Morris Lorentzen House, is significant under criterion 3 of the Public Resources Code Section 5024.1(a), in the area of architecture as an intact example of a David Jacks Corporation prefabricated farm house from the first decade of the twentieth century. Between 1908 and 1915, Monterey's David Jacks Family corporation had designed and constructed a series of up to sixty-six of these structures, known as Jacks farmhouses, on several ranches and dairies in the Salinas Valley between Chular and King City on 30,000 acres of the vast land holdings acquired by David Jacks during the nineteenth century. Currently, there are only twelve known Jacks farmhouses still in existence. As the Morris Lorentzen House is still in relatively good condition, the Phase One Historical Review concluded that the Morris Lorentzen House is an intact example of a type of rare architectural style found in the Salinas Valley. The Morris Lorentzen House embodies distinctive characteristics of a type and period of regional construction specific to the Salinas Valley; therefore, the structure qualifies thematically for listing in the California Register and such properties are considered historical resources under CEQA.

The Morris Lorentzen House is a two-story, wood-framed, front gable residence with a rectangular plan. The building makes spare use of ornament and is an example of what some architectural historians call the National Folk Gable-Front style. The roof is clad in composition shingles and has narrow boxed eaves with a plain wood fascia at the gable ends, while channel rustic siding with corner boards clad the walls. A one-story hipped roof porch appears at the front and a shed roof porch extends from the rear. Most windows are simple wood frame 1/1 double-hung sash, but aluminum frame sliding windows have been added in several of the original openings. The other structures on the parcel do not date to the same time period as the house and are not contributing elements of the property.

The proposed project would require the removal of the Lorentzen House in order to accommodate project development. This is considered a potentially significant impact due to the historical significance of structure. Implementation of the following mitigation measures would ensure that project-related impacts can be minimized to a level considered less-than-significant. Although the relocation of the Lorentzen House is necessary in order to avoid a potentially significant impact to a historically significant structure, implementation of mitigation requiring the relocation of the structure has the potential to result in additional impacts. More specifically, relocation of the Lorentzen House could result in additional impacts as a result of inadvertent damage to the structure during the relocation process. In order to ensure that potential impacts associated with the relocation of the Lorentzen House are minimized, additional mitigation measures have been incorporated. Implementation of the following mitigation measures is necessary in order to minimize project-induced impacts to a less-than-significant level. The following mitigation measures would not result in any additional environmental impacts beyond those identified in this EIR.

Impact **Development of the project and the resulting move of the historical resource to another location would cause a substantial, adverse change to a historical structure eligible for listing in the California Register on the site.** ***This represents a significant impact that can be reduced to less-than-significant levels with the following mitigation.***

Mitigation

4.5-1 Relocation of House. The project proponent shall ensure that the design and implementation of the relocation project is consistent with the *Secretary of the Interior's Standards for* Rehabilitation *and Illustrated Guidelines for Rehabilitating Historic Buildings (U.S. Department*

of the Interior, National Park Service, 1992), the California Historical Building Code, and the Mitigation Monitoring and Reporting Plan (MMRP) for the project. Prior to recordation of the final map, the project applicant shall submit a relocation plan prepared by a qualified professional in accordance with the general recommendations of *Moving Historic Buildings*, a publication of the National Park Service, to the City of Soledad for review and approval. The relocation plan shall discusses planning, research, and recording prior to the move. In addition, the relocation plan shall identify siting, foundation construction, building reassembly, and restoration work after a successful move. See John Obed Curtis, *Moving Historic Buildings*, Heritage Conservation and Recreation Service, Publication No. 9, US Department of Interior (1979) for further details. Prior to the relocation, the applicant shall provide verification of compliance with related mitigations to the City of Soledad Community Development Department Director for review and approval. In addition, the structure shall be relocated prior to the issuance of any building and/or grading permit for development within the Specific Plan area.

4.5-2 Protective Measures. The project proponent shall develop and implement measures to protect the character-defining features of the Lorentzen House building from damage by the relocation project. The features include, but are not limited to scale, massing, and layout of the house, as well as siding and wood frame fenestration. Protective measures shall be prepared by a qualified professional in accordance with the *Secretary of the Interior's Standards for Rehabilitation and Illustrated Guidelines for Rehabilitating Historic Buildings* (U.S. Department of the Interior, National Park Service, 1992), the California Historical Building Code, *Moving Historic Buildings*, and the MMRP for the project. Prior to the recordation of the final map, the project applicant shall submit a relocation plan, consistent with Mitigation Measure 4.5-1, which incorporates protective measures consistent with the intent of this measure. Prior to the relocation of the structure, the applicant shall submit evidence from a qualified professional demonstrating that protective measures have been implemented, subject to the review and approval of the City of Soledad.

4.5-3 Repair of Inadvertent Damage. The project proponent shall ensure that any inadvertent damage to the character-defining features of the Morris Lorentzen House resulting from the rehabilitation project is repaired in accordance with the *Secretary of the Interior's Standards for Rehabilitation and Illustrated Guidelines for Rehabilitating Historic Buildings* (U.S. Department of the Interior, National Park Service, 1992) and California Historical Building Code. A qualified professional shall be consulted prior to any repairs. The condition of the building shall be photographed as part of the proposed recordation document and/or video documentation, prior to the start of the relocation, and this will help to establish the baseline condition for assessing inadvertent damage. The project applicant shall submit detailed documentation prepared by a qualified professional demonstrating that all repairs have been completed in accordance with applicable standards prior to the issuance of any building and/or grading permit.

4.5-4 Professional Standards. All activities regarding historical architectural resources and historic preservation carried out as part of this project shall be carried out by or under the direct supervision of persons meeting, at a minimum, the Secretary of the Interior's professional qualifications standards (48 FR 44738-9) in these disciplines. Prior to the relocation of the Lorentzen House, the applicant shall submit evidence to the City of Soledad demonstrating compliance with this measure.

4.5-5 Monitoring. The mitigation measures applying to the relocation of the Lorentzen House shall be set forth in a Mitigation Monitoring and Reporting Program (MMRP) for the project. The MMRP will guide project-specific mitigation, monitoring, and/or reporting programs for various aspects

of mitigation monitoring, reporting, and enforcement in order to ensure full compliance with the conditions of project approval.

4.5-6 Coordination. The project proponent shall coordinate with and inform interested parties, including, but not limited to the Soledad Historical Society and the Monterey County Historical Society, regarding the status of its compliance with the mitigation measures set forth in the MMRP, as necessary.

4.5-7 Recordation to Historic American Building Survey standards. Prior to the start of any project work, the project proponent shall ensure that the Lorentzen House property is recorded and documented in accordance with the Level II recordation standards of the Historic American Building Survey/Historic American Engineering Record (HABS/HAER) program. This level of recordation would include:

- Archival reproduction of any existing historic images of the property and grounds;
- Archival reproduction of any existing maps, sketches, or drawings of the house;
- Production of measured architectural plans and drawings;
- Production of large-format photographs of exterior and interior views of the house, and exterior views of the house and current setting, including relationship to non-eligible outbuildings; and
- Narrative history and description of the property (based on the narrative provided in the Seavey (2006) evaluation of the property, and the Monterey County survey(s) of similar properties.

The original archival set of recordation documents and photograph prints will be submitted to the Soledad Historical Society (or its designee), and archival quality photocopies of the documentation set will be provided to the following interested parties and local repositories: the Monterey County Historical Society; the Monterey County Libraries (Soledad and Salinas branches), and the UC Santa Cruz Library Special Collections Department. The project proponent would ensure that this recordation documentation was prepared prior to carrying out any other treatment and would make the content of the document available for other mitigation measures, such as the preparation of interpretive material.

Archaeological Resources

None of the materials associated with prehistoric cultural resources in the area (dark midden soil, bedrock mortar outcrops, marine shell fragments, bones or bone fragments, broken or fire-altered rocks, flaked or ground stone, etc.) were noted during the field survey. At the time of the field reconnaissance for the project area west of San Vicente Road, soil visibility was very good, and the soil visibility in the tended vineyard was also very good. Soil visibility in the fallow areas was generally good to fair. The steeper slops in the northeastern section of the project site were vegetated in dry grasses and weeds which greatly limited soil visibility to ranch roads, animal trails and burrows. Overall, ground surface visibility was considered adequate for the purpose of the reconnaissance.

Limited amounts of ceramic and glass were found throughout the western portion of the project site, but these materials do not represent a significant historical trash site. No other evidence of cultural resources was found on or adjacent to the project site. Construction of the project could, however, potentially uncover buried archaeological resources or human remains during excavation and clearing activities. This represents a potentially significant impact. Implementation of these mitigation measures would not result in any new environmental impacts beyond those identified in this EIR.

Impact **Construction of the project may result in the discovery and disturbance of unknown archaeological resources and/or human remains.** ***This represents a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation measure.***

Mitigation

4.5-8 In order to ensure that project-impacts to potentially unknown resources are avoided, the project proponent shall be responsible for on-going monitoring of project construction. Prior to the issuance of any grading permit, the project proponent shall provide the City of Soledad with documentation identifying construction personnel that will be responsible for on-site monitoring. If archaeological resources or human remains are accidentally discovered during construction, work shall be halted within 150 feet (50 meters) of the find until a qualified professional archaeologist can evaluate it. Work shall not recommence until the project archaeologist has submitted documentation to the City indicating that discovered resources have been adequately salvaged and no further resources have been identified within the area of disturbance

4.5-9 In order to ensure that the proposed project does not impact buried human remains during project construction, the project proponent shall be responsible for on-going monitoring of project construction. Prior to the issuance of any grading permit, the project proponent shall provide the City of Soledad with documentation identifying construction personnel that will be responsible for on-site monitoring. If buried human remains are encountered during construction, work in that area must halt and the archaeologist and the coroner immediately notified. If the remains are determined to be Native American, then the NAHC must be notified within 24 hours as required by Public Resources Code 5097. The NAHC will notify designated Most Likely Descendants who will provide recommendations for the treatment of the remains within 24 hours. The NAHC will mediate any disputes regarding treatment of remains. Work shall not recommence until the project archaeologist, coroner, and NAHC, submit documentation to the City indicating that buried human remains have been adequately salvaged and no further remains have been identified within the area of disturbance.

<u>Paleontological Resources</u>

No unique paleontological resources have been identified within the Miravale III area. No paleontological resources are anticipated in the project area; therefore, project development would not result in direct or indirect impacts on any unique paleontological resources. **The project would have a less-than-significant impact on paleontological resources.**

4.6 GEOLOGY, SOILS, AND MINERAL RESOURCES

Introduction

This section describes the geologic and seismic setting for the project and evaluates its potential to cause geologic impacts such as erosion during construction or to be subjected to geologic hazards such as earthquakes. In addition, this section describes known mineral resources within the project vicinity.

Several reports were completed for the proposed project including two Preliminary Geologic Hazards Investigations prepared by Nolan Associates (August 9, 1995 and September 27, 2006); a *Geotechnical Investigation for the Preliminary Design Phase*, prepared by Tharp & Associates, Inc. (August 29, 2005); and a *Preliminary Soils & Foundation Investigation*, prepared by Tharp & Associates, Inc. (October 19, 1995). These reports are included as Technical Appendix T-5 in Volume II of this DEIR.

Setting

Overview

Geologic structure in central California is primarily the result of tectonic events that occurred over the past 30 million years. It is widely believed that the numerous faults in this area are related to movement along the boundary between the Pacific and North American tectonic plates. The relative motion between these two tectonic plates is taken up largely along the northwestward-trending San Andreas Fault system, which defines the regional boundary between the two plates. Changes in sea level and tectonic uplift resulted in a complicated depositional environment that produced the complex geology of the Monterey Bay region.

The project site is situated on the eastern flank of the Salinas Valley and is bounded to the east by the foothills of the Gabilan Range, a granitic massif that forms a portion of the Coast Ranges Physiographic Province of California. The Coast Ranges Province consists of a series of coastal mountain chains paralleling the pronounced northwest-southeast structural grain of central California geology. The Gabilan Range and adjacent portions of the Salinas Valley are underlain by a large, northwest-trending, fault bounded, elongated prism of granitic and metamorphic basement rocks, known collectively as the Salinian Block. The Salinian Block is separated from contrasting basement rock types to the northeast and the southwest by the San Andreas and the Sur-Nacimiento fault systems, respectively. Overlying the granitic basement rocks on the Salinian Block is a sequence of dominantly marine sediments of Paleocene to Pliocene age and non-marine sediments of Pliocene to Pleistocene age, all of which show evidence of uplift and deformation. Refer to Figure 4.6-1 for the Regional Geologic Map.

The Salinas Valley is underlain by alluvial fill to an estimated depth between 800 and 1,000 feet. The fill is composed of mainly unconsolidated and loosely consolidated sediments. These sediments were derived through weathering and the subsequent movement of this material from upland areas to the valley floor. The valley is also underlain by a complex series of stratigraphic units. Alluvial fan deposits have built up on both sides of the valley. In addition, varying stream velocities and changing patterns of the Salinas River and its tributaries, over time, have resulted in the deposition of alternating layers of silt, sand, gravel, cobble, and boulders over the fans and in the valley. Overall, underlying geologic structure can vary considerably. Refer to Figure 4.6-2 for the Local Geologic Map.

The project site is located on the northern edge of the City of Soledad, approximately 35 miles southeast of the Monterey Peninsula and 85 miles southeast of the San Francisco Bay Area. The site is composed of

contiguous parcels totaling approximately 920 acres and consists of two primary landforms, the valley floor and the foothills of the Gabilan Range.

Topography

The project site is located on a broad, gently sloping alluvial fan at the foot of the western slope of the Gabilan Range on the east side of the Salinas Valley, with the eastern-most portion of the project site extending onto the foothills of the Gabilan Range. The alluvial fan abuts flat-lying fluvial deposits of the Salinas River southwest of the site. The elevation ranges from 200 to 600 feet above sea level. The land to the east of the site is rugged ridge-and-valley topography that rises rapidly to elevations greater than 2,000 feet. Surface slopes on the alluvial portion of the site are approximately 5 to 8 percent gradient. Steep slopes on the eastern portion of the site range up to about 70 percent gradient, but more commonly fall in the range of 30 to 45 percent. Refer to Figure 4.6-3 for the Topographic Index Map.

Drainage

Drainage of surface water in the vicinity of the project site generally occurs by overland sheet flow towards shallow drainage courses. The drainages are ephemeral and it is unlikely that substantial surface flow occurs except during periods of high rainfall. The natural drainage channels are only slightly incised and there is little indication of significant erosion on the site.

Soils

The project site possesses two primary subsurface profiles. The foothill portion of the site is characterized by a thin layer (usually less than 5 feet) of colluvium and slope wash which is underlain by granitic bedrock. This bedrock is generally weathered in the upper 3 to 4 feet, becoming less weathered with increasing depth. These materials are generally hard to very hard, dry to slightly moist, nonplastic to slightly plastic, of low to moderate expansivity, with the exception of scattered deposits of highly expansive clay, and are considered only slightly compressible. The valley floor portions are underlain by a relatively thick alluvial/colluvial deposit composed of clayey sand with varying amounts of silt and gravel overlying sands and gravels with lesser clay contents. The clayey sands in the upper stratum anticipated to impact the proposed project are generally loose to medium dense, somewhat compressible, and of low expansivity. Additionally, some of the loose surficial material possess an undesirably high collapse potential. The sands and gravels, which primarily underlie the southern portions of the site, are generally medium to very dense, considered to be only slightly compressible, and of very low expansivity. Refer to Figure 4.2-2 in the Agricultural Resources Section for the Soils Map.

According to the results of the Preliminary Geologic Hazards Investigations by Nolan Associates and the Geotechnical Investigations by Tharp & Associates, Inc., a total of 51 exploratory borings were drilled on the project site. The exploratory borings were drilled to depths ranging from 10.0 to 51.5 feet below the ground surface. In addition, percolation testing was done in 11 locations. Soils encountered in each exploratory boring were visually classified in the field and a continuous log was recorded. Laboratory tests were performed on the collected soil samples to determine physical and engineering characteristics.

Groundwater

Hydrophilic vegetation on a portion of the site indicates a locally elevated groundwater level, probably perched on relatively less impermeable alluvial strata. Regional groundwater was only encountered in the extreme southern portion of the site in the sand/gravel deposits at a depth of 30 feet. However, shallow groundwater was encountered perched on the dense clayey sand layers in the central portions of the site.

This groundwater was encountered at an average depth of approximately 11 feet and appears to be perched on the denser clayey sand materials encountered at a depth of approximately 20 feet.

Events and Processes

Seismicity. The project site is located within a seismically active area. The alluvial Salinas Valley is bordered to the east and west by active or potentially active fault zones. The potential for earthquake damage from ground shaking is moderate to high in the project vicinity. The San Andreas fault lies approximately 12 miles to the northeast of the project site. This fault has generated earthquakes in excess of 7.0 on the Richter scale at many points along its 600-mile length. The Reliz-Rinconada fault lies along the other side of the valley, approximately 4.6 miles southwest of the project site. Although not considered to be as potentially strong as the San Andreas fault, the Reliz-Rinconada fault is located in closer proximity to the site, and therefore poses a significant seismic hazard. Refer to Figure 4.6-4 for the Regional Seismicity Map.

Ground Shaking. Small to moderate earthquakes (magnitude less than 5.0 on the Richter Scale) are common in Monterey County. The most significant quakes affecting the County during the last century have included the 1906 San Francisco earthquake and the 1989 Loma Prieta earthquake. Research has shown that areas underlain by layers of unconsolidated, recent alluvium and unconsolidated soil material with high ground water have an increased risk of experiencing the damaging effects of groundshaking. Due to its proximity to a number of major earthquake faults, it is reasonable to assume that all improvements in the City will experience intense groundshaking at least once within their useful life (60 years), and that unstable hillsides will be subjected to destabilizing landslide forces.

Ground Rupture. Seismically induced ground rupture is defined as the physical displacement of surface deposits in response to an earthquake's seismic waves. Ground rupture is most likely to occur along active faults. However, the potential for ground rupture also exists along potentially active faults. Therefore, development in areas overlying fault zones, whether active or potentially active, should be avoided. Any development that does take place within these areas should perform a fault hazard study to assess the potential for damage associated with fault rupture and to establish setbacks to mitigate the potential for such damage.

Ground Lurching. Ground lurching is a type of ground failure that could potentially occur in parts of the Soledad planning area during a large earthquake. This phenomenon is characterized by irregular cracks, fissures, and fractures of lengths varying from a few inches to many feet. It is caused by the shaking, settling, and sliding of soil and can be accompanied by lateral spreading, which is the horizontal movement of soil towards the open face of an embankment.

Erosion. Erosion is a natural process that occurs over time and can be caused by either wind or water moving over soils. Soil erosion can become a problem when human activities accelerate erosion rates. Non-point sources, including impervious surfaces, construction activities, and road construction, can all accelerate the rate at which soils are removed from hillsides. There is the potential for increased erosion as a result of proposed development within the foothills of the Gabilan Range.

Landslides. The occurrence of landslides is influenced by a number of factors, including slope angle, soil moisture content, vegetative cover, and the physical nature of the underlying strata. Landslides can be triggered by one or more specific events, including development-related construction, seismic activity, soil saturation, and fires. The primary factor in determining landslide potential is an unstable slope condition. No evidence of previous landslides were found during site reconnaissance and aerial photo inspection of the site and the entire property has been mapped as a "low" landslide hazard area

(Rosenberg , 2001). The only steep slopes where landsliding has the potential to occur are situated on the easternmost portion of the project site.

Lateral Spreading. Lateral spreading is a failure within weaker soil material that causes the soil mass to move towards a free face or down a gentle slope. Liquefaction, lateral spreading, and differential compaction tend to occur in loose, unconsolidated, noncohesive soils with shallow groundwater. Of these three, liquefaction is considered to be the greatest hazard to development within the project site.

Liquefaction. Liquefaction is the transformation of soil from a solid to a liquid state as a consequence of increased pore-water pressures, usually in response to strong ground shaking, such as those generated during a seismic event. Loose, granular soils are most susceptible to these effects, while more stable silty clay and clay materials are generally somewhat less affected. In general, liquefaction potential varies according to soil type, with recent, unconsolidated alluvial soils having the highest potential. Central and southern portions of the site have been identified as having the presence of potentially liquefiable soils.

Soil Expansion. Expansive soils shrink and swell as a result of moisture changes. This can cause heaving and cracking of slabs-on-grade, pavements, and structures founded on shallow foundations. At the site, soil units with elevated plasticity indexes include Gloria sandy loam, Placentia sandy loam, and Salinas clay loam.

Mineral Resources

Sand, gravel, and petroleum are the primary mineral resources extracted in Monterey County. Construction-grade aggregate (sand, gravel, and crushed stone) is the most abundant and commonly used mineral resource. Aggregate resources are classified by the State Geologist into four mineral resource zones based on the likelihood of the presence of mineral deposits and their economic value in the form of Mineral Resource Zones (MRZs) under the Surface Mining and Reclamation Act of 1975 (SMARA). This mineral land classification is used to help identify and protect mineral resources in areas within the State subject to urban expansion or other irreversible land uses that would preclude mineral extraction.

Permitted aggregate resources located within the project vicinity include Stonewall Canyon quarry, which is operated by Syar Industries and located off of Metz and Stonewall Canyon Roads, approximately 1.5 miles east of the project site. The project site is not identified by the City's General Plan or the State of California as containing potential mineral resources. Additionally, the project site is not located within a designated MRZ.

Local Requirements

City of Soledad General Plan.

The Safety, Land Use, and Conservation/Open Space Elements of the General Plan identify potential natural and human-made hazards and provide standards for the protection of people and property from such hazards, as well as for the protection of significant mineral resources. Geologic/soil hazard and mineral resource policies which apply to development within the project area include requirements for Uniform Building Code compliance, preparation of geological and soil studies, adherence to hillside/slope development and grading standards, and avoidance of urban uses adjacent to regional mineral resource deposits. Applicable policies are identified below.

Policy C/OS-8 The City shall require public or private development to:

a. The City shall designate hillside areas above the 400 foot elevation contour as Open Space/Grazing, Public Facility (parkland) or Agriculture.
b. Locate primary structures, accessory structures, paving, and grading at the base of a hill (generally that are below the 400 foot contour or 15 percent slope) unless: (1) no practicable alternative is available, (2) the location on a greater slope or at a greater elevation provides more aesthetic quality, or (3) the location is necessary to protect public health and safety.
c. Utilize design, construction, and maintenance techniques that: (1) preserve and enhance the hillsides; (2) ensure that development near or on portions of a hill do not cause, or make worse natural hazards (such as erosion, sedimentation, fire, or water quality concerns); (3) include erosion and sediment control practices including temporary vegetation sufficient to stabilize disturbed areas; (4) minimize risk to life and property from slope failure, landslides, and flooding; (5) maintain the character and visual quality of the adjacent hillside.
d. Incorporate recreation and public access on or near hillsides consistent with this Element.

Policy C/OS-9 The City shall support the preservation and enhancement of natural land forms, natural vegetation, and natural resources to the maximum extent feasible.

Policy C/OS-26 The City and County shall discourage urban uses adjacent to State-designated regional resource deposits if such uses would be incompatible with mining operations, or would restrict future extraction of significant mineral resources.

Policy HZ-5 All new development shall satisfy the applicable requirements of the Uniform Building Code.

Policy HZ-6 The City shall require the preparation of a soils engineering and geologic-seismic analysis prior to permitting development in areas prone to geologic or seismic hazards (i.e. groundshaking, landslides, liquefaction, expansive soils).

Policy HZ-7 The City shall limit development in areas of steep or unstable slopes to minimize hazards by landslides or liquefaction.

Policy HZ-8 In landslide hazard areas, the City shall prohibit alteration of land in a manner that could increase the hazard, including concentration of water through drainage or irrigation systems; removal of vegetative cover; and steepening of slopes and undercutting the bases of slopes.

Please refer to Table 4.9-2 of the Land Use section for a detailed analysis of the project's consistency with the City's General Plan geologic/soil hazard and mineral resource policies.

Environmental Impact Report on the Soledad General Plan. The General Plan EIR evaluated potential area-wide geologic hazards and regional seismic characteristics and potential mineral resource impacts and the effects of geologic hazards related to the development of properties and facilities within the Plan area. These potential hazards included seismicity, grounding shaking, ground rupture, ground lurching, liquefaction, landslides, erosion and sedimentation, subsidence, and expansive soils. According to the EIR all associated impacts were found to be less-than-significant with mitigation incorporated.

- A major earthquake on the San Andreas faults could produce ground accelerations that would result in damage to structures and a potential safety hazard to occupants of such structures. This impact was considered significant unless mitigated.

- Portions of the Plan area may be subject to landslides and/or slope failure. This impact was considered significant, unless mitigated.

- Development activities associated with the various land uses contemplated by the Plan have the potential to result in soil erosion. This impact was considered significant, unless mitigated.

Miravale III Specific Plan

Section 2.0 (Land Use) of the Miravale III Specific Plan and the Hillside Development Standards & Guidelines both contain policies concerning geologic impacts associated with hillside development. Section 2.0 identifies land use goals and policies regarding the physical development for each respective land use category (i.e. residential, commercial, etc.). The Hillside Development Standards & Guidelines, included as Appendix A of the Specific Plan, outlines measures designed to limit impacts from proposed hillside development. The following policies are applicable regarding geologic impacts associated with hillside development.

- Land Use Goal LU-10 states that project development should protect the scenic vistas of the hills above Soledad through careful siting and design standards that minimize grading and visibility of new hillside development.

To minimize potential impacts due to hillside development specific Hillside Development Standards were developed as part of the Specific Plan. The Hillside Development Standards and Guidelines identify specific grading practices and designs, including the preservation of the natural topography, to minimize impacts. Additionally, specific measures are included to address grading design, preserving natural topography, fire related hazards, drainage issues, and building design within the hillside portion of the site.

Relevant Project Characteristics

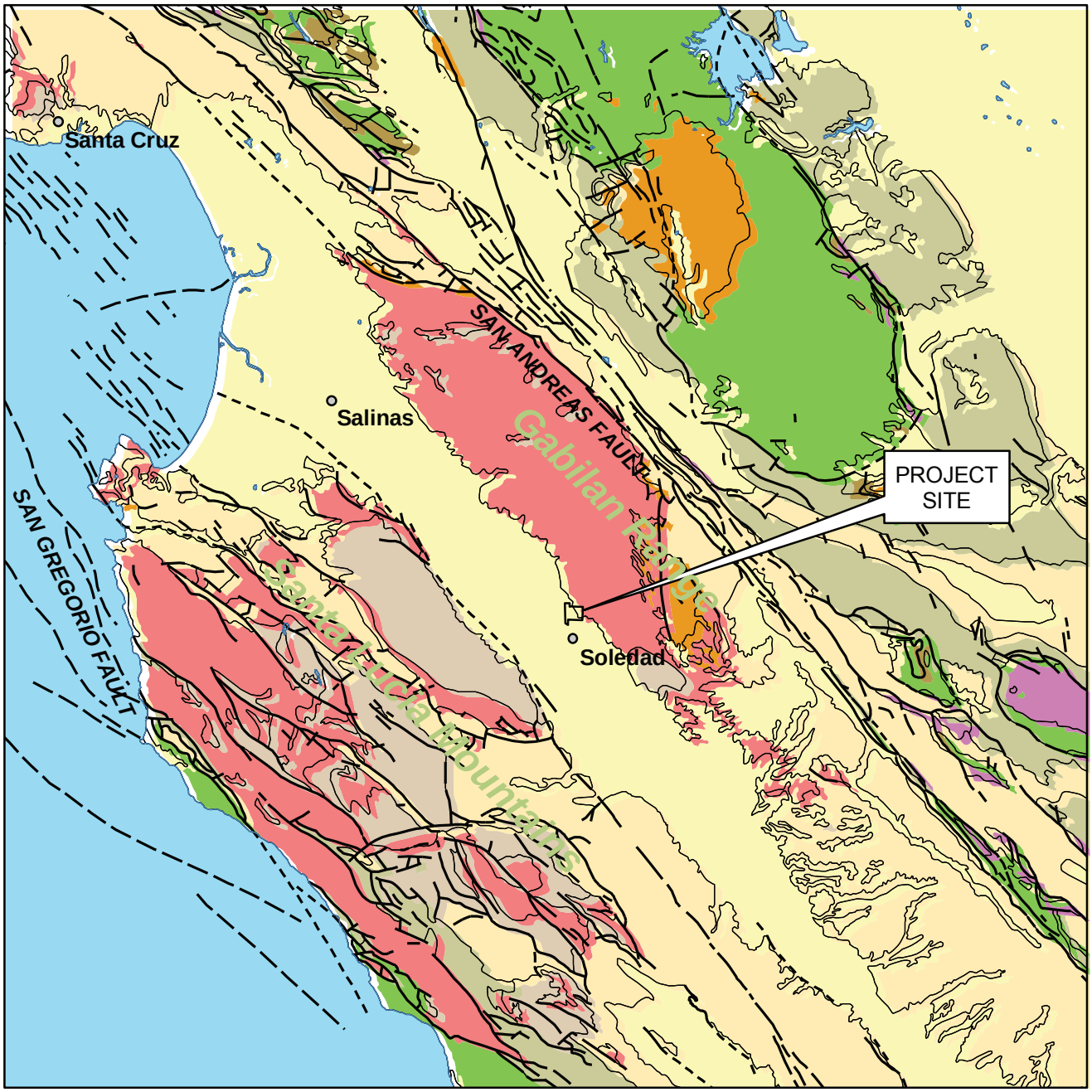
The Specific Plan calls for a mixed-use urban development consisting of new roads and infrastructure, single-family and multi-family residential units, retail commercial space, a golf course, school and public safety sites, and open space and recreation areas. The project will require extensive grading on the site to facilitate construction of the proposed uses.

Thresholds of Significance

In accordance with CEQA Guidelines, a project impact would be considered significant if the project would:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault,
  - Strong seismic ground shaking,
  - Seismic-related ground failure, including liquefaction,
  - Landslides;

- Result in substantial soil erosion or the loss of topsoil;

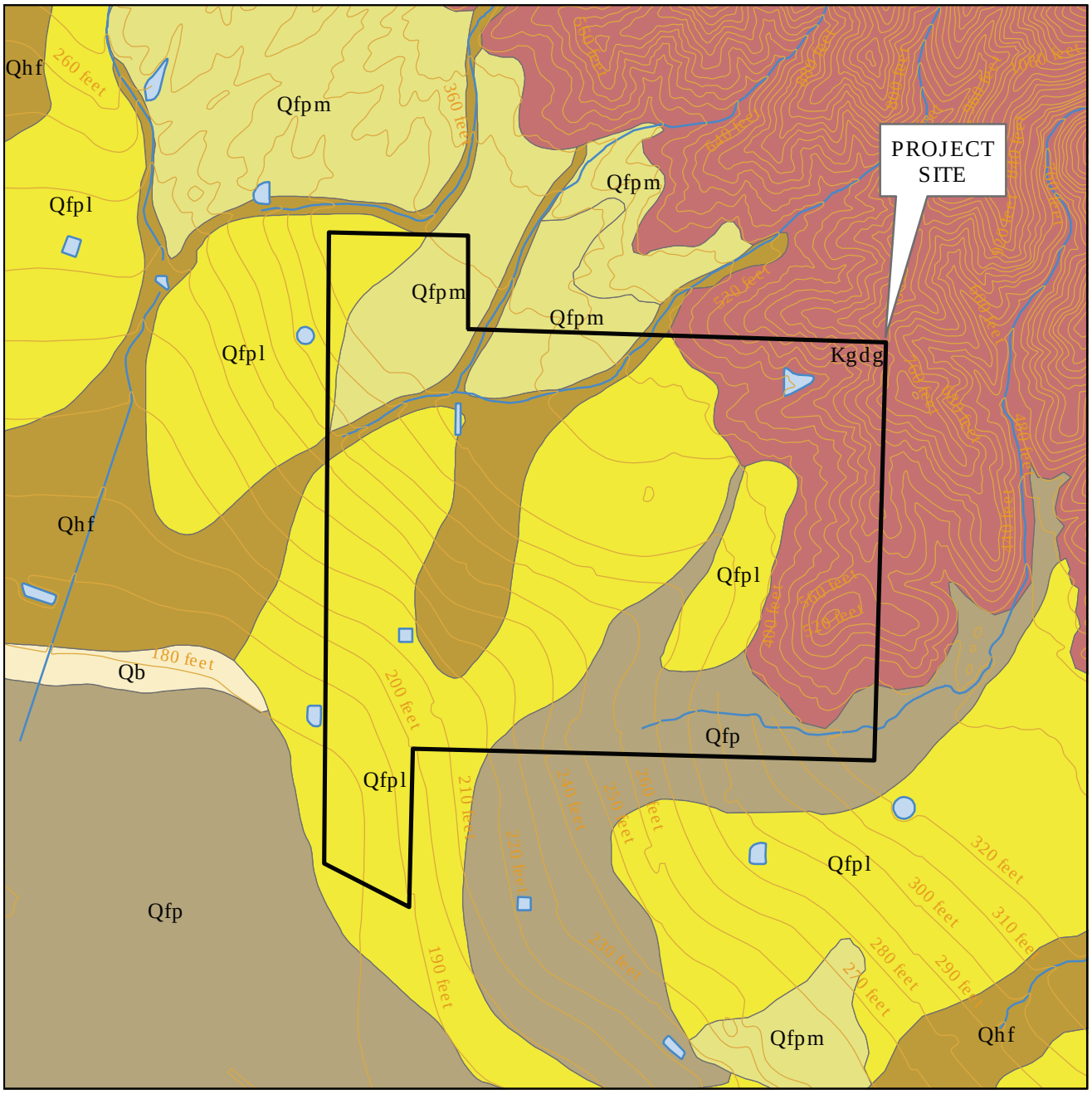


Source: Nolan Associates, 2007

N

Regional Geological Map

Figure 4.6-1



UNITS

- Qfp: Undifferentiated Flood Plain Deposits
- Qb: Basin Deposits
- Qhf: Holocene Alluvial Fan Deposits
- Qfpl: Late Pleistocene Alluvial Fan Deposits
- Qfpm: Middle Pleistocene Alluvial Fan Deposits
- Kgdg: Cretaceous Granodiorite of Gloria Road

1,000 0 1,000 2,000 Feet

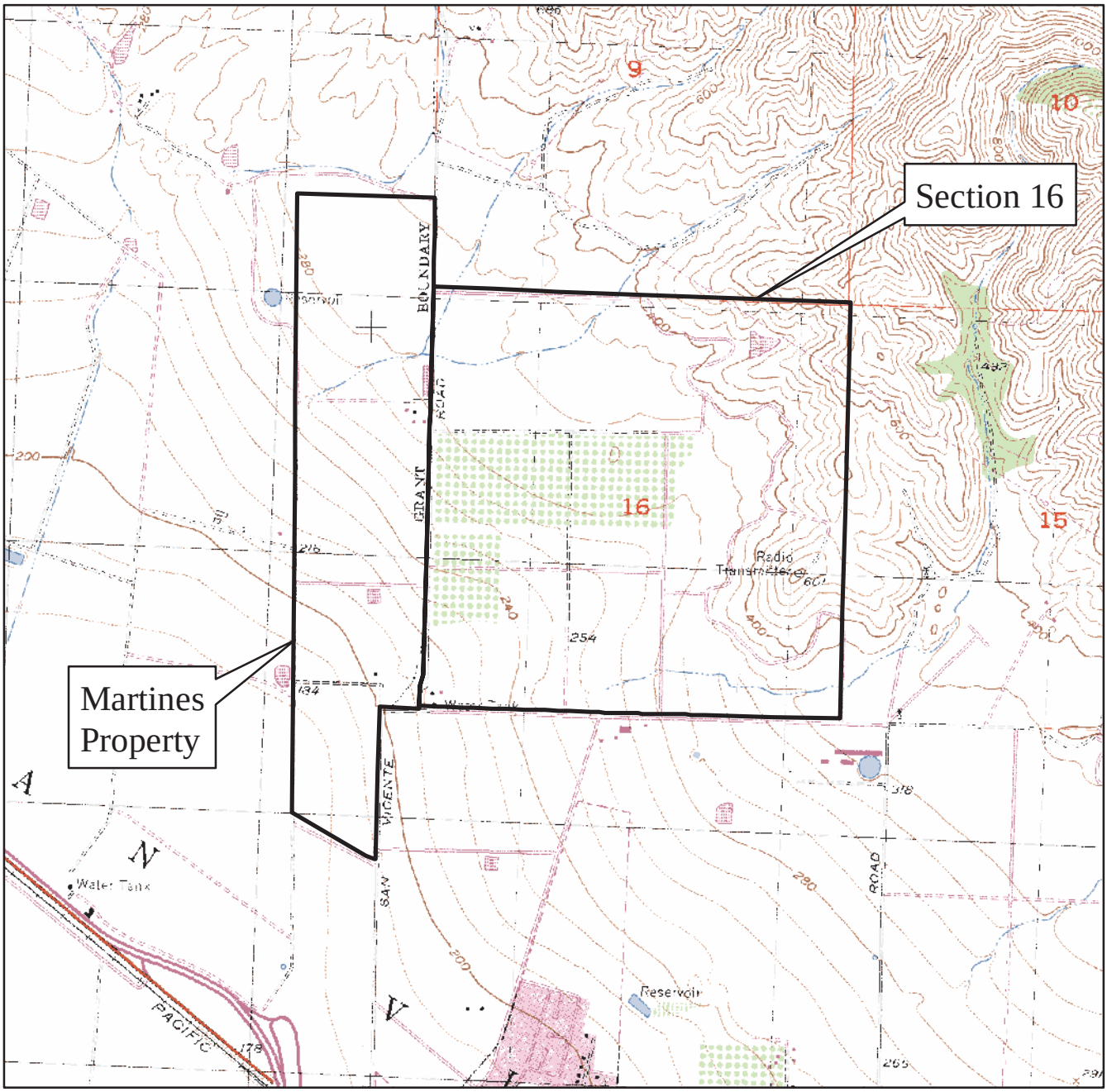
1:24,000

Source: Nolan Associates, 2007

N

Local Geological Map

Figure 4.6-2



SCALE 1:24,000

1000 0 1000 2000 feet

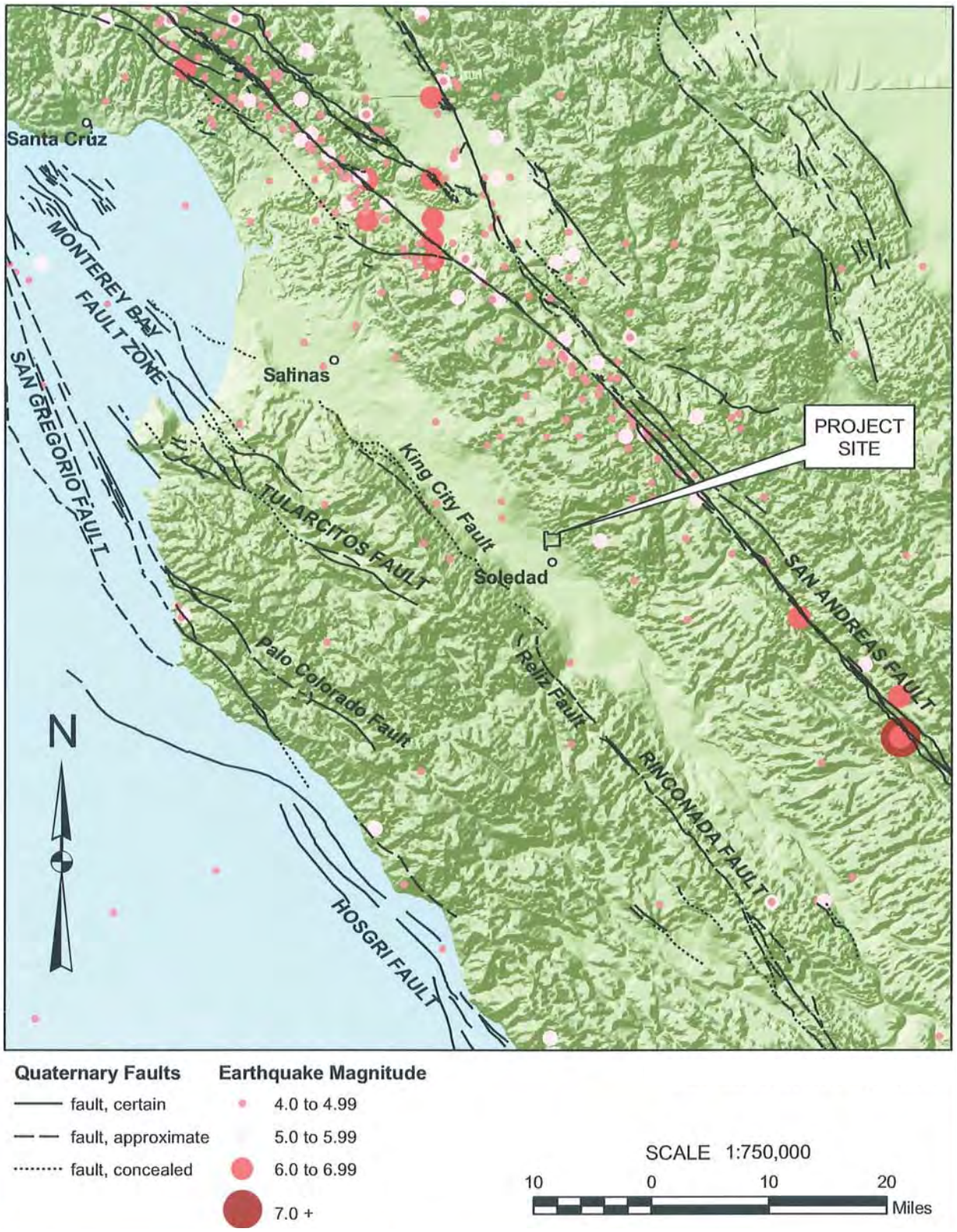
1 INCH = 2000 FEET

Source: Nolan Associates, 2007

N

Topographic Index Map

Figure 4.6-3



Source: Nolan Associates, 2007

N	Regional Seismicity Map	Figure 4.6-4

- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;

- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property;

- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state;

- Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

Impacts and Mitigation

Seismic Hazards

During the life of the project, proposed development would be subject to seismic hazards such as ground accelerations, ground shaking, and liquefaction. The Reliz-Rinconada fault zone, passing within 6 miles of the site, is expected to generate the largest earthquake ground motion at the site. The characteristic earthquake on this fault is expected to generate estimated ground motions of up to 0.72g. Duration of strong seismic shaking from this event will be about 26 seconds. However, the recurrence interval (RI) for this earthquake is relatively long (RI = 1,764 years); therefore, the probability of this earthquake occurring within the project lifespan is relatively low. The San Andreas fault zone, passing within 12 miles of the site, is also expected to generate large earthquake ground motions. These ground motions are estimated at up to 0.26g with a duration of 7 seconds. Large earthquakes on the San Andreas fault are considered to be more likely (RI = 50-200 years) than on the Reliz-Rinconada fault. Existing building code regulations for seismic loads may not eliminate the potential for damage to structures resulting from nearby major earthquakes. Consequently, the requirements of the existing building codes should be reviewed during site design in order to provide the appropriate level of protection to new improvements. Implementation of the following mitigation measures would not result in any new environmental impact beyond those identified elsewhere in this EIR.

Impact **The project would be exposed to potential adverse effects from strong seismic ground shaking that may result in damage to proposed structures.** ***This would represent a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation measures.***

Mitigation

4.6-1 To minimize the potential effects from strong seismic ground shaking on project components, a project-specific geotechnical analysis shall be performed by a registered professional engineer with geotechnical expertise, and all recommendations shall be incorporated into final design plans. Prior to the issuance of any building and/or grading permit, the project applicant shall submit a project-specific geotechnical analysis to the City of Soledad Public Works Director for review and approval. The project engineer shall develop project-level plans based upon and in response to the observations and recommendations made in the project specific geotechnical analysis.

4.6-2 In order to minimize potential seismic-related hazards, the project engineer shall incorporate the seismic shaking analysis contained within the Geologic Hazards Investigation Update prepared by Nolan Associates (September 2006) into project design. Prior to the issuance of any building and/or grading permits, the project applicant shall submit design level plans demonstrating that the recommendations of the Geologic Hazards Investigation Update are incorporated into project design, subject to the review and approval of the City of Soledad Public Works Director. In addition, all structures shall be designed to the most current standards of the California Building Code, at a minimum.

4.6-3 In order to minimize seismic-related hazards to new public facilities, a site-specific probabilistic seismic hazards assessment shall be incorporated into the design of any schools, hospitals, fire or police stations, or any other critical facilities planned for the project site. An individual assessment shall be performed for each site by an engineering geologist. Prior to the issuance of any grading and/or building permit for new public facilities, including but not limited to new schools, hospitals, and fire or police stations, a probabilistic seismic hazards assessments shall be prepared and submitted to the City of Soledad Director of Public Works for review and approval.

Grading and Soil Erosion

The project will require extensive grading on the site to facilitate construction of proposed uses. For the purposes of this analysis it is assumed that the entire project site would be disturbed in order to facilitate project development. There is the potential for increased erosion as a result of proposed development within the foothills of the Gabilan Range. The foothill portion of the site is characterized by a thin layer (usually less than 5 feet) of colluvium and slope wash which is underlain by granitic bedrock. Site preparation and construction activities would disturb soil and increase its susceptibility to erosion. Removal of soils by wind or water can undermine buildings, roads, and other developments, as well as contribute siltation of local streams or water bodies. Moreover, removal of existing mature eucalyptus and other tree species along San Vicente Road could result in additional erosion-related impacts. Erosion impacts can result from both short-term construction activities and long-term project conditions where vegetative cover is not re-established following development. Although the Hillside Development Standards & Guidelines contained in Appendix C include specific erosion control regulations, additional mitigation would be warranted in order to ensure that project-related impacts are reduced to a less-than-significant level. Moreover, mitigation measures are necessary in order to ensure that removal of existing mature eucalyptus and other tree species would not result in additional erosion-related impacts. Implementation of the following mitigation measures would not result in any new environmental impact beyond those identified elsewhere in this EIR.

Impact **Construction of the project could result in substantial soil erosion or loss of topsoil.** ***This is a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation measures.***

Mitigation

4.6-4 In order to reduce wind and water erosion on the project site, an erosion control plan and Storm Water Pollution Prevention Plan (SWPPP) shall be prepared for the site preparation, construction, and post-construction periods. The erosion control plan shall incorporate best management practices consistent with the requirements of the National Pollution Discharge Elimination System (NPDES). The erosion component of the plan must at least meet the requirements of SWPPP required by the California State Water Resources Control Board. If earth disturbing activities are proposed between October 15 and April 15, these activities shall be restricted per the requirements of Soledad Municipal Code Chapter 15.08. Prior to the issuance of any permit,

the project proponent shall submit detailed plans to the satisfaction of the City of Soledad Public Works Director. The components of the erosion control plan and SWPPP shall be monitored for effectiveness by City of Soledad Public Works. The following measures shall be implemented, where appropriate, to control erosion:

1) Keep construction machinery off of established vegetation as much as possible, especially the vegetation on the upwind side of the construction site;
2) Establish specific access routes at the planning phase of the project, and limits of grading prior to development, which should be strictly observed;
3) Utilize mechanical measures (i.e. walls from sand bags and/or wooden slat or fabric fences) to reduce sand movement;
4) Immediate revegetation (plus the use of temporary stabilizing sprays), to keep sand movement to a minimum; and
5) For larger-scale construction, fabric or wooden slat fences should be placed around the construction location to reduce sand movement.

4.6-5 Areas disturbed by grading shall be stabilized with adequate landscaping vegetative cover. A re-vegetation and landscaping plan shall be prepared by a landscape architect with experience in working with the type of soils that are characteristic of the site, subject to the review and approval of the City of Soledad. Prior to the issuance of any certificate of occupancy and concurrent with project construction, disturbed areas shall be re-vegetated consistent with the City approved landscaping plan. All project replanting shall be continually monitored by the landscape architect for a duration of three years. The landscape architect shall submit annual monitoring reports to the City of Soledad after each successive year detailing the success of landscaping. Success shall be based on an 80% survival rate. If it is determined that the replanting has not been successful, additional replanting shall be required by the City of Soledad.

4.6-6 All drainage from improved surfaces shall be captured by closed pipe or lined ditches and carried to neighborhood storm sewers or natural drainages. At no time shall any concentrated discharge be allowed to spill directly onto the ground adjacent to structures or to fall directly onto steep slopes. The control of runoff is essential for erosion control and prevention of water ponding against foundations and other improvements. Prior to the issuance of any grading and/or building permit for each new structure, the project applicant shall submit an erosion control plan consistent with this measure, subject to the review and approval of the City of Soledad Public Works Director.

Liquefaction

Soil liquefaction occurs as a result of strong seismic shaking of loose, saturated sediments. A portion of the project site is mapped as being exposed to a high level of risk from liquefaction. This area of risk corresponds to Undifferentiated Flood Plain (Qfp) deposits. Based on site geologic mapping, there were no areas underlain by Qfp. However, the alluvial fan sediments underlying the central, western, and southern portions of the site can be capable of liquefaction in areas of shallow ground water.

A quantitative liquefaction analysis was performed for subsurface conditions encountered during the field exploration. The analysis was performed using empirical predictions of earthquake-induced liquefaction potential, and assumed a peak ground acceleration of 0.34g. The results of the analysis indicate that under the conditions anticipated during the design seismic event, an approximately 9 foot thick layer of poorly graded sand with trace to some clay underlying the central portion of the site at depths of approximately 11 to 20 feet are potentially liquefiable, and a 6 foot thick layer of the poorly graded sand

with trace clay underlying the southern portion of the site at depths of approximately 45 to 50 feet are also potentially liquefiable.

There is a risk of liquefaction and collapse at the project site due to the presence of recent, unconsolidated alluvial soils. Isolated and discontinuous loose and dry sands were encountered at various depths across the site. These sands are weak and potentially compressible. As the surficial soils that will be supporting the foundations and structural fill are loose to very loose, remedial grading, subexcavation, and recompaction will be necessary to improve the soils for foundation and structural fill support. Future development of the project site would be required to be built in compliance with the provisions of the Uniform Building Code. Adherence to existing building regulations, in addition to the following mitigation measure, would ensure that impacts would be less-than-significant. Implementation of the following mitigation measures would not result in any new environmental impact beyond those identified elsewhere in this EIR.

Impact **The project could be exposed to localized liquefaction and collapse.** ***This would represent a potentially significant impact that can be reduced to a less–than-significant level with implementation of the following mitigation measures.***

Mitigation

4.6-7 In order to reduce the risk of localized liquefaction and collapse, and allow for adequate foundation and structural fill support, grading plans shall be consistent with a project-specific geotechnical analysis. The project geotechnical engineer shall prepare a quantitative assessment of liquefaction and seismically-induced settlement potential for the project as part of a comprehensive site geotechnical evaluation, prior to the recordation of each final map. Measures to ensure adequate reduction of risk to standard acceptable levels in accordance with standard geotechnical practice shall be incorporated into project design and specifications, subject to the review and approval of the City of Soledad Public Works Director.

Landslides, Debris Flow and Lateral Spreading

According to the preliminary geological and geotechnical analyses prepared for the project, the entire site is mapped as a "low" landslide hazard area. There is no indication of past slope instability at the project site. The only steep slopes where landsliding could occur are situated within the foothill portion of the site. However, these slopes are underlain by granitic rock, which is typically resistant to landsliding (Jeff Nolan, personal communication, August 2007). In addition, the foothill portion of the site is characterized by a thin layer of colluvium and slope wash. Some of these soils could be considered loose and unconsolidated, and therefore have the potential for lateral spreading. These soils were observed to be located within several very steep, v-shaped drainage swales. These swales had fan shaped deposits at their mouths that are indicative of debris flow type landslide deposits during intense rainstorms. Therefore, the project could be subject to on- or off-site landslide and lateral spreading hazards. In order to ensure that project-related impacts are reduced to a less-than-significant level, project-specific mitigation is necessary. Implementation of the following mitigation measures would not result in any new environmental impact beyond those identified elsewhere in this EIR.

Impact **The project could be exposed to potential adverse effects from on- or off-site landslides and lateral spreading that may result in damage to proposed structures.** ***This would represent a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation measures.***

Mitigation

4.6-8 Portions of the project located within debris flow hazard areas as described in the Geological Hazards Investigation Update prepared by Nolan Associates (September 2006, see pg. 14) shall incorporate design measures to mitigate this hazard to acceptable levels in accordance with standard engineering practices. Suitable measures include: 1) Restricting development to outside these areas; 2) Constructing artificial channels or diversion walls, designed to divert fluidized debris away from habitable structures; or 3) Constructing impact walls, designed to withstand anticipated debris flow volumes and velocities. An engineering geologist shall be retained to provide site-specific geologic design criteria for debris flow hazard areas once the final project plans are available. Diversion or retaining structures shall be designed based on recommendations by a geotechnical engineer, subject to review and approval of the City of Soledad Public Works Director. Prior to the recordation of each final map, the project applicant shall submit evidence demonstrating that adequate design measures are incorporated to mitigate potential hazards to acceptable engineering standards, subject to the review and approval of the City of Soledad.

Expansive Soil

Structures or improvements built atop expansive soils may be subject to damage from soil shrinkage and swelling, associated with wetting and drying. A soil with a higher plasticity index is generally more prone to shrinkage or swelling in response to seasonal rainfall. At the site, soil units with elevated plasticity indexes include Gloria sandy loam, Placentia sandy loam, and Salinas clay loam. These soil units are restricted to flatter areas of the property. Due to the presence of potentially expansive soils, there is the potential that future development of the project site, as envisioned in the Specific Plan, could expose persons and/or structures to soil related hazards. As the project has the potential to be exposed to soil expansion on foundations and interior or exterior concrete slabs-on-grade within these areas, additional mitigation would be warranted to reduce project impacts to a less-than-significant level. Implementation of the following mitigation measures would not result in any new environmental impact beyond those identified elsewhere in this EIR.

Impact **The project could be exposed to localized soil expansion.** ***This would represent a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation measures.***

Mitigation

4.6-9 In order to minimize potential hazards associated with expansive soils, the expansion potential of site soils shall be evaluated as part of a site-specific geotechnical study to ensure hazards are reduced to an acceptable level of geotechnical and Uniform Building Code practices. The recommendations of a geotechnical engineer for mitigating soil shrink-swell hazards shall be incorporated into project design. These measures may include replacement of soil with engineered backfill or treatment of expansive soil with lime. Prior to the recordation of each final map, the project applicant shall submit evidence demonstrating that adequate measures are incorporated to mitigate potential hazards to acceptable engineering standards, subject to the review and approval of the City of Soledad Director of Public Works.

Mineral Resources

Development of the project would not impact access to existing mineral resources located east of the site. Stonewall Canyon quarry is located off of Metz and Stonewall Canyon Roads, which is located on the

opposite side of the City and separated from the project site by numerous foothills of the Gabilan Range. Since the project is not located within a designated MRZ or near identified potential mineral resources, it is unlikely that proposed urban uses would be incompatible with existing mining operations, or would restrict future extraction of significant mineral resources. Therefore, the project would not result in the loss of availability of a known mineral resource. **There will be no impact to mineral resources and no mitigation measures are necessary.**

4.7 HAZARDS AND HAZARDOUS MATERIALS

Introduction

A *Phase I Environmental Site Assessment* was completed for the project by D&M Consulting Engineers, Inc. (September 7, 2006). In addition, a *Phase 1 Environmental Site Assessment* was also prepared for a portion of the subject property in 1995 by Terratech, Inc. The following discussion incorporates the information contained in both of those analyses. These reports are included as Technical Appendix T-6 and are included as part of Volume II of this DEIR. A copy of these reports and their accompanying appendices are also on file with the City of Soledad.

This section assesses the potential public health and safety impacts of the project. Hazards, such as flooding, seismic/geologic, and public service hazards, including fire and emergency response, are discussed in the Hydrology and Water Quality, Geology and Soils, and Public Services Sections, respectively.

Setting

Overview

Hazardous materials, as defined by the California Code of Regulations, are substances with certain physical properties that could pose a substantial present or future hazard to human health or the environment when improperly handled, disposed, or otherwise managed. A hazardous waste is any hazardous material that is discarded, abandoned, or slated to be recycled. Hazardous materials and waste can result in public health hazards if improperly handled, released into the soil or groundwater, or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer.

Regulatory Environment

The generation, storage, and handling of hazardous materials and wastes are regulated by various federal, state, and local laws and regulations aimed at the protection of public health and the environment. A summary of regulations follows.

Federal. The U.S. Environmental Protection Agency (EPA) is responsible for enforcing regulations at the federal level pertaining to hazardous materials and wastes. The primary federal hazardous materials and wastes laws are contained in the Resources Conservation and Recovery Act (RCRA) of 1976 and in the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980. CERCLA, more commonly known as Superfund, established the National Priorities List for identifying and obtaining funding for remediation of severely contaminated sites. Federal regulations pertaining to hazardous materials and wastes are contained in the Code of Federal Regulations (40 CFR). The regulations contain specific guidelines for determining whether a waste is hazardous, based on either the source of generation or the characteristics of the waste.

Transportation of hazardous materials by truck and rail is regulated by the U.S. Department of Transportation (DOT). DOT regulations establish criteria for safe handling procedures. Federal safety standards are also included in the California Administrative Code.

State. The EPA has delegated much of its regulatory authority to individual states whenever adequate state regulatory programs exist. The Department of Toxic Substance Control Division of CAL EPA is the

agency empowered to enforce federal hazardous materials and waste regulations in California, in conjunction with the EPA.

California hazardous materials and waste laws incorporate federal standards, but in many respects are stricter. For example, the California Hazardous Waste Control Law, the state equivalent of RCRA, contains a much broader definition of hazardous materials and waste. State hazardous materials and waste laws are contained in the California Code of Regulations, Titles 22 and 26. Regulations implementing the California Hazardous Waste Control Law list hazardous chemicals; establish criteria for identifying, packaging, and labeling hazardous wastes; prescribe management of hazardous wastes; establish permit requirements for hazardous waste treatment, storage, disposal, and transportation; and identify hazardous wastes that cannot be disposed of in landfills.

Under RCRA, a facility is classified as a generator of hazardous waste if it generates and stores hazardous waste onsite for less than 90 days; such a facility is required to obtain an EPA generator's identification number from the EPA or the California Department of Toxic Substances Control (DTSC). If hazardous waste is stored on site for longer than 90 days, the facility is classified as a Transfer, Storage, or Disposal Facility and is required to obtain a RCRA Part B Storage Permit, which can take approximately two years to obtain. Transportation and disposal of hazardous materials are also regulated; hazardous waste must be characterized to determine methods of disposal and site disposal (i.e., class of landfill).

Under both RCRA and the California Hazardous Waste Control Law, hazardous waste manifests must be retained by the generator for a minimum of three years. A hazardous waste manifest lists a description of the waste, its intended destination, and regulatory information about the waste. A copy of each manifest must be filed with DTSC. The generator must match copies of hazardous waste manifests with receipts from the treatment/disposal/recycling facility to confirm that the wastes were properly handled.

Monterey County. The Monterey County Environmental Health Division requires that a Business Response Plan and Inventory be prepared for facilities that generate hazardous waste or handle hazardous materials in order to plan and prepare for possible chemical releases or emergencies. A Business Response Plan is required for businesses that generate any amount of hazardous waste or that use hazardous materials in the following amounts: 1) 55 gallons or greater for liquids, 2) 500 pounds or greater for solids, and 3) 200 cubic feet or greater for compressed gases. A Business Response Plan must include specific information on hazardous materials handled (inventory and chemical description), emergency contacts, notification procedures, evacuation plans, training procedures, and a site map.

Pesticide use is regulated and permitted by the Monterey County Agricultural Commissioner’s Office.

Phase I Assessment

In March 1995 a Phase 1 Environmental Site Assessment was prepared by Terratech, Inc. that evaluated the potential for hazardous environmental conditions on the portion of the project site located east of San Vicente Road. A supplemental Phase I Environmental Site Assessment was conducted for the entire project site by D&M Consulting Engineers, Inc. in September 2006. This report incorporated the findings of Terratech’s previous evaluation in addition to conducting additional analysis pertaining to potential environmental hazards. The purpose of this assessment was to determine the potential for hazardous materials contamination on the site. This assessment included the following: 1) a records search of all environmental agency databases and files, 2) a site reconnaissance, 3) interviews with key site personnel and regulatory officials, and 4) conclusions and recommendations. Specific discussions on the recognized environmental conditions that warrant Phase II investigation were presented in the Opinions and Conclusions section of the Phase I Assessment.

Site Characteristics and Use. The project site consists predominantly of agricultural land and is located at the northern edge of relatively new residential subdivisions. To the west and north are agricultural and grazing land, and the foothills of the Gabilan Range. There are no commercial or industrial facilities nearby. The site elevation ranges from 180 feet to 740 feet above mean sea level and slopes downward generally to the southwest. There are no streams in the immediate area but there are a number of man-made, earthen reservoirs holding irrigation water. The western and eastern portions of the site are separated by San Vicente Road. The western portion of the site is currently used for row crops. The eastern portion of the site has two vineyard areas, intervening fallow row crop area, and some rangeland. There are two existing farm residences within the project area. The residences include adjoining farm equipment storage, barn, maintenance shop, and a chemical storage shed. Other structures include two large water tanks, a radio transmission tower, and a few high-tension power line towers.

Database Search. A database search was conducted to identify recorded hazardous materials incidents in the project area. The search included recorded incidents on the National Priorities List (NPL), the Superfund Comprehensive Environmental Response Compensation and Liability Information System List (CERLIS), the EPA's emergency response notification system list (ERNS), RCRA, and other federal, state, and local agency databases. The goal of reviewing the database report is to identify facilities that have known and documented environmental aspects that may negatively impact the subject site.

The project site was not identified on any database lists. Only one facility near the project site was identified on the database report to be of potential concern. Soledad Sanitary Landfill, located immediately north of the western portion of the project site, was listed in the databases of two California agencies – Waste Management Unit Database System compiled by the State Water Resources Control Board and the Solid Waste Information System compiled by the State Integrated Waste Management Board. The closed landfill is deemed to have a low potential for generating significant quantities of leachate but does need long-term maintenance to prevent erosion and water from ponding on-site. There was no information about analytical testing of soil or groundwater near this facility.

According to Monterey County Environmental Health records, the vineyard facility within the eastern portion of the project site was designated a closed site as of April 2004. A chemical inventory lists four 500 gallon propane tanks, 1,000 gallon and 10,000 gallon diesel fuel tanks, two 10,000 gallon gasoline tanks, 55 gallon oil drum, and 55 gallon waste oil drum. It was unclear whether the site contains underground storage tanks. There were no notations regarding spills or releases and no violation notices.

The Monterey County Agricultural Commissioner's office was contacted for pesticide records. With regards to the eastern portion of the project site, by far the most heavily applied chemicals are the sulfur-based fungicides (Wilbur-Ellis and Red-Top Dusting Sulfur, and Microthiol Disperss). Other fungicides used include Pristine, Champ Formula 2, Kocide 2000, and Rally 40W. In the weed control/herbicide category, the most heavily used are Roundup and Gramoxone Max. The last main category of chemicals applied is the spreader surfactant-types, such as Latron B-1956, In-Place and R-11. With regards to the western portion of the project site, the most listed chemical is Sonata, a non-hazardous bio-fungicide. The site also uses very small amounts of Entrust insecticide and Miller Nu-Film P spreader.

Site Survey & Interviews. A site reconnaissance was performed by D&M Consulting Engineers on August 31, 2006, to look for obvious evidence of potential contamination, such as current hazardous materials storage or use; unusually stained soils, slabs, and pavements; drains, sumps, drums, tanks, and electrical transformers; stressed vegetation; and discarded hazardous materials containers. In addition, interviews were conducted with the current property owner, Nader Agha, and site operation managers Norm Braga (western portion of the project site) and Mark Mirassou (eastern portion of the project site).

Eastern Portion Observations – Approximately 160 acres are planted as a vineyard. The remaining portions are either fallow (310 acres) or too steep for cultivation. Pole-mounted transformers are located at the southwest and northeast ends of the area. A 1,000 gallon diesel AST and 500 gallon gasoline AST are located on the east side of the farm outbuildings. No spills were noted in or around the bermed area. Along the north side of the outbuildings were several 55 gallon drums containing paving oil. No significant staining was noted. The inside of some of the outbuildings are used for storage and mixing of agricultural chemicals and storage and usage of oil. No evidence of USTs was noted. In addition, no evidence of hazardous materials storage was noted.

Western Portion Observations – The majority of the site is in row crop cultivation. A 10,000 gallon diesel AST is located along the southern boundary of the site. No signs of spillage were noted. An irrigation well is located east of the AST. A square reservoir is located near the center of the area, and a rectangular reservoir is located alongside San Vicente Road at the southeast corner.

Airports

There are no public airports within the vicinity of the project site. However, a private airstrip is located southeast of the project site. The airstrip consists of a 1,000-foot by 95-foot dirt runway. The airstrip is located approximately 6,000 feet from the project's boundary. The northwest-southeast orientation of the runway does not place the project site in the line of overflight for takeoffs and landings. The airstrip is used by small planes chartered for Stonewall Canyon Vineyard. Use of the landing airstrip generally occurs in the fall during harvest season. The airstrip is occasionally used for aerial application of chemicals on crops. Use of the airstrip for chemical applications generally occurs during spring and fall when rains may hinder ground application. According to Monterey County records, use of the landing strip is not expected to exceed two daylights flights per week during the harvest season.

City of Soledad General Plan

The Safety Element of the General Plan identifies potential natural and human-made hazards and provides standards for the protection of people and property from such hazards. Numerous goals and policies of the General Plan are intended to protect residents from such hazards. The following hazards/hazardous materials policies apply to development within the project area:

Policy L-38 The City and Redevelopment Agency shall promote the development of clean industries that do not generate large amounts of air pollution, have the potential to pollute groundwater resources, or that store, use or produce large volumes of hazardous materials.

Policy HZ-9 New development shall provide fire flow, emergency access and hydrants consistent with Fire Department requirements.

Hazards/hazardous materials policies which apply to development within the project area include requirements for Uniform Building Code compliance and preparation of soil studies. Please refer to Table 4.9-2 of the Land Use section for a detailed analysis of the project's consistency with the City's General Plan hazards/hazardous materials policies.

Environmental Impact Report on the Soledad General Plan. The General Plan EIR evaluated potential hazardous materials associated with the adoption and implementation of the Soledad General Plan, including future development within the project area. This program-level EIR focused on general impacts associated with implementation of the General Plan, rather than project-specific impacts

associated with individual development projects, such as the proposed project. According to the General Plan EIR, the following hazardous material impacts were identified:

- Urban development accommodated by the General Plan will increase the amount of hazardous materials used, stored, generated, and transported in and through the City. This would result in increased amounts of hazardous materials entering natural drainage courses and ultimately, the Salinas River. This impact was identified as significant unless mitigated.

Miravale III Specific Plan

Section 5.2.2 of the Miravale III Specific Plan identifies policies and implementation measures to ensure adequate fire protection services to mitigate impacts to emergency response or risk associated with wild land fire.

- New development shall provide fire flow, emergency access, and hydrants consistent with Fire Department Requirements.

Relevant Project Characteristics

The Specific Plan calls for a mixed-use urban development consisting of new roads and infrastructure, single-family and multi-family residential units, retail commercial space, a golf course, school and public safety sites, and open space and recreation areas. Project development would require extensive grading in order to facilitate construction of the proposed uses, in addition to the relocation and demolition of existing structures on-site. More specifically, as detailed in **Section 4.5 Cultural Resources,** the existing Lorentzen home, which is considered a historic structure, would be relocated to avoid impacting a historically significant resource. Several existing outbuildings would be demolished subsequent to the relocation of the Lorentzen home.

Thresholds of Significance

In accordance with CEQA Guidelines, a project impact would be considered significant if the project would:

- create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;

- create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;

- emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within on-quarter mile of an existing or proposed school;

- be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;

- for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area; and

- for a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area.

Impacts and Mitigation

The issues of emergency response and wildland fires are addressed in **4.12 Public Services** of this EIR.

Hazardous Material/Waste Sites

The project site has been under active agricultural use, including orchards, vineyards, and row crops, for the past 90 years. Commonly used agricultural chemicals of the past were chlorine or metal based and tend to persist in near-surface soils. In recent years, the western portion of the site has been used as an organic farm and limited quantities of pesticides have been applied. Vineyard operations continue on the eastern portion of the project site and involve applications of sulfur and other fungicides and weed control herbicides. These newer agricultural chemicals tend to be much less persistent in soil and the environment.

In 1995 limited soil sampling was conducted within the eastern portion of the site as part of the Phase 1 Environmental Site Assessment prepared by Terratech, Inc. Soil sampling was conducted in order to determine the presence of any hazardous conditions on-site. No soil samples were taken within the western portion of the project site. Testing was limited to the 'Priority Pollutant' suite of chlorinated pesticides; plus PCBs, which are chemically similar. Seven of the 10 soil samples exhibited no detectable analytes. The other three samples were found to only contain trace amounts of DDE (a breakdown product of DDT), plus a trace of dieldrin in one of the three. The maximum concentrations were 0.066 mg/kg and 0.013 mg/kg, respectively. For relative comparison, the currently applied screening levels for these chemicals in a residential land use are 1.6 mg/kg for DDE and 0.035 for dieldrin (Cal EPA, 2005). Although the limited soil sampling conducted in 1995 did not reveal any significant levels of residual chemicals, additional sampling conducted as part of a Phase II Environmental Site Assessment is warranted per the recommendations contained in the Phase 1 prepared by D&M Consulting Engineers, Inc. See Mitigation Measure 4.7-1 below.

Within the project vicinity, there are no known or listed releases of contaminants (soil or groundwater). A single testing event conducted in 1987 on groundwater from a supply well showed no suspicion of regional groundwater contamination. Nitrates may be high, but that is common for the whole valley. D&M Consulting Engineers, Inc. determined that additional groundwater sampling is not warranted as the project would be provided potable water from municipal sources (See **Section 4.14 Utilities** for further discussion regarding Water Supply). A "closed" landfill, however, is located adjacent to the project site. According to Terratech, Inc. disposal operations at this facility commenced in 1964 and included the disposal of "non-hazardous" waste, including municipal waste, brush, and other vegetative materials. An exploratory investigation conducted in 1977 determined that the site is underlain with non-waterbearing coarse-grained granatic bedrock. It was determined that the underlying geological features would preclude the landfill from degrading the surrounding environment. No records were found of analytical environmental investigations having been performed, just the general exploratory investigation conducted in 1977. A single incidence was reported in 1981 that indicated the site was not in compliance with surface water criterion because the site was not properly maintained to prevent erosion and water from ponding on site. No other violations have been reported on the facility.

Future development of phase four, including areas identified as "Urban-Reserve" may potentially be exposed to hazards associated with the closed landfill. Although the facility is not anticipated to result in exposure of environmental hazards to surrounding uses, this is considered a potentially significant impact. Due to potential human health concerns, the County of Monterey is currently in the process of reviewing a landfill buffer ordinance, which would limit development within 1,000 feet of a closed landfill. Figure 4.7-1 identifies portions of the project site that are within the 1,000 foot landfill buffer zone. Although the

facility is listed as closed and no known environmental concerns have been reported at the facility, the County of Monterey has identified the buffer zone as necessary to ensure the healthy and safety of the public. Upon annexation, however, approval of development within this area would be subject to the approval of the Soledad Planning Department. Mitigation 4.7-1 would insure project impacts would be reduced to less-than-significant.

Based on review of the hazardous materials database report, observations from the site reconnaissance, and results of the owner/operation managers' interviews, it was determined that the following hazardous environmental conditions exist within and near the project site:

- Pesticide and metal residuals from longtime agricultural use on most of the site;
- Specific areas where agricultural chemicals were stored, and especially mixed;
- Specific areas where burning of grape stakes has occurred;
- Lead-based paint and pesticide residues around structures (both current and former);
- Soil staining in areas such as the various earthen building floors;
- Soil beneath the maintenance pit in the vineyard shop;
- Soil beneath the pole-mounted transformers that apparently malfunctioned;
- Infiltration of possible contaminants at the wash rack drain and shop leachfield; and
- Possible impacts from the closed landfill adjacent to north end of Parcel 26.

These items are in addition to the standard 'closure' processes of removing all hazardous materials, their containers (including any underground tanks, if present) and affiliated equipment, and the standard pre-demolition survey of all structures for hazardous building materials, such as asbestos. Although the existing Lorentzen house would be relocated to avoid impacting a historically significant structure, the demolition of existing on-site structures, such as the barn and various agricultural buildings, could result in the exposure of construction personnel to asbestos-related hazards. According to D&M Consulting Engineers, Inc., asbestos containing material may be present in these structures and affiliated equipment. The incorporation of mitigation requiring asbestos surveys would be warranted in order to minimize potential human health-related impacts (personal communication, Eric Lautenbach, June 2008).

Based on the findings of the Phase I Assessment, the preliminary environmental soil testing conducted in 1995, and the similar developments that have already occurred within the project vicinity, it is not expected that development of the proposed project would be exposed to significant environmental hazards. Implementation of the following mitigation measures, as recommended in the Phase I Assessment, would further ensure that project impacts are reduced to a less-than-significant level. Implementation of the following mitigation measures would not result in any new environmental impacts beyond those identified elsewhere in this EIR.

Impact **The project proposes a variety of uses in an area that may be contaminated with hazardous materials. Release of these contaminants could pose a health risk to construction workers and future users on the site.** ***This is a significant impact that can be reduced to a less-than-significant impact with the following mitigation measures.***

Mitigation

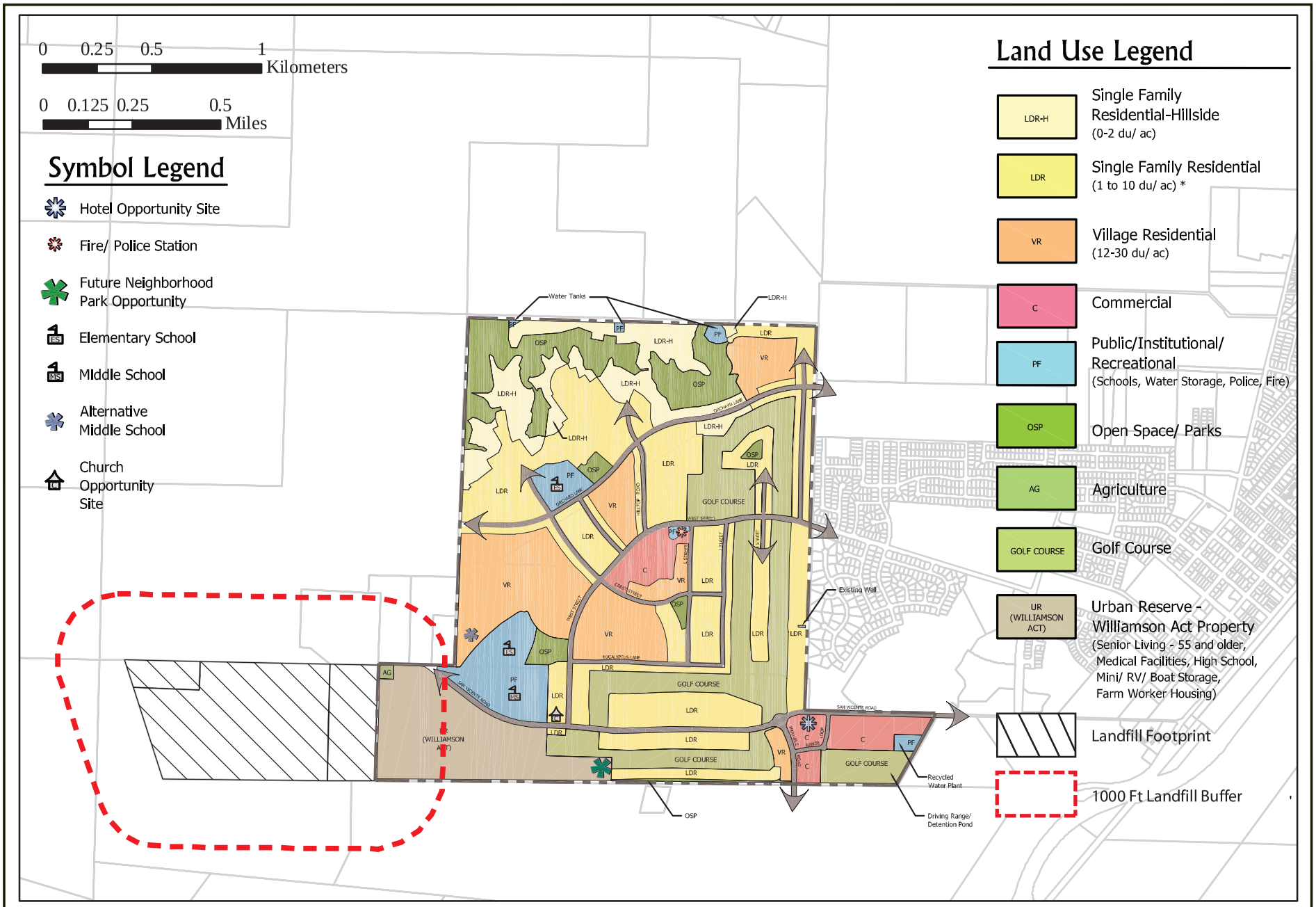
4.7-1 Prior to the recordation of any final map, the applicant shall arrange for a Phase II Environmental Site Assessment to be prepared which assesses the localized environmental conditions described in the Phase I Environmental Site Assessment prepared by D&M Consulting Engineers, Inc. (September 2006) and identifies any required remedial actions for the safe handling, removal and special needs for any identified materials. The Phase II Assessment shall include site-specific soil sampling in order to assess the presence of potential soil contamination and to identify special needs for soil handling during construction/grading activities and possible health risks to construction workers and future users consistent with the recommendations contained in the Phase 1 Environmental Site Assessment prepared by D&M Consulting Engineers, Inc.

If results indicate the presence of such materials in excess of screening levels for residential, educational, or commercial uses, a Remediation Plan shall be prepared and implemented to reduce contamination to acceptable levels, maintain the safety of construction workers and future site users, and assure proper management of contaminated materials in accordance with state and local regulatory requirements. This plan shall be subject to review and approval by the Monterey County Division of Environmental Health. Prior to the issuance of any building and/or grading permit, the project applicant shall submit evidence to the City of Soledad for review and approval demonstrating compliance with this measure.

4.7-2 Prior to commencement of new development, the applicant shall obtain approval of a Soil Management Plan from the Monterey County Division of Environmental Health, which establishes management practices for handling potentially contaminated soil, if encountered, during construction/grading activities.

4.7-3 In order to reduce human health risks to construction personnel and future site occupants, the project proponent shall retain a qualified consultant to survey all buildings to be demolished for asbestos under the National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines prior to demolition activities. If asbestos containing material is documented within existing on-site structures, all potentially friable asbestos shall be removed prior to building demolition in accordance with NESHAP guidelines. Prior to the issuance of a grading permit, the project proponent shall submit written evidence to the City of Soledad Director of Public Work from a qualified consultant demonstrating that all asbestos containing material, if present, has been properly removed and demolition activities may proceed without exposing construction personnel to asbestos related-hazards.

4.7-4 In order to reduce human health risks to construction personnel and future site occupants, the project proponent shall retain a qualified consultant to conduct a lead-based paint survey to evaluate the presence of lead-based paint residues in site soils adjacent to existing structures. If lead contamination is documented on-site, all peeling and flaking lead-based paint shall be removed and properly disposed of separately from building debris, in accordance with current Department of Toxic Substances Control policies. In addition, all existing structures within the Specific Plan area that were constructed prior to 1978 shall be surveyed for lead-based paint prior to any demolition activities. Prior to the issuance of any permit for each phase of development, the project proponent shall submit written evidence from a qualified consultant documenting that all lead-based paint hazards have been appropriately removed and disposed of in accordance with industry standards, subject to the review and approval of the City of Soledad.



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Soledad Sanitary Landfill Buffer Zone

Figure 4.7-1

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Hazardous Emissions Within One-Quarter Mile of a Proposed School Site

As identified in the Miravale III Specific Plan, several sites have been identified as future school locations, including two elementary schools and one middle school, within the project boundaries. Due to the historical uses associated with the subject property, in addition to the proximity of the Soledad Sanitary Landfill, there is the potential that several of the proposed school sites may be exposed to hazardous materials and/or emissions. More specifically, the proposed middle school and elementary school located along San Vicente Road, in addition to the alternative middle school location, are within approximately 1,500 feet of the Soledad Sanitary Landfill (see Figure 4.7-1).

According to the Phase 1 prepared by D&M Consulting Engineers, Inc., Soledad Sanitary Landfill is listed as closed and the prime waste type disposed of at the facility was identified as "non-hazardous." More specifically, typical wastes disposed of at this facility included municipal waste, brush, and other vegetative materials. Subsurface investigations conducted in the 1970s determined that the facility was underlain by non-waterbearing, coarse-grained granitic bedrock and that the facility, due to the underlying site characteristics, would not degrade the surrounding environment. A single incidence reported in 1981 by the State Solid Waste Management Board indicated that the site was not in compliance with surface water criterion because the site had not been properly maintained to prevent erosion and water from ponding on-site. Further investigations were conducted by Monterey County Environmental Health Division representatives from 1991 through 1994 and no additional incidences were reported.

Due to the proximity of the Soledad Sanitary Landfill to planned school sites and other educational uses within the project area, there is the potential that these sites may be exposed to environmental hazards. Although this facility is located within approximately 1,500 feet of the proposed school sites, preliminary investigations conducted as part of the Phase 1 Environmental Site Assessments determined that the landfill, which is located either downgradient or crossgradient from the project site, would not pose a significant environmental hazard to the proposed development. Additionally, the materials historically disposed of at this facility have been identified as non-hazardous. Although the landfill is not considered a hazardous waste site, the decomposition of organic material and other solid waste may result in the release of gases and/or other harmful emissions. Potential impacts would be minimized through the implementation of Mitigation Measure 4.7-1 identified above. In addition, further project-specific environmental review would be required prior to conveyance of any potential school sites consistent with the California Education Code. If, however, it is determined through the implementation of Mitigation 4.7-1 that the existing landfill would result in the exposure of students to potential environmental hazards the following mitigation measure would ensure that impacts would be reduced to a less-than-significant level. Implementation of the following mitigation measures would not result in any new environmental impacts beyond those identified elsewhere in this EIR.

Impact **Due to the proximity of the Soledad Sanitary Landfill to the proposed school sites, there is the potential for hazardous emissions and/or other environmental hazards to affect the health and safety of students attending new schools within the project area. More specifically, the existing landfill has the potential to expose several of the proposed school sites to environmental hazards. Although the landfill is listed as "closed" and no known hazardous incidents have been reported, releases of emissions may, nevertheless, adversely affect the health of students. *This is a significant impact that can be reduced to a less-than-significant impact with the following mitigation measures.***

Mitigation

4.7-5 If, during the course of the Phase II Environmental Site Assessment, it is determined that the existing Soledad Sanitary Landfill would expose the proposed school sites to an environmental hazard that cannot be reduced to an acceptable level through remediation, the project applicant, in conjunction with the Soledad Unified School District and the City of Soledad, shall identify new school sites within the Miravale III project area that would not be exposed to known environmental hazards, prior to the recordation of any final map. If new school locations are necessary, the applicant shall amend the Specific Plan and submit a revised tentative map demonstrating the new school locations, subject to the review and approval of the City of Soledad, prior to the recordation of any final map. Any new school site shall be coordinated with the Soledad Unified School District.

Hazardous Materials Use

The project proposes new residential, commercial, and recreational uses, including school and public facility sites and a golf course. The golf course will be surrounded by residences and will be located near the proposed school sites. Golf course use could expose residents and students to potentially hazardous chemicals. The public demand for turf grass of high quality and uniform playing surface on golf courses require pest management. Pesticides and other methods are used to control or reduce the adverse effects of harmful insects, unwanted plants, and pathogenic organisms. Pesticide use on golf courses is relatively small compared with agricultural operations. Pesticides are applied selectively and much less frequently than fertilizers, usually no more than once or twice per year. The pesticides and herbicides typically used on golf courses are not highly mobile or persistent and dissipate rapidly as a result of volatilization, photodegradation, microbial action, hydrolysis, and soil absorption. The project will be required to minimize pesticide use by adhering to a chemical application management plan.

The project site is proposed along the City's periphery, where land uses begin to become more rural and agricultural in nature. The project site abuts existing agricultural uses with a majority of the cultivation occurring to the west of the site. It is anticipated that the adjacent agricultural uses will continue during the construction and operation of the project. As in most agricultural production, chemical applications to the crops are necessary to control pests and diseases. The types of chemicals and their frequency of application are driven by the prevalent pest or disease, which often varies. For the types of crops adjacent to the project site, sulfur dust is typically applied via tractor applications. Aerial spraying is not normally required; however, blowers may be used that create plumes of sulfur. Application routines are generally frequent, approximately once every 7 to 21 days. Numerous local, state, and federal regulations and ordinances pertain to the proper transport, use, storage, and disposal of pesticides and herbicides, including training for workers handling and applying these materials and reporting of releases. Permits are required for pesticide and herbicide application through the Monterey County Agricultural Commissioner's Office.

Residential uses are proposed along a portion of the western edge of the project site. The residences will be in proximity to adjacent agriculture operations and residents could be exposed to potential hazardous chemicals. In order to reduce the risk of pesticide exposure, consistent with the mitigation measures identified in **Section 4.2 Agricultural Resources**, the proposed project will be required to incorporate agricultural buffers between residential and agricultural uses to minimize and/or avoid potential impacts to surrounding uses. The incorporation of the following mitigation would further minimize potential project impacts to a level considered less-than-significant. Implementation of the following mitigation measures would not result in any new environmental impacts beyond those identified elsewhere in this EIR.

Impact **Future development could involve the use/storage of hazardous materials and/or be located in proximity to existing agricultural use/storage of hazardous materials. Accidental release of hazardous materials could result in significant impacts on public health and the environment.** ***This is a significant impact that can be reduced to a less-than-significant impact with the following mitigation measures.***

Mitigation

4.7-6 The applicant shall prepare a Chemical Application Management Plan (CHAMP). This plan shall detail the procedures to construct, operate, and maintain the golf course. The CHAMP shall provide technical public disclosure regarding pesticides, fertilizers and other chemicals to be used on the golf course, as well as methods of application and handling. This plan shall be submitted to the Monterey County Environmental Health Division for review and approval. Prior to the issuance of any permit for golf course development, the project applicant shall submit documentation to the City of Soledad demonstrating that a CHAMP has been prepared and approved by the County of Monterey. The following provisions shall be included in the CHAMP:

- Drought, pest, and disease resistant grass species shall be selected.
- Pesticides shall be handled, applied, and disposed of by a licensed (State-certified) spray technician.
- Only approved and legal chemicals shall be used. All county, state, and federal guidelines must be strictly adhered to regarding storage, handling, and application of pesticides.
- Advanced technology/monitoring equipment shall be used to insure minimal application of pesticides, herbicides, and fertilizers. This equipment shall be maintained and in proper calibration.
- A controlled and designated area/facility shall be used for the proper mixing and loading of pesticides into application equipment. The facility shall consist of an impermeable pad with controlled and contained drainage, and should be at least 50 feet from open ditches, ponds, or other water bodies. Rinse water shall be properly stored and hauled for disposal at an approved facility.
- Selection of pesticides shall be based on the ability to achieve treatment goals and criteria to minimize off-site movement. Selection of less toxic, less mobile, and less persistent pesticides shall be a priority management criterion.
- Pesticide applications shall be carefully timed and combined with other pest management practices; pests shall be accurately identified and pesticide applications made only when necessary, using the least amount required for all seasons.
- Pesticides shall not be applied when soil moisture is high during the rainy season. Applications shall be restricted prior to any anticipated late or early season storm events to preclude potential impacts from runoff.
- Irrigation applications shall be consistent with turf grass evapotranspiration requirements. Over-watering shall be avoided.

Airport Hazards

A private airstrip is located approximately 6,000 feet from the project's boundary. The northwest-southeast orientation of the runway does not place the project site in the line of overflight for takeoffs and landings. Except when necessary for takeoff and landing, the minimum altitude for aircraft over populated areas is 1,000 feet above the highest obstacle according to Federal Aviation Administration (FAA) standards. Since the project site would not be subject to takeoffs and landings from the

neighboring airstrip, it is unlikely that aircraft would operate at an altitude less than 1,000 feet over the project site. Therefore, airport hazard risk impacts would be considered less-than-significant. **This represents a less-than-significant impact.**

4.8 HYDROLOGY AND WATER QUALITY

Introduction

This section evaluates the potential impacts of the project to hydrology and water quality based on existing information and data provided in the City of Soledad Urban Water Management Plan (UWMP), the Water Supply Assessment (WSA) prepared for the project (Byron Buck, August 2007), and available drainage and hydrologic information from the City of Soledad Storm Drain Master Plan (SDMP), which was adopted by the City Council in October 2007. As part of the SDMP, RM Associates conducted an analysis of the existing drainage conditions on the project site, in addition to stormwater runoff calculations (Appendix G). Additional information is derived from Nolan Associates, the geologic consultants for the property (Preliminary Hydrogeologic Investigation, August 1995 and Geologic Investigation, 2007 Update). The following section evaluates these items in accordance with the CEQA Guidelines. Impacts related to the availability of water supply and water system infrastructure are addressed in **Section 4.14 Utilities.**

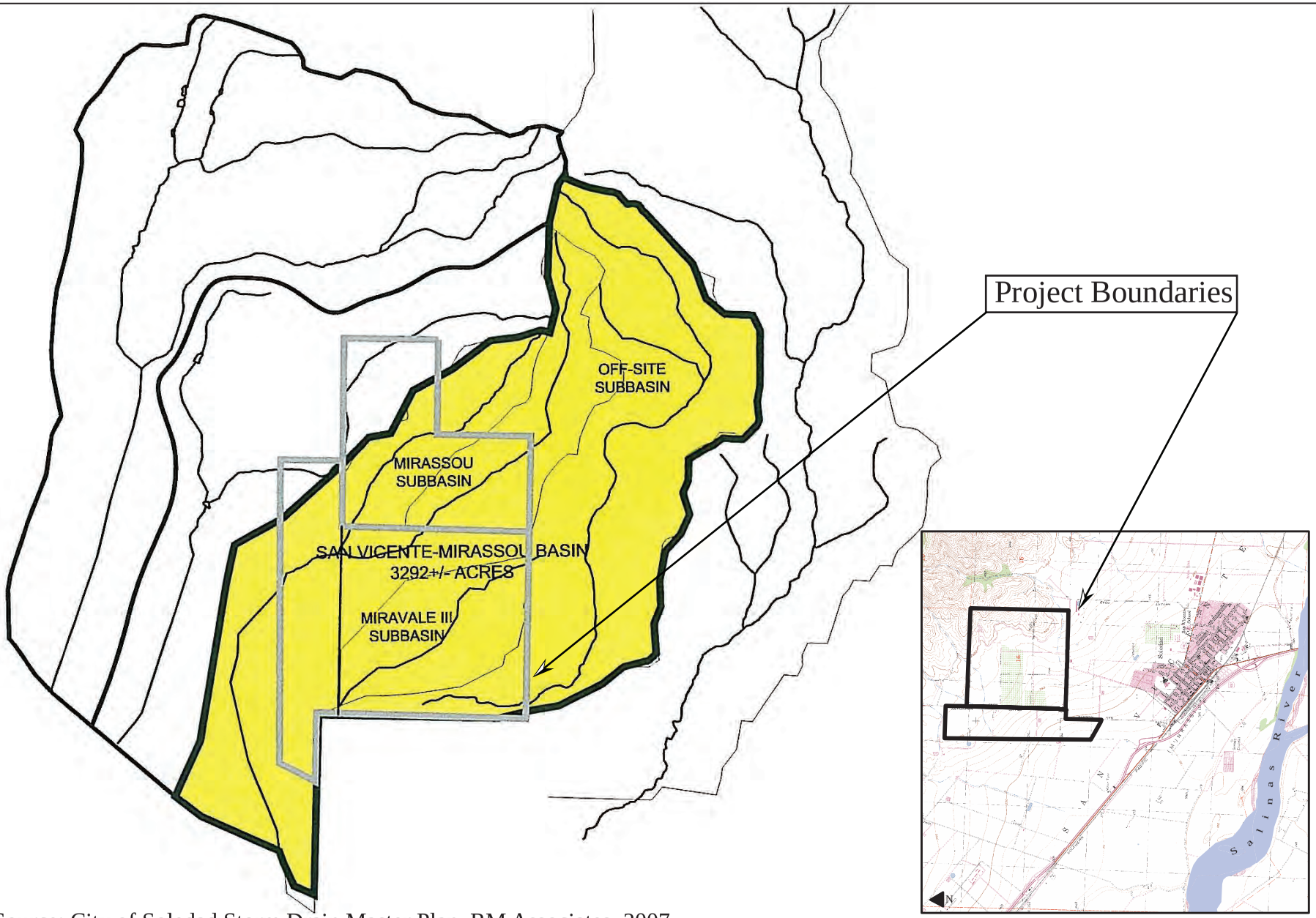
Setting

Surface Water Resources and Water Quality

As previously identified elsewhere in this EIR, the proposed project site is located within three designated expansion areas according to the City of Soledad General Plan. The project site is generally located to the north and northwest of the existing developed portions of the City, which is divided into nine drainage basins. Five of these basins are located entirely within the City limits, three are partially inside the City limits, and one lies entirely outside the City boundaries. The 920-acre project site is part of a large watershed system that has an offsite watershed of ±1,900 acres (refer to Figure 4.8.1).

The land to the east of the site consists of a rugged ridge-and-valley topography that rises rapidly to elevations greater than 2,000 feet. Site elevation ranges between 200 and 600 feet above sea level. Surface slopes on the alluvial portion of the site are approximately 5 to 8 percent gradient. Steep slopes on the eastern portion of the site range up to about 70 percent gradient, but more commonly fall in the range of 30 to 45 percent. Drainage of the surface water in the vicinity of the project generally occurs by overland sheet flow towards shallow ephemeral drainage courses on the site. The drainages on the property typically do not carry surface water except during peak rainfall events (Nolan Associates, 1995). The site's soils have moderate to high infiltration rates and low moisture retention capacity. The natural drainage channels crossing the property show little incision and there is little indication of significant erosion on the property, consistent with the observed infrequent surface flow (Nolan Associates, 1995).

Surface water quality within the Salinas River has been monitored over time in several locations. The results indicate that water quality meets the standards specified in the City's NPDES permit.



Source: City of Soledad Storm Drain Master Plan, RM Associates, 2007

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Storm Drain Master Plan Watershed Map

Figure 4.8-1

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Flooding

The General Plan FEIR describes generalized flood hazards within the City of Soledad area. The Salinas River is located approximately 1.25 miles south of the project site and is the primary surface drainage feature that affects the surrounding area. As identified in the General Plan FEIR, the boundaries of the 100-year floodplain generally correspond to the areas surrounding the Salinas River. There are no areas within the project site that are identified within a 100-year flood hazard area on the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map. The 100-year floodplain defines the boundary of flooding statistically anticipated to occur once every 100 years. Although the City is not located within the 100-year floodplain, flooding has occurred in the downtown portion of the City and a portion of the project site. More specifically, flooding occurred during a 1995 storm event that resulted in the Bryant Canyon Channel overflowing. The City of Soledad has recently completed improvements along the Bryant Canyon Channel to prevent future flooding. According to the City, these improvements are thought to have mitigated potential flooding hazards within the surrounding area (personal communication, Susan Hilinksi, May 2008).

Groundwater Resources

The project site is underlain by the Salinas Valley Groundwater Basin. This groundwater basin extends below the Salinas Valley, from San Ardo to the Monterey coast. In the first comprehensive study of the Salinas Valley aquifer, the California Department of Water Resources (DWR, 1946) separated the aquifer into five sub-areas based on differences in hydrologic character, including the degree of groundwater confinement, the specific capacity of wells, and the source of the groundwater recharge. The five regions are 1) the pressure area, 2) the eastside area, 3) the Arroyo Seco cone, 4) the forebay area, and 5) the upper valley. A more recent comprehensive groundwater study for the basin (Montgomery Watson Engineers, 1994) has modified this division of the groundwater basin by including the Arroyo Seco cone in the Forebay area and by adding the Fort Ord/Toro region as a sub-basin. The subject properties are located within the Forebay area (Nolan Associates, 1995 Hydrogeologic Investigation). According to DWR, the Forebay Aquifer Sub-basin underlies an area of approximately 94,000 acres from Gonzales to just north of Greenfield. Along the southern edge of the sub-basin, the Pancho Rico Formation is water-bearing. The Forebay area is characterized by gravels, sands, and clays of fluvial origin with minor, interfingering alluvial fan deposits occurring along the valley margins. These sediments constitute an unconfined aquifer over 800 feet thick, although local occurrence of clay layers may create partially confined conditions in some areas.

Recharge to groundwater occurs principally by: 1) infiltration from the Salinas River, fed during the dry part of the year by water release from the Nacimiento and San Antonio reservoirs, 2) infiltration and underflow from tributary drainages around the basin, and 3) return flows from agricultural irrigation and percolation of rainfall. On the subject property, principal recharge of aquifers is by rainfall and return flows from irrigation, with recharge occurring due to direct application of irrigation water and precipitation on areas underlain by alluvium. Infiltration also occurs due to runoff from steep slopes underlain by granitic rocks on the alluvial valley fill.

Groundwater flow in the valley is to the northwest, towards the mouth of the Salinas Valley. However, pumping from large agricultural wells can have a significant local impact on groundwater gradient and may locally induce cross valley groundwater flow. Long term groundwater levels in the upper valley and Forebay areas appear to be stable, supported by inflows from the Nacimiento and San Antonio reservoirs (Boyle Engineering, 1986 and Montgomery Watson, 1994). Depth to groundwater in the area is currently about 120 feet (Nolan Associates, 1995 and 2007).

Groundwater pumping for agriculture and urban development in the lower part of the valley (the Pressure Area) has resulted in a decline in groundwater levels, resulting in a serious seawater intrusion problem. An area of significant saltwater intrusion now extends over five miles inland from the Monterey Bay in the shallowest aquifer (the "180-foot" aquifer, Montgomery Watson, 1994). Sensitivity studies on pumping strategies in the valley (Yates, 1987) indicate that the sea water intrusion problem is relatively insensitive to pumping in the upper valley. Studies of the area hydrogeology (Fugro West, 1994) indicate that the portion of the Salinas River south of Soledad (upstream from the project) is a gaining reach where groundwater flows into the river, and the stretch of the river north of Soledad is a losing reach, where water percolates to groundwater from the river.

To address the issue of seawater intrusion, the Monterey County Water Resources Agency (MCWRA) is implementing a program to address overdraft and seawater intrusion in the basin known as the Salinas Valley Water Project (SVWP). The SVWP includes re-operation of the Nacimiento and San Antonio reservoirs and the capture and diversion of water via a seasonal surface diversion structure to provide water for agriculture in lieu of groundwater pumping. A later phase of the SVWP involves supplying surface water to coastal urban water agencies to further reduce pumping in the coastal areas. Detailed information regarding the background and history of the condition of the Salinas Valley Groundwater Basin, including the cause and extent of overdraft and seawater intrusion, current and future water needs and trends, and efficacy of alternative mitigation measures, is contained in the *June 2001 EIR and Environmental Impact Statement for the Salinas Valley Water Project* (http://www.mcwra.co.monterey.ca.us/SVWP/DEIR_EIS_2001/index.htm). Further information is also provided in the project's Water Supply Assessment and Written Verification of Supply (WSA) prepared for this project pursuant to Water Code sections 10910 et seq. Pursuant to Section 15150 of the CEQA Guidelines, the information and analysis in these reports is incorporated by reference in this EIR.

Regulatory Environment

Federal and State Requirements

Federal Clean Water Act. The Federal Clean Water Act is codified in 33 USC 1251-1376 and regulates discharges into U.S. waters through a National Pollutant Discharge Elimination System (NPDES) permit, administered through the State Water Resources Control Board (SWRCB) and the State Regional Water Quality Control Board (RWQCB) in California. The State and Central Coast RWQCB oversee a statewide General Permit regarding management of stormwater runoff from construction sites over one acre in size. The Central Coast RWQCB has authority to use planning, permitting, and enforcement to protect beneficial uses of water resources in the region. The Central Coast RWQCB uses its adopted Water Quality Control Plan for the Central Coast Region (1994), referred to as the Basin Plan, to implement policies and provisions for water quality management in the region. The Basin Plan identifies beneficial uses of major surface waters and their tributaries, in addition to water quality objectives and implementation plans to protect these beneficial uses.

The 1987 Amendments to the Federal Clean Water Act require that storm water discharges to waters of the U.S. be regulated under the NPDES. The SWRCB issued a draft statewide General Permit in July 2002. The Central Coast RWQCB oversees the statewide General Permit regarding management of storm water runoff from construction sites over one acre in size. Provisions of the statewide General Permit indicate that discharges of material other than storm water into waters of the U.S. are prohibited; that storm water discharges shall not cause or threaten to cause pollution, contamination, or nuisance; and that storm water discharges not contain hazardous substances. The statewide General Permit also requires implementation of Best Management Practices (BMPs) to achieve compliance with water quality standards. A BMP is defined as any program, technology, process, siting criteria, operating method, measure, or device that controls, prevents, removes or reduces discharge of pollutants into bodies of

water. Any project that will disturb over one acre (including the proposed project and any future site-specific projects) is required to file a "Notice of Intent" with the RWQCB with submittal of a Storm Water Pollution Prevention Plan (SWPPP) prior to project construction. The SWPPP is the foundation of the required documentation for a NPDES General Storm Water Permit for construction activities.

California Fish and Game Code. The California Fish and Game Code (Sections 1600-1607) authorizes the Department of Fish and Game to enter into streambed alteration agreements with applicants to develop mitigation measures for projects that would obstruct the flow or alter the bed, channel, or bank of a river or stream in which there are fish or wildlife resources, including intermittent and ephemeral streams.

Local Requirements

City of Soledad General Plan.

The City of Soledad General Plan provides policies to protect groundwater resources and provide adequate storm drain systems. Please refer to Table 4.9-2 of the Land Use section for a detailed analysis of the project's consistency with the relevant hydrological, water quality and flood control provisions of the Soledad General Plan. The following policies address utilities and service systems relevant to the proposed project.

Policy S-12 The City shall encourage the use of natural drainage systems where feasible to preserve and enhance natural features.

Policy S-13 The City shall support efforts to acquire land or obtain easements for drainage and other public uses of flood channels where it is desirable to maintain channels in a natural state.

Policy S-14 The City shall strive to improve the quality of urban stormwater runoff and quality of groundwater recharge through the use of appropriate mitigation measures including, but not limited to, infiltration/sedimentation basins, oil/grit separators, and other management practices, including storm water retention.

Policy S-15 The City shall require new development to adequately mitigate increases in stormwater peak flows and/or volume. Mitigation measures shall take into consideration impacts on adjoining properties and impacts on groundwater recharge related to existing and proposed water wells.

Policy S-16 The City shall encourage project designs that minimize drainage concentrations and impervious coverage and maintain, to the extent feasible, natural site drainage conditions. Drainage onto adjacent properties shall be restricted to pre-project levels minus any runoff from the area to be developed.

Policy S-17 The City shall require projects to allocate land as necessary for the purpose of retaining flows and/or for the incorporation of mitigation measures for water quality and supply impacts related to urban runoff.

Policy S-17 The City shall require projects to allocate land as necessary for the purpose of retaining flows and/or for the incorporation of mitigation measures for water quality and supply impacts related to urban runoff.

Policy S-18 The City shall coordinate mitigation measures with responsible agencies (including California Regional Water Quality Control Board, Monterey County Environmental Health Department, and Monterey County Water Resources Department) for the control of storm drains, the monitoring of discharges and the implementation of measures to control pollutant loads in urban storm water runoff.

Policy S-19 Engineered drainage plans shall be required for all development projects. Engineered drainage plans shall incorporate a collection and treatment system for stormwater runoff consistent with applicable federal and State laws.

Flood Hazards

Policy HZ-1 The City shall promote flood control measures that maintain the drainage courses in their natural conditions within the 100-year floodplain.

Policy HZ-2 The City shall prohibit the construction of facilities essential for emergencies and large public assembly in the 100-year floodplain, unless the structure and access to the structure are free from flood inundation.

Policy HZ-3 The City shall require flood control structures, facilities, and improvements to be designed to conserve resources, incorporate and preserve scenic values, and to incorporate opportunities for recreation, where appropriate.

Policy HZ-4 The City shall manage flood prone areas consistent with the requirements of the Federal Emergency Management Agency (FEMA) and the Monterey County Water Resources Agency.

Environmental Impact Report on the Soledad General Plan. The General Plan EIR evaluated hydrologic and drainage impacts associated with the adoption and implementation of the Soledad General Plan, including future development within the project area. This program-level EIR focused on general impacts associated with implementation of the General Plan rather than project-specific impacts associated with individual development projects, such as the Miravale III project. According to the General Plan EIR, the following water quality impacts were identified.

- Buildout of the General Plan would increase the amount of impervious surfaces within the City's Plan area, thereby increasing the volume and velocity of runoff and the potential for erosion and sedimentation in the Salinas River and its tributaries.

- Buildout of the General Plan would increase the amount of heavy metals and other hazardous materials, washed from the surface of parking lots and roadways constructed within the Plan area that could enter natural drainage courses such as the Salinas River during a rainstorm.

- Development and associated construction activities could result in the release of oil, engine fuel, and other toxic substances into the Salinas River or its tributaries, adversely affecting water quality.

- Buildout of the land uses designated by the General Plan have the potential to expose people and property to the periodic effects of flooding.

- The increase in impervious surfaces resulting from the buildout of the General Plan could adversely affect groundwater recharge.

- Development and the proposed change in land use from buildout of the General Plan could affect regional groundwater quality.

Miravale III Specific Plan

Sections 5.0 of the Miravale III Specific Plan identify goals and policies to ensure the adequate provision of public facilities related to hydrology, drainage and water quality.

- Public Services and Facilities Goal PSF-1 states that project development should provide an efficient, self sustaining system of public facilities that accommodate the needs of project build-out.

- Public Services and Facilities Goal PSF- 2 further states that project development should provide adequate and reliable services and utilities to area residents and business while ensuring that adequate maintenance of these facilities is provided.

Specific Plan policies related to stormwater management are identified in Section 5.1.3 of the Specific Plan as follows:

- Ensure provision and sizing of adequate stormwater facilities to accommodate the Plan Area and provide for water retention sufficient to limit peak flows to predevelopment levels.

- Limit the development of impervious surfaces, to the extent practical, in order to reduce post-project runoff volumes.

- Require appropriate runoff control measures as part of development to minimize discharge of urban pollutants, such as oil and grease, into drainage areas.

- Construction and grading activities shall comply with Best Management Practices and Storm Water Pollution Prevention Plan policies per applicable controls, standards, and the Regional Water Quality Control Board.

- Design and construct a stormwater collection and retention system that adequately retains peak storm flows onsite, avoids aggravating or causing offsite flooding downstream from the project site, and ensures separation of stormwater drainage from recycled water generated within the Plan Area.

Relevant Project Characteristics

The majority of the lowland portion of the project site is currently in active agricultural production or fallow. The upland portions of the site associated with the Gabilan foothills are undeveloped. The Specific Plan calls for the replacement of the existing agricultural and grazing uses with a mixed-use urban development consisting of new roads and infrastructure, single-family and multi-family residential units, retail commercial space, a golf course, school and public safety sites, and open space and recreation areas. According to information provided by the applicant's engineer, development of the proposed project would involve approximately 2.05 million cubic yards (CY) of cut/fill.

The project is proposing to retain post-development storm water onsite, according to the plans for the project, to be contained within two percolation/retention ponds located on the existing San Vicente Road (southeast of the proposed middle school) and in the extreme southwest corner of the Plan Area (at the golf practice range). The Specific Plan and VTMs call for stormwater generated by the development to be collected in an underground piping system and directed to two existing retention ponds located within the plan area boundary that would be enlarged and converted into retention basins. Plans for the project state that the enlarged basins would be sized to accept the increase in flow due to the development and would release runoff to the existing facilities at a rate equal to or less than the historic flow prior to development. Erosion Control measures including pre- and post-construction BMPs are proposed as part of the Specific Plan (refer to the analysis below for City requirements for stormwater retention on site, as identified in the Miravale III Storm Drain Analysis prepared by RM Associates).

Thresholds of Significance

In accordance with CEQA Guidelines, a project impact would be considered significant if the project would:

- violate any water quality standards or waste discharge requirements;
- substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);
- substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site;
- substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
- create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- otherwise substantially degrade water quality;
- place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
- place within a 100-year flood hazard area structures which would impede or redirect flood flows; or
- expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam.

Impacts and Mitigation

Surface Water/Water Quality

The project site consists of 920 acres; the area identified as offsite watershed is approximately 1,900± acres. According to the City, the project is required to provide flood protection for this project based on a 2,800± acre watershed. An analysis regarding the proposed stormwater system, as proposed by the project engineers in accordance with City requirements per the adopted City Storm Drain Master Plan, was conducted for the City by RM Associates (Miravale III Storm Drain Analysis, included as part of the City of Soledad Storm Drain Master Plan, adopted by the City Council in October 2007). The proposed Miravale III storm drainage piping system consists of three major branches to provide stormwater collection for each of the major sub-basins of the 2,800 acre watershed. The westerly branch provides collection to the offsite storm water northerly of the development, the southerly branch provides collection to the offsite stormwater easterly of development, and the central branch provides collection to a large portion of the onsite stormwater runoff. The RM Associates review of the engineered plans found that the engineering concepts of the proposed storm drainage collection and storage disposal system, drainage pipes, and basins generally address the natural drainage channels and the critical points of natural convergence of runoff. The proposed detention basins for Miravale III are located in areas of natural or manmade storage of runoff from large areas of agriculture fields (RM Associates, 2007).

The project would require extensive grading on the site to facilitate construction of the proposed uses. There is the potential for increased erosion as a result of the proposed development within the foothills of the Gabilan Range. In addition, grading within the foothill area and portions of the project site located above the 400 foot elevation contour would result in landform alterations that would potentially alter the existing drainage pattern on the project site. Impacts related to changes in the existing drainage pattern are discussed in greater detail below. Site preparation and construction activities would also disturb soil and increase its susceptibility to erosion. Removal of soils by wind or water can undermine buildings, roads, and other developments, as well as contribute to siltation of local streams and water bodies. Surface runoff from the proposed development could generate urban pollutants affecting water quality such as oil, grease, and trace metals from vehicles using parking areas and roadways. In addition, fertilizers, pesticides, and herbicides released from the golf course, parks, and other landscaped areas could impact water quality.

The project proposes to utilize BMPs to minimize the release of water pollutants into surface drainages and groundwater. BMPs for the project may include the use of silt fencing, sediment traps, and other measures during construction, as well as long-term facilities, including surface and subsurface filtration systems. The project would be required to conform to the measures set forth in the Specific Plan, as well as the NPDES permit. The project would also be required to pay fees to the City to fund maintenance costs for onsite BMPs.

Mitigation measures 4.6-4 to 4.6-6 contained in this EIR, which include adherence to the specific erosion control regulations in the Hillside Development Standards & Guidelines contained in Appendix C, in addition to requirements that the project applicant submit a Storm Water Pollution Prevention Plan (SWPPP) and associated erosion control measures, would minimize potential project-related impacts. The following mitigation measures are in addition to existing mitigation identified in **Section 4.6 Geology, Soils, Mineral Resources** (see mitigation measures 4.6-4 and 4.6-5). Implementation of the following mitigation measures would not result in any new impacts beyond those identified elsewhere in this EIR.

Impact **Construction and operation of the project could impact water quality through substantial soil erosion during grading activities, loss of topsoil, and surface runoff from the proposed development.** ***This is a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation measures.***

Mitigation

4.8-1 In order to ensure that impacts are minimized to the greatest extent feasible, the project shall be designed to meet the BMP standards for operational phase storm water runoff and to maintain the onsite BMPs. The project shall implement BMPs to manage water quality by providing onsite runoff treatment in line with the onsite infiltration system. Prior to the issuance of any grading and/or building permit, the project applicant shall prepare a Construction Management Plan that identifies a designated construction supervisor responsible for the continued implementation of all construction BMPs throughout the duration of project construction. Moreover, the Construction Management Plan shall also identify BMPs to be implemented as part of the project and associated monitoring activities. The Construction Management Plan shall be reviewed by the City of Soledad Public Works Director prior to the issuance of any permit.

4.8-2 In order to prevent excess sediment buildup and ensure that all percolation basins are functioning in accordance with project-level plans, the project applicant and/or his/her successor in interest, shall be responsible for the long-term maintenance of all percolation basins and related private on-site drainage improvements and shall enter into a maintenance agreement with the City to provide for such. Bi-annually a basin maintenance report shall be submitted to the City of Soledad, subject to the review and approval of the Public Works Director, demonstrating that the basins have been properly maintained and cleaned in accordance with City standards. Prior to the issuance of any building and/or grading permit, the project applicant shall enter into a maintenance agreement with the City of Soledad.

Surface Drainage /Flooding

Development of the proposed project would result in substantial physical changes to the existing drainage conditions within the project area as a result of grading activities, the introduction of impervious surface areas, changes in site topography, and other site disturbing activities. The alteration of existing drainage patterns combined with the introduction of impervious surface areas has the potential to result in substantial soil erosion, in addition to flooding. Project-induced impacts related to increased soil erosion and sedimentation are addressed in **Section 4.6 Geology, Soils, and Mineral Resources.** Moreover, mitigation measures were incorporated in order to reduce the extent of potential project-related impacts related to increased soil erosion (see mitigation measures 4.6-4 – 4.6-6). Therefore, the following analysis focuses only on potential project-related impacts associated with drainage and associated flooding. For more information regarding project-related impacts associated with increased erosion and sedimentation, please refer to **Section 4.6 Geology, Soils, and Mineral Resources.**

As identified above, implementation of the Miravale III Specific Plan would significantly increase impervious surfaces and stormwater runoff thereby resulting in potential impacts related to surface runoff and on- and off-site flooding. In order to ensure that project-induced impacts would not result in significant on- or off-site flooding, the proposed project would be required to provide adequate drainage facilities in order to accommodate a 100-year storm event. As currently proposed, however, the drainage

facilities are inadequately sized to accommodate projected stormwater flows associated with a 100-year storm event. This is considered a potentially significant impact.

In order to accommodate projected stormwater flows, the project would need to provide retention facilities with an estimated storage volume of approximately 230 acre feet (RM Associates, Memorandum to City Public Works Director, dated October 27, 2006). As currently proposed, the project would provide storage facilities with an estimated volume of approximately 148 acre feet, which is considered inadequate to accommodate peak stormwater flows. Inadequately sized facilities could result in off-site flooding and associated impacts, such as property damage, disruption of public services, and similarly related impacts.

As part of the SDMP conducted by RM Associates, several storm water models were developed to evaluate on-site conditions, in addition to off-site conditions on an individual project level, and cumulative level. The results of RM Associates' analysis indicated that the preliminary design proposed as part of the Miravale III Specific Plan does not meet the design requirements delineated in the October 2007 SDMP in regards to flood protection from a 100-year storm event. In addition to providing inadequately sized detention facilities, proposed piping in the major branches were not considered adequately sized to convey stormwater associated with a 100-year storm event. Accordingly, the proposed facilities are considered to be inconsistent with the requirements of the City's adopted SDMP. The applicant's engineer, however, has indicated that RM Associates' analysis does not account for the percolation and disposal of stormwater via native soils. According to the review conducted by RM Associates, the project engineer's design assumptions, however, are not supported by technical evidence and additional geotechnical testing would be necessary to support the project engineer's assumptions. The final location, size, and design of the proposed drainage facilities and associated drainage infrastructure would also be required to be built in conformance with a design-level geotechnical evaluation consistent with the City's standards as evidence of suitable percolation rates at the proposed drainage facilities (refer to Section 3.4 of the Storm Drain Master Plan for design requirements of detention basins).

While the proposed project site is not located within a flood hazard area as delineated by FEMA, localized flooding has been known to occur within the project area and surrounding vicinity. Development of the proposed, which would result in substantial grading, changes in topography, and similarly related activities, has the potential to result in on- and off-site flooding due to changes in existing drainage patterns. In order to ensure that these impacts would be minimized to a less-than-significant level, drainage infrastructure would need to be designed and built in accordance with the City's standards as identified in the SDMP. As currently proposed, the preliminary design is considered inadequate and has the potential to result in additional impacts related to flooding. As a result, project-specific mitigation is warranted in order to ensure that final-design level plans are consistent with adopted City standards. Implementation of the following mitigation measure is necessary in order to ensure that impacts would be reduced to a less-than-significant level. Implementation of the following mitigation measure would not result in any new impact beyond those identified elsewhere in this EIR.

Impact **Construction and operation of the project could potentially result in flooding impacts to off-site properties if adequately sized drainage facilities are not provided within the proposed development.** ***This is a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation measures.***

Mitigation

4.8-3 In order to ensure that project-induced impacts related to changes in the existing drainage patterns on the project site are minimized, the project applicant shall submit design-level improvement

plans for the project's storm drainage collection and retention system. Final design-level plans shall be supported with appropriate soils and hydrologic data in accordance with City standards. All conveyance system and retention basins shall be sized and designed in accordance with applicable City design standards and shall be appropriately sized to accommodate stormwater runoff from a 100-year storm event. Prior to the recordation of any final map, the project applicant shall submit all design-level plans and supporting details to the City of Soledad Director of Public Works for review and approval. The VTM and Specific Plan shall be revised as necessary to reflect final locations of drainage facilities, subject to the review and approval of the City of Soledad.

Groundwater Resources

The proposed project would be provided municipal water from the City of Soledad. As identified in the WSA prepared for the proposed project, the City's sole source of water is provided from groundwater resources within the Salinas Valley Groundwater Basin, which is divided into four subareas, including the East Side, Pressure, Forebay, and Upper Valley. As previously discussed**,** the Salinas Valley Groundwater Basin is currently in a state of overdraft and saltwater intrusion has been documented along the coastal portions of the Basin. The City withdraws groundwater from the unconfined shallow aquifer zone located in the Forebay subarea. Although overdraft conditions have been identified along the coastal portions of the Basin, overdraft conditions have not be documented within the Forebay subarea. As part of the City's UWMP, anticipated demands associated with new developments, including the Miravale III project, were included as part of long-term groundwater projections, and it was determined that adequate groundwater resources are available to accommodate buildout as envisioned in the UWMP. Moreover, as discussed in greater detail in **Section 4.14 Utilities,** development of the proposed project would result in a net decrease in water usage as compared to historical water usage associated with existing agricultural activities. In addition, recycled water is an integral component of the proposed project and recycled water would be used to irrigate the golf course, in addition to front yards and other landscaped areas within the project area thereby reducing demands on groundwater resources. The proposed project is also located within Zone 2C of the Salinas Valley Water Project (SVWP), which is intended to minimize groundwater overdraft within the Salinas Basin, and would therefore benefit from improvements implemented as part of the SVWP. Finally, according to the 2005 UWMP and the City's WSA for the proposed project, sufficient water exists to meet the anticipated demands generated by the proposed project. Projected water supplies are sufficient to meet the projected annual water demands of existing and previously approved uses and the proposed Miravale III project during normal, single dry and multiple dry years" (Water Supply Assessment and Written Verification of Supply) without impairing the City's ability to meet existing and future demands. For a more detailed discussion regarding water supply please refer to **Section 4.14 Utilities.** ***The project would result in less-than-significant impacts associated with groundwater supplies.***

4.9 LAND USE AND PLANNING

Introduction

The following section analyzes the project's consistency with applicable land use plans including the Soledad General Plan and other relevant planning documents. The analysis presented in this section addresses the project in terms of the project's consistency with applicable land use policies and regulations pertaining to the development of the project site. In addition the analysis includes a review of the project's compatibility and compliance with the LAFCO of Monterey County's Sphere of Influence Policies and Criteria and Section 56668 of the Government Code. The following documents, herein incorporated by reference, were reviewed during the preparation of this section:

- City of Soledad General Plan
- City of Soledad General Plan EIR
- Monterey County General Plan
- California Department of Conservation Farmland Mapping and Monitoring Program, 1994-2000
- City of Soledad Zoning Ordinance
- Miravale III Specific Plan and Vesting Tentative Map

Physical impacts resulting from the change in land uses (e.g., biological resources, transportation, public services, etc) are address in their respective sections in this EIR.

Environmental Setting

The 920-acre project site is located on the northern edge of the City of Soledad outside of the city limits within unincorporated lands of Monterey County. The project site contains approximately 610 acres of farmland currently under agricultural production. The remaining acreage is comprised of fallow lands, non-grazed grasslands, or occupied with agricultural accessory uses such as an equipment storage area and two existing residential units. Within the Project Area approximately 107 acres are under Williamson Act contract, but are currently in non-renewal status with cancellation pending in 2016.

The site is currently zoned by the County for farmland and permanent grazing uses. Land uses surrounding the proposed Project Area are varied. Properties to the north and east are located within unincorporated Monterey County and largely comprise of grazing and fallow lands. Properties to the west are also located within Monterey County and are utilized as irrigated row crop land. Properties to the south are located within the City of Soledad and predominantly residential.

Regulatory Environment

Local Agency Formation Commission. The State Cortese-Knox Act, which was revised by the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (AB 2838), grants the Local Agency Formation Commission (LAFCO) the power and duty to review proposals for changes of organization or reorganization, including adjustments and/or expansions to service district boundaries. Among the purposes of the LAFCO review are the organized and efficient extension of governmental services, protection of open space and prime agricultural lands, and consideration of adequate affordable housing. Moreover, as identified in Government Code Section 56375, LAFCO is required to "review and approve or disapprove, with or without amendment, wholly, partially, or conditionally, proposals for changes of organization or reorganization." As identified in the General Plan EIR, a "change of organization" may include any of the following:

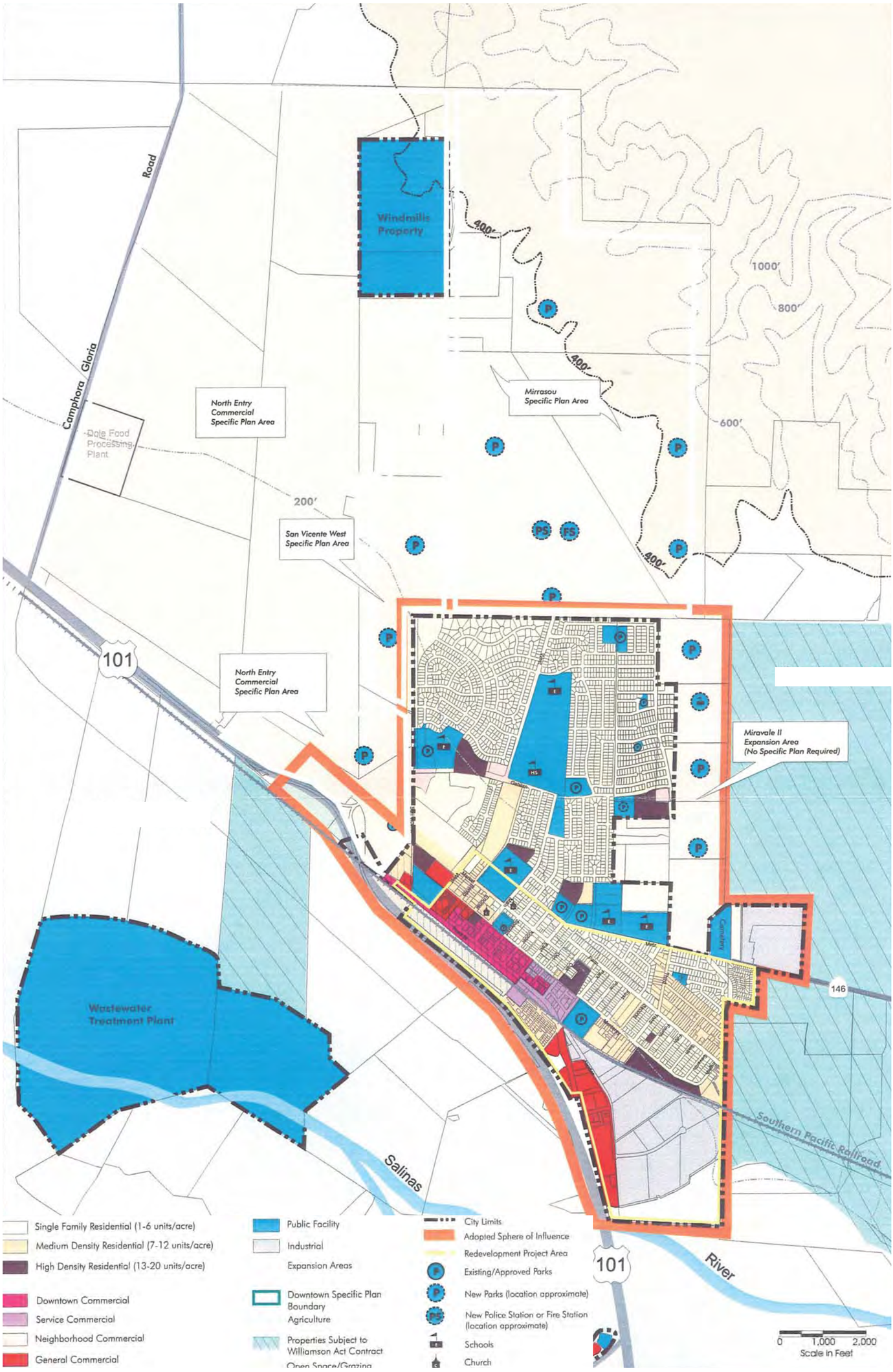
- A city incorporation
- A district formation
- An annexation to, or detachment from, a city or district
- A disincorporation of a city
- A district dissolution
- A consolidation of cities or special districts
- A merger or establishment of a subsidiary district

Development of the proposed project would require that the project site, which is located within unincorporated portions of the County of Monterey, be annexed into the City of Soledad. As the basis for making decisions about organizational changes and annexations, LAFCO must adopt a sphere of influence for each local agency subject to LAFCO regulations. Soledad's current sphere of influence is shown on Figure 4.9-1. The proposed project site is currently located outside of the City's existing sphere of influence. Therefore, future development of the project site would require an amendment to the City's sphere of influence to include the project site. Subsequently, the project area would be annexed into the City. Prior to amending a City's Sphere of Influence, LAFCO must consider and prepare a written determination that adequately addresses the following:

- The present and planned land uses in the area, including agricultural and open space lands;
- The present and probable need for public facilities and services in the area;
- The present capacity of public facilities and the adequacy of public services which the agency provides or is authorized to provide;
- The existence of any social or economic communities of interest in the area if the commission determines they are relevant to the agency;

In July 2006, as required by State law, the LAFCO of Monterey County prepared the Final Municipal Service Review for South/Central Monterey County, which includes the City of Soledad. The service review was prepared consistent with the requirements of Government Code Section 56430, which requires LAFCO to adopt a written statement of determination regarding a number of factors, including, but not limited to, infrastructure needs and deficiencies, population projections, and financing constraints and opportunities. This information has been incorporated into each respective section of this EIR. For more information please refer to **Sections 4.11 Population and Housing, 4.12 Public Services, and 4.14 Utilities.**

Monterey County General Plan. The proposed Miravale III Specific Plan and Vesting Tentative Map are currently located entirely within the unincorporated areas of Monterey County. The Monterey County General Plan, which was adopted in 1982, governs land use within the unincorporated areas of Monterey County, including the project area. While the proposed project site is located within unincorporated Monterey County, the project area is identified within the unincorporated portions of the Soledad General Plan Study Area. As previously identified, the project site, subject to LAFCO review and approval, would be annexed into the City of Soledad. As such, upon annexation, development within the Specific Plan area would be subject to the policies contained within the Soledad General Plan and Miravale III Specific Plan, discussed in further detail below. Additionally, for more information regarding the project's consistency with applicable LAFCO policies please see below.



N

City of Soledad General Plan Land Use Diagram

Figure 4.9-1

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According to the Monterey County General Plan, portions of the project site are designated as Farmland (F) and Permanent Grazing (PG). The Farmland designation is applied to parcels considered prime, of statewide importance, unique, or of local importance, as defined by the US Department of Agriculture. These areas are designated along the fertile floor of the Salinas Valley and generally surround the City of Soledad. The Permanent Grazing designation is applied to areas with less productive soils and greater slopes which may be less desirable for irrigated agriculture but may still support livestock grazing as a viable agricultural enterprise. Within the City's Study Area, Permanent Grazing areas are located above the valley floor in the foothills of the Gabilan Range east of the City. See Figure 4.9-2 for a graphical representation of the Monterey County land use designations affecting the project site. The expansion of urban development would result in the permanent conversion of land designated Farmland to an urban use. Impacts relating to agriculture are discussed in **Section 4-2 Agricultural Resources**.

Central Salinas Valley Area Plan. The Central Salinas Valley Area Plan (CSVAP) is one of eight planning area components of the Monterey County General Plan. The goals, objectives, and policies of the Area Plan focus on the local issues affecting land uses in the Central Salinas Valley while remaining consistent with the County General Plan. The CSVAP describes and designates various land uses within its planning area and identifies appropriate policies and standards which address local land use issues related to transportation and circulation, water supply, wastewater services, resource management, public services, and housing. Moreover, as identified in the CSVAP, the plan seeks to reconcile the demand for growth with the need to preserve and enhance the attractive qualities of the planning area for its residents and the need to ensure the long-term viability of the area's natural resources. Upon annexation, the proposed project would be subject to the policies contained in the City of Soledad General Plan and the Miravale III Specific Plan.

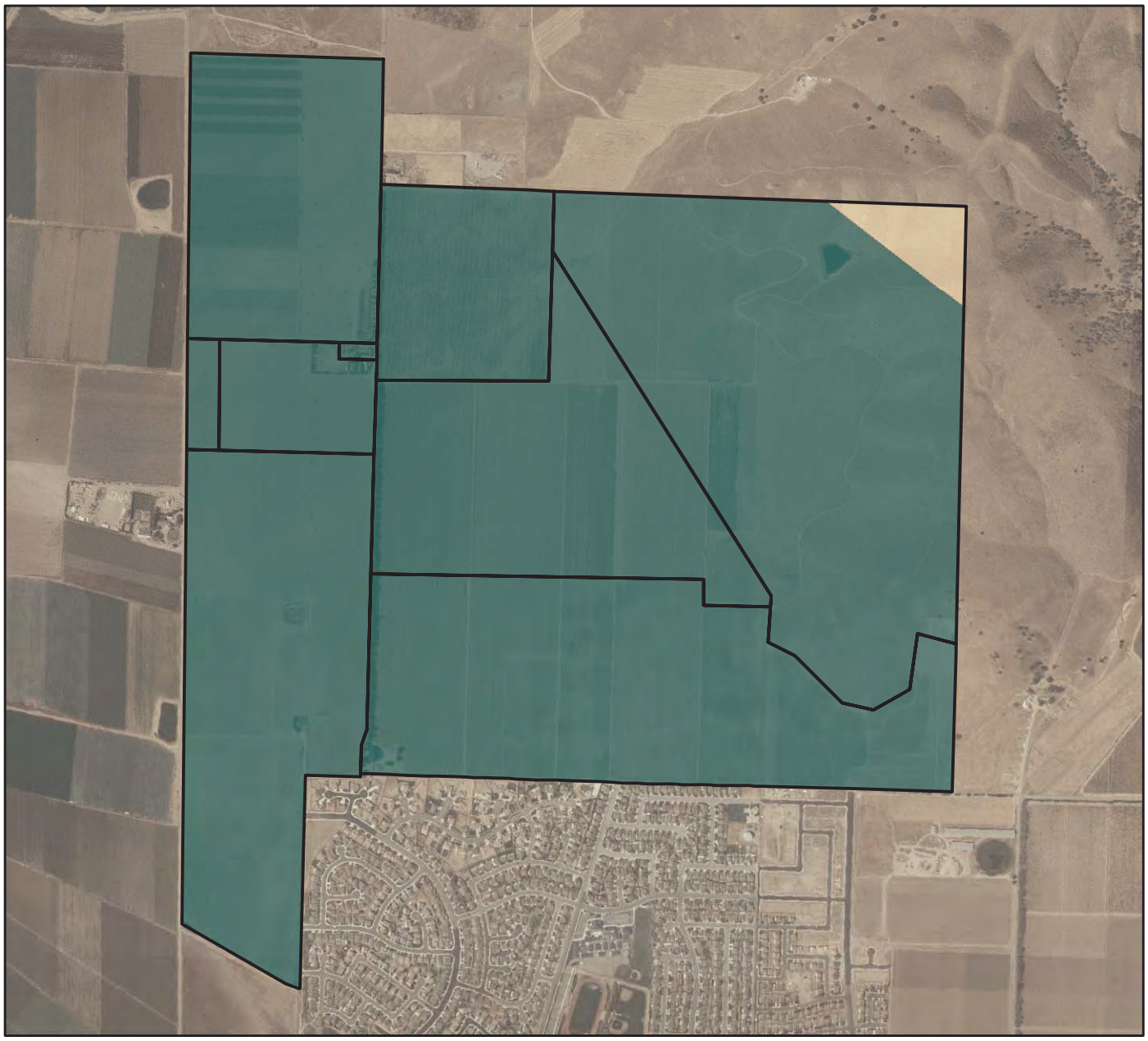
City of Soledad General Plan

Pursuant to California Government Code Section 65300, each city is required to adopt a comprehensive General Plan to guide the physical development of the Community. The City of Soledad General Plan consists of goals, policies, and implementation plans for the physical development of the City. As identified in the General Plan, several areas adjacent to the City, including the project site, have been identified as future expansion areas. These areas are currently located in the unincorporated portions of Monterey County, but would be annexed into the City. Future development within these areas would be subject to the policies contained in the General Plan, including the preparation of a Specific Plan.

According to the City of Soledad General Plan, the majority of the proposed project site is located within all or a portion of three expansion areas, including the Northwest, San Vicente West, and Mirassou expansion areas (See Figure 4.9-1). These areas, as envisioned by the City, are intended to be primarily residential in nature, but would also provide a range of land uses necessary to support a livable community. The City of Soledad General Plan objectives for the expansion area are as follows:

- New residential projects should be designed to integrate with existing neighborhoods to ensure that they do not destroy the established character. Subdivisions in City expansion areas should be designed so that individual, separately developed projects work together to create true neighborhoods with a sense of identity, instead of disjointed or isolated enclaves.

- Subdivision design should emphasize pedestrian connectivity within each project, and to adjacent neighborhoods, and nearby schools and parks. All streets and walkways should be designed to provide safe and pleasant conditions for pedestrians. Streets within neighborhoods should be no wider than needed to accommodate parking and two low-speed



0 0.125 0.25 0.5 Miles

0 0.25 0.5 Kilometers

Project Parcels

County Land Use

Farmlands

Permanent Grazing

N

Monterey County Land Use Map

Figure 4.9-2

travel lanes. Sidewalks should be separated from curbs by parkway strips of at least four feet in width; and the parkways should be planted with canopy street trees.

- Specific plans should provide a range of residential housing types affordable to the widest range of income groups, consistent with the goals, policies and programs of the Housing Element of the General Plan.

- Subdivisions should be designed to provide usable public open spaces in the form of parks, linear bicycle and pedestrian trails, squares, and greens, as appropriate.

The Land Use Consistency Table presented in table 4.9-2 of this EIR provides an analysis of the project's consistency with the applicable land use provisions of the City of Soledad General Plan.

Environmental Impact Report on the Soledad General Plan. The General Plan EIR evaluated potential land use and planning impacts associated with the adoption and implementation of the Soledad General Plan, including future development within the project area. This program-level EIR focused on general impacts associated with implementation of the General Plan, rather than project-specific impacts associated with individual development projects, such as the Miravale III project. Rather, the General Plan discussion predominantly focused on the plan's consistency with LAFCO policies, the Monterey County General Plan and other County land use regulations, Monterey Bay Unified Air Pollution Control District regulations, and the Integrated Solid Waste Management Plan.

City of Soledad Zoning Code

The project is located outside of the City of Soledad and will require a General Plan Amendment, Specific Plan, Zone Change (Pre-Zoning), Architectural Review, Sphere of Influence Amendment, Annexation, Tentative Subdivision Map, and Development Agreements to allow the proposed development. The project includes zoning of the entire project site to Specific Plan. The land uses proposed for the project site are classified in the Specific Plan by zoning type, including Low Density Residential (LDR & LDR-H/M3-R-1), Village Residential (M3-VR), Village Commercial (VC), and Gateway Commercial (GC). Development standards for residential and commercial land uses are provided in the Specific Plan. For regulations not covered in the Specific Plan, the City of Soledad Title 17 would apply.

The proposed project would also be subject to Section 17.41 of the Municipal Code, the Inclusionary Housing Ordinance. The proposed project, as mitigated, meets the requirements of the Inclusionary Housing Ordinance. A more thorough evaluation of project compliance with this section of the Municipal Code is provided in **Section 4.11 Population and Housing.**

City of Soledad Housing Element

The City of Soledad Housing Element is one of seven General Plan Elements mandated by California State Law. Housing element law, enacted in 1969, mandates that local governments adequately plan to meet the existing and projected housing needs of all economic segments of the community. The law acknowledges that, in order for the private market to adequately address housing needs and demand, local governments must adopt land use plans and regulatory systems that provide opportunities for, and do not unduly constrain, housing development. The programs presented in the Housing Element must reflect the commitment of the locality to address a range of housing needs, including those for affordable housing. The Housing Element is intended to provide citizens and public officials with an understanding of the housing needs in the community and set forth an integrated set of policies and programs to attain goals. The City of Soledad Housing Element is consistent with California Government Code Section 65581.

The Housing Element is most affected by development policies contained in the Land Use Element of the General Plan. The Land Use Element establishes the location, type, intensity, and distribution of land uses throughout the city. As such, the Land Use Element sets the upper limit of acreage that will be used for housing. The standards set in the Land Use Element determine the density of residential development and sets the upper limit for housing units that can be built in the City. The Land Use Element also addresses the development of other land uses such as industrial, commercial, and professional offices that create demand for housing in the City. Finally, the Land Use Element identifies areas subject to flooding.

According to the City of Soledad Housing Element, the types of housing and units that should be provided include: multi-family housing, affordable housing, units for large families, and single room occupancy units for migrant farm workers. The City of Soledad's holding capacity for residential units is 6,600 to 8,600 units that could be constructed within the City's General Plan area in accordance with the General Plan. Table 4.9-1 below (from the Specific Plan) shows the proposed housing types that would meet the General Plan objectives

Table 4.9-1
Residential Potential For Miravale III Specific Plan Area
(Miravale III Project Site)

Proposed Zone District	Proposed Housing Type	Residential Acreage (Acres)	Average Density (Units/Acre)	Potential Number of Units
LDR (Low Density Residential) *Duplex/Small Lots*	Single-Family Residential	~ 240.88	6.10	~ 1,470 ~ 116
(VR) Village Residential*	Multi-family Residential & High Density Residential	~ 146.88	18.99**	~ 2,614
	TOTAL	~ **387.76**		~ **4,200**
*Assumes 500 Senior Housing Units **This assumes that parks, roads, and parking required for VR is included in the 17.91 du/ac				

City of Soledad Jobs/Housing Balance

The jobs/housing ratio represents the total number of jobs to residential units in a city or region. This number helps to identify the ability of the community to provide a balance of adequate employment and housing for its current and projected population. A lower jobs/housing ratio indicates fewer jobs for residents, and a high number indicates more jobs than housing.[1] A jobs/housing ratio of between 1 and 1.5 is generally considered balanced. Achieving a jobs/housing balance requires controlling the location, intensity, and nature of jobs and housing. Evaluation of the existing and future jobs/housing balance considers employment potential (existing and projected), housing demand, new housing production, and available transportation systems (particularly alternative transportation).

There are currently 3,200 jobs in Soledad (including jobs in the prison) and about 3,192 dwelling units, for a jobs to housing ratio of about 1.0.[2] A ratio of 1.0 means that there are about the same number of

[1] Though useful as a planning tool, it should be noted that the concept of a jobs/housing balance is limited since it does not consider employment wage levels or housing costs.
[2] This information is based on the analysis contained in the City of Soledad's General Plan and data from the California Department of Finance.

jobs as dwelling units, which would seem at first glance to be a positive sign. However, a straight comparison of dwelling units and jobs ignores a number of important factors such as the presence of more than one wage-earner per household, the wage scale in relation to the cost of local housing, and whether or not the jobs are matched by the skill mix of the local workforce. The prison accounts for jobs in Soledad, but the City does not generate property tax or sales tax revenues from the prison, as it would from private industry

The Land Use Element of the City's General Plan calls for phasing construction of residential development with development that will provide primary wage-earner jobs and adjustment of land use designations and new residential project approvals as needed to promote a reasonable balance between employment-generating land uses and housing. This policy is intended to help maintain a jobs-housing balance and contribute to the overall fiscal health of the City.

Miravale III Specific Plan

According to California Government Code Section 65451, cities and counties are required to prepare a general plan which describes what the city or county (and its residents) desire for their community, both now and in the future. General plans are required to address land use, circulation, housing, conservation, open space, noise, and safety. Specific plans provide comprehensive guidelines for a more defined and localized area within a jurisdiction's boundaries. They offer more specific information and guidance than what is available in a general plan. The Miravale III Specific Plan has been prepared consistent with the specific plan content and requirements identified in California Government Code Section 65451 and the criteria identified in Appendix B of the Soledad General Plan, which identifies standards for Specific Plans.

The purpose of the Miravale Specific Plan is to implement the City of Soledad's General Plan land use and development provisions pertaining to the project site. As previously identified above, the 920-acre project site comprises of all or part of three designated expansions areas, specifically the Northwest, San Vicente West, and Mirassou Expansion Areas. The Specific Plan is intended to serve as a comprehensive planning document for the project area that provides a cohesive vision for the buildout of the site.

Section 2.0 of the Miravale III Specific Plan identifies goals and policies to ensure adequate and compatible land uses within the Plan area. In addition, Section 2.0 also establishes development standards, lighting and signage requirements, landscaping, parking lot and driveway standards, as well as residential fencing guidelines. Key Land Use goals are summarized below.

- As indicated in Land Use Goal LU-1, a primary goal of the Specific Plan is to "develop an integrated and cohesive residential and recreation-oriented community centered around a signature golf course, parks, and hillside open spaces."

- Land Use Goal LU-2 states that the Specific Plan is intended to "provide a variety of housing types and densities within low, medium, and high density neighborhoods to serve a range of housing needs and income levels of the broader Soledad community and region."

- Land Use Goal LU-3 identifies that an objective of the Specific Plan is to "provide a range of land uses and facilities that meet the needs of Plan area residents and are economically beneficial to the City."

- Land Use Goal LU-4 is intended to insure that adequate open space, parks and recreational facilities are provided in order to meet the needs of the Plan area residents that are centrally located and linked throughout the plan area.

- Land Use Goal LU- 5 in intended to locate shopping, employment centers, recreation, and parks within walking distance from the homes that use these plan components.

- Land Use Goal LU-6 promotes land uses that provide employment opportunities for residents for the immediate surrounding communities.

- Land Use Goal LU-7 states that development within the project area should "provide public facilities, infrastructure and services commensurate with new development so as to adequately meet the needs of all development and future residents in the planning area in a manner that is financially self-supporting."

- Land Use Goal LU-8 is intended to encourage the development of "new, attractive residential neighborhoods that are in close proximity to parks, open spaces, schools, and neighborhood commercial."

- Land Use Goal LU-9 is intended to ensure that the Specific Plan "provide an integrated storm drainage and open space system that incorporates best management practices to adequately control storm flooding problems and protect water quality."

- Land Use Goal LU-10 is intended to protect the scenic vistas of the hills above Soledad through careful siting and design standards that minimize grading and visibility of new hillside development.

In addition to establishing specific Land Use policies, the Miravale III Specific Plan also establishes land uses designations and corresponding zoning designations on the project site. More specifically, the proposed site consists of residential, commercial, public/institutional, and open space/parks land uses. These land uses are further classified according to zoning type, including Low Density Residential (LDR & LDR-H/M3-R-1), Village Residential (M3-VR), Village Commercial (VC), and Gateway Commercial (GC). Figure 4.9-3 provides a graphical representation of the proposed zoning designations. For more information regarding allowable uses, please refer to section **3.0 Project Description.** Development standards for each of the zoning designations are contained in Appendix H of this document.

Relevant Project Characteristics

The 920-acre Plan Area is located on the northern edge of the City of Soledad generally between San Vicente Road and Orchard Lane, and is surrounded by agricultural land to the north and west, an existing residential subdivision to the south, and undeveloped foothills of the Gabilan Mountain Range to the east. The project site is contiguous to existing development in Soledad.

The Miravale III Specific Plan proposes to develop a predominantly residential and commercial development on a currently undeveloped site designated for future build-out by the City of Soledad 2005 General Plan. The proposed land uses include approximately 1,470 single-family residential units, 2,230 multi-family residential units, 500 senior housing units, 120 hotel rooms, 250,000 square feet of retail commercial space and an 18-hole golf course. Conceptual plans include a variety of residential types, including apartments, townhouses, and attached homes on small and large lots. The project also proposes three school sites (2 elementary schools and 1 middle school), a fire and police substation, and approximately 255 acres of open space and recreation areas, including parks, playgrounds, a trail system,

and a public golf course. Additionally, project development also includes several amendments to the General Plan, they are summarized below.

Proposed General Plan Amendments

- Revision of General Plan land use diagrams to reflect Specific Plan's proposed planning area boundary and land use designations—i.e., Figures II-4 (Northwest Expansion Area), II-6 (San Vicente West Specific Plan Area), II-7 (Mirassou Specific Plan area) and Figure II-9-Land Use Diagram and Figure VI-1-Parks and Trails.

- Revision of Figure V-2 , Circulation Diagram, to reflect the circulation system proposed by the VTM/Specific Plan contingent upon demonstration that the proposed circulation achieves the same objectives—connectivity/service levels, etc.—as that shown by the Fig. V-2.

- Revision of the land use descriptions and development potential tables for the affected Expansion Areas—Northwest Expansion Area (pp. II-11 –II-12), San Vicente West (p.II-16), and Mirassou Specific Plan area (p. II-18) to reflect the alternative land use concept of the proposed Specific Plan. Revisions may include deletion of the L-shaped block from the Mirassou Specific Plan Expansion area.

- Modification of Table II-1, General Plan Development Potential, to allow an additional 1,050 - 1,550 units—over and above the maximum development currently allowed (number of additional units varies depending upon the extent to which development is reduced in the NW Expansion area)

- Modification of Land Use Policy L-45 to allow exceptions to the restriction on ridgeline development per the proposed Specific Plan/VTM.

- Modification of Land Use Policy L-5 and Policy S-1 and S-23 to allow exceptions to the requirements that adequate public services, including schools, be provided concurrent with new development (or demonstration that the existing middle school and high school—with or without improvements—can accommodate the majority of students generated by the project.)

- Modification of PR-33 to allow exception to the requirement that new development provide its fair share of public park and recreation opportunities (the minimum standard of 3.0 acres per 1000 residents is being met but this includes approximately 8 acres of trails and park connections; further, the General Plan goal is 5 acres of parkland for each 1,000 persons).

- Amendment of Housing Element Program 4-2 to allow exception to requirement that new "development must be organized into functioning neighborhoods that contain very low, low and moderate-income housing that is fully integrated with market-rate single-family housing." Being "next to" as noted in Section 2.5 of the draft Specific Plan doesn't meet the intent of the Housing Element to achieve "fully integrated" mixed income housing types and affordability.



Source: RRM Design Group, 2007

◀N

Miravale III Proposed Zoning Designations

Figure 4.9-3

DENISE DUFFY & ASSOCIATES, INC.

Thresholds of Significance

In accordance with CEQA Guidelines, a project impact would be considered significant if the project would:

- physically divide an established community;
- conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or
- conflict with any applicable habitat conservation plan or natural community conservation plan.

Impacts and Mitigation

Physically Divide an Established Community

No established residential or business communities exist within the project site. The issue of division or disruption of the physical arrangement of an established community typically involves actions that would create physical barriers that would substantially separate portions of a built community, such as construction of a new freeway through an established neighborhood. Construction of the proposed project would not divide or disrupt the physical arrangement of an established community, since there are no established residential neighborhoods or business districts located within the project site and the project is not located between any established communities. **There will be no impact and no mitigation measures are necessary.**

Conflict with Any Applicable Land Use Plan, Policy, or Regulation

The project would result in potential land use impacts associated with increased traffic, air pollution emissions, noise, and visual changes. These impacts are addressed within their respective sections of this EIR. The following section addresses the conformance of the project with applicable land use policies and regulations, as well as policies and regulations intended to avoid or mitigated an adverse environmental impact.[3]

Project development, which includes several General Plan amendments, as discussed above, is generally consistent with applicable land uses policies and regulations, as amended, pertaining to the development of the project site with the exception of several policies primarily relating to biological and aesthetic resources. The project would result in potential conflicts with adopted land uses policies and regulations that are intended to avoid and/or mitigate an adverse environmental impact. As identified in the City of Soledad General Plan EIR prepared by Crawford Multari & Clark Associates, several policies, including, but not limited to, *Policy C/OS-7*, *C/OS-8*, and *C/OS-9*, are intended to avoid and/or mitigate aesthetic, biological, geological, and agricultural impacts associated with buildout of the General Plan.

[3] It is important to note that the General Plan EIR made the distinction between the General Plan's consistency with other planning and regulatory requirements and potential environmental impacts. Moreover, "the fact that a comprehensive amendment of a city's general plan might be inconsistent with goals, policies and programs currently set forth does not in itself constitute a significant impact (Baldwin v. City of Los Angeles (1999) 70 Cal. App 4th 819,842-843)."

Pursuant to CEQA a significant environmental effect must involve an adverse change in the existing physical condition of the site. As proposed, project development would result in substantial changes in the physical environmental such that development has the potential to conflict with adopted policies intended to avoid and/or mitigate an environmental impact. For instance, project development would result in substantial changes in the physical conditions of the project site by allowing development to occur on and/or above the 400 foot elevation contour. As identified in **Section 4.1 Aesthetics** this is considered a significant unavoidable impact. Additionally, project development would also conflict with General Plan policies intended on avoiding and/or mitigating biological impacts. As indicated in **Section 4.4 Biological Resources**, project development would result in significant and unavoidable impacts to a variety of special-status wildlife species that cannot be mitigated to a less-than-significant level. As previously indicated, project development would result in substantial changes to the physical conditions of the project site that were previously restricted to avoid and/or mitigated aesthetic, biological, geological, and agricultural impacts. Although mitigation measures have been identified in previous sections of this EIR, project-related impacts cannot be mitigated to a less-than-significant level. See Table 4.9-2 for more information regarding the project's consistency with applicable General Plan policies and regulations pertaining to the development of the project site.

Impact **Since the proposed project would conflict with several policies intended to avoid and/or mitigate environmental impacts and these impacts cannot be mitigated to a less-than-significant level, this impact is considered significant and unavoidable. Mitigation measures have been identified in this EIR to reduce the extent of project-induced impacts, but these impacts cannot be minimized to a less-than-significant level. *This represents a significant and unavoidable impact.***

The following discussion examines the proposed project's consistency with adopted planning documents and its conformance with land use plans, policies, or regulations. Relevant land use documents, including the City of Soledad General Plan, General Plan EIR, Zoning Code, and Housing Element were reviewed to address the project's consistency with the land use policies and regulations discussed below.

Compatibility with LAFCO Policies

As previously identified above, the proposed Miravale III project site is located within unincorporated Monterey County. The project site, which is located adjacent to existing residential development within the City of Soledad, is identified in the General Plan as a future expansion area. Consistent with Government Code Section 65859, the site was "pre-zoned" to indicate the City's intention to annex the project site. In order to accommodate development of the proposed project, the City's existing Sphere of Influence would need to be amended to include the project site; subsequently the project site would need to be annexed into the City. The City, as required by LAFCO, will request approval to amend the City's Sphere of Influence, as well as, the annexation of the project site. As discussed in **Section 4.12 Public Services** and **4.14 Utilities and Service Systems**, adequate public services are available to accommodate project development. Accordingly, the proposed sphere amendment and annexation will not result in any new or more significant impacts than already analyzed in this EIR. As identified in Appendix I, development of the proposed project would be compatible with applicable LAFCO of Monterey County policies, including the "factors to be considered in review of proposal" for LAFCO, the adopted LAFCO of Monterey County's "Sphere of Influence Policies and Criteria," and the draft Sphere of Influence policies currently under consideration.

Consistency with City of Soledad General Plan

As previously identified, the proposed project includes several General Plan amendments in order to ensure that project development would be consistent with the City's General Plan. The General Plan

amendments include revisions to several land use and circulation diagrams, land use descriptions of the expansion areas, modification of various tables to demonstrate increased project density, policy modifications/revisions, and amendments to the housing element. Although project approval, including the adoption of the identified General Plan amendments would ensure project consistency with a number of General Plan provisions, development of the project would still conflict with several General Plan policies. Table 4.9-2 summarizes the project consistency with applicable City of Soledad land use policies. As identified above, this is considered a significant impact.

Consistency with City of Soledad Zoning Code

A primary function of the Specific Plan is to establish the zoning districts and development standards by which development within the Plan Area would be regulated. To accomplish this, zoning districts consistent with Soledad Municipal Code Title 17 have been utilized. The zoning districts used within the Plan Area are prefaced with M3, to indicate their specificity with the Miravale III Specific Plan. The Specific Plan's zoning districts are regulated by the design guidelines and development standards contained in the Land Use Section of the Specific Plan. The design guidelines and standards established within the Plan have been adopted by ordinance and provide development regulations that control the subdivision and improvement of land within the Plan Area. The zoning designations identified in the Specific Plan are intended to supplement the existing Zoning Code. However, when the proposed zoning conflict with existing city zoning standards, the standards identified in the Specific Plan will supersede in order to implement the proposed land use designations.

Consistency with City of Soledad Jobs/Housing Balance Goals

Evaluation of the existing and future jobs/housing balance considers employment potential (existing and projected), housing demand, new housing production, and available transportation systems. New residential development will be phased so that the number of new units constructed annually is consistent with the jobs-housing balance provision of the City's General Plan.

The Specific Plan provides a balance of jobs and housing that is consistent with the Housing Element. The Specific Plan includes an industrial, office, and commercial component, which is expected to generate approximately 550 jobs. The housing component of the Specific Plan includes the development of 4,200 dwelling units. This equates to a jobs to housing ratio of approximately .13 new jobs for each new home within the Plan area. The City of Soledad anticipates as many as 22,000 jobs and about 14,000 total dwelling units at buildout of the General Plan, which includes the Miravale III site. Should this development potential be realized, the City's ratio of jobs to dwelling units would be about 1.57, or considerably more jobs than dwelling units. The proposed project has substantially larger residential portion compared to employment generating commercial portion. The ultimate development of the City as envisioned under the General Plan, including development of the proposed project, would provide for a favorable jobs/housing balance.

Consistency with City of Soledad Housing Element

Development of the proposed project, as mitigated, would be consistent with the City of Soledad Housing Element. The Specific Plan provides for a mix of housing types, densities, and lot sizes that are consistent with goals of the Housing Element. In order to ensure consistency with the City of Soledad Housing Element, project-specific mitigation measures were identified in **Section 4.11 Population and Housing**. Mitigation was identified by the City of Soledad as necessary to ensure that affordable housing units are integrated into future development within the project site. For a more detailed discussion please refer to **Section 4.11 Population and Housing.**

Consistency with City Facility Planning Documents

As part of long-range planning, the City has undertaken the preparation of several long-term facility plans, including, but not limited to, the Long-Term Wastewater Management Plan, Stormwater Management Plan, Urban Water Management Plan, and the Water Master Plan. These plans have been prepared in order to ensure that the City has adequate services to accommodate development as envisioned under the 2005 Soledad General Plan. In order to ensure consistency with these documents the City of Soledad Director of Public Works has identified that the following mitigation is necessary.

Impact **As proposed, the Miravale III Specific Plan has the potential to conflict with adopted planning documents pertaining to public services.** ***This would represent a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation measure.***

Mitigation

4.9-1 In order to maintain project consistency with adopted City-wide facility planning documents, the project applicant/developer shall revise Section 5.0 of the Specific Plan to incorporate revisions identified by the City of Soledad Director of Public Works, prior to project approval. The following policy revisions have been identified as necessary. Revisions are underlined.

Revise Wastewater Policy 2 to read as follows, "Design and construct the wastewater treatment system for Miravale III in accordance with applicable requirements of the Soledad Urban Water Management Plan, Long-Term Wastewater Management Plan, and the Recycle Water Service Ordinance No. 645.

Revise Water Policy 1 to read as follows, "Design and construct the water supply and distribution system for Miravale III that expands upon and is integrated with the City's water distribution system and which meets the needs of future project developments of the Specific Plan area consistent with the Urban Water Management Plan and the City's 2005 Water Master Plan."

Revise Stormwater Policy 5 to read as follows, "Design and construct a stormwater collection and retention system that adequate retains peak storm flows onsite, avoids aggravating or causing offsite downstream from the project site, and ensures separation of stormwater drainage from Recycled water generated within the Plan area and that is consistent with the 2007 Stormwater Management Plan, Stormwater Master Plan, and Ordinance No. 617"

Add a new policy to the Section 5.2.2 Law Enforcement and Fire Protection/Medical Services. The new policy shall read as follows:

"9. Police and fire services will be maintained with funding from a public safety benefit assessment district or similar district."

Conflict With Any Applicable Habitat or Natural Community Conservation Plan

There are no habitat or natural community conservation plans that apply to the project site. Therefore, the project would not conflict with any applicable Habitat or Natural Community Conservation Plans. An expanded discussion of this issue is provided in **Section 4.4, Biological Resources**. **The project would not adversely impact any habitat or natural community conservation plans.**

Table 4.9-2
Project Consistency with Relevant City of Soledad General Plan Land Use Policies

Policy Number	Policy Summary	Applicable Specific Plan Policy Number	Consistency
GENERAL PLAN			
Land Use			
L-2	Further annexations to the City may occur when a) a substantial portion of the development capacity within the existing city limits has been developed, b) a substantial public benefit can be realized through the annexation, such as the provision of public open space, additional parkland, or the protection of scenic vistas, or natural resources, or c) a special type of use is proposed that cannot be practically accommodated in the existing city limits, and d) the project can be found to provide a financial benefit to the City or to be fiscally neutral. The Planning Commission shall review the merits of a request for annexation based on these criteria, and make a recommendation to the City Council.		The General Plan anticipated future growth in the Miravale III plan area (Mirassou plan area, Northwest and San Vicente West Plan Expansion Areas). The Plan is providing the City with affordable housing, a golf course, parks, schools, police and fire sites, and trails. The fiscal impact on the City will be reviewed as part of the City Council consideration of the project. The Planning Commission (PC) shall review the merits of a request for annexation based on these criteria, and make a recommendation to the City Council to determine consistency. Mitigation measures under the Cumulative and Population and Housing Sections of this EIR also incorporate this policy. **With PC determination on above, the project is consistent with this provision.**
L-3	A specific plan shall be required for all annexations and development of properties designated Expansion Area. Specific plans shall be prepared in accordance with the standards provided in Appendix B.		The City will review the Miravale III Specific Plan to ensure compliance with policy and that the Specific Plan has been prepared in accordance with the standards provided in Appendix B of the Soledad General Plan. **The project is consistent with this provision.**
L-4	The City shall promote patterns of development that allow for the efficient and timely extension of infrastructure and services.		Public services will be provided as described in Section 5 of the Specific Plan and in the Public Services and Utilities section of this EIR. **The project is consistent with this provision.**
L-5	New development shall not be allowed unless adequate public services are available to serve such new development, or that can be provided at the time of development.		**Project consistent.** Development of the proposed project would be required to provide adequate public services in order to accommodate project development. As identified in **Section 4.12 Public Services,** the proposed project, as mitigated, would provide sufficient services to meet project demands.
L-6	New development shall pay its fair share of providing additional public services needed to accommodate such development.		**Project consistent.** As identified in **Section 4.12 Public Services** and **Section 4.14 Utilities,** development of the proposed project would be required to submit payment of its fair share of public services needed to accommodate project development. Moreover, the developer will prepare a Development Agreement and Plan for Services.
L-7	Master plans for sewer, water, roads, drainage and other public improvements shall be required for new development on large undeveloped parcels and may be included in the specific plan required by policy L-3, and as determined by the City.		Section 5.0 of the Specific Plan provides conceptual public utility plans. Section 4.0 provides a conceptual circulation plan. Final plans will be submitted upon completion of the vesting tentative map. **The project is consistent with this provision.**

Table 4.9-2
Project Consistency with Relevant City of Soledad General Plan Land Use Policies

Policy Number	Policy Summary	Applicable Specific Plan Policy Number	Consistency
L-8	The City shall permit only low-intensity land uses in areas where natural conditions such as floodplains and steep hillsides are likely to pose a threat to public safety or produce excessive maintenance costs.		The Specific Plan proposes Low Density Residential in hillside locations, subject to the Hillside Development Standards found in Appendix A of the Specific Plan. **The project is consistent with this provision.**
Land Use - Jobs/Housing Balance			
L-10	The City shall monitor development and adjust land use designations and new residential project approvals as needed to promote a reasonable balance between employment-generating land uses and housing.		The proposed project will provide 4,200 residential units and 550 jobs as part of project development. This equates to a jobs housing ratio of .13 new jobs for each new home within the plan area, considered a reasonable balance for the proposed project considering development potential associated with General Plan buildout. **The project is consistent with this provision.**
L-11	The City shall encourage large residential development projects to be phased or timed with development that will provide primary wage-earner jobs.		Miravale III proposes commercial and office job opportunities in Phases 1 and 2, as well as new schools, police and fire facilities in phases 1-4 to provide sources of employment within the project area. **The project is consistent with this provision.**
Land Use - Residential Development			
L-13	The City shall require that residential projects be designed to reflect and consider the relationship of the project to surrounding uses. Residential densities and lot patterns will be determined by these and other factors. As a result, the maximum density specified by the General Plan land use designations or zoning for a given parcel of land may not be realized.		The project Specific Plan proposes a maximum 4,200 units within the Plan Area including a number of PUD areas that have not been fully designed. Residential siting and design of the residential portion of the project reflect awareness of surrounding land uses as residential and non residential uses abut similar uses in the surrounding project vicinity. **The project is consistent with this provision.**
L-14	The maximum allowable residential density for new residential subdivisions or development projects shall be computed based on the gross area of the lot before dedications for highway setbacks, parks, streets, or other requirements.		The maximum residential density for the proposed project is 30 units per acre. Dedications for parks, streets, etc. have been considered and are part of the proposed project. Moreover, additional project-specific mitigation measures have been identified to ensure that adequate facilities are provided as part of project development. **The project, as mitigated, is consistent with this provision.**
L-15	The City shall require new subdivided lots to be adequate in size and shape for the range of primary and accessory uses designated for the area.		The proposed project provides lots of varying size and shape for the range of primary and accessory uses per new zoning designations as provided in the Specific Plan and Zoning Code. **The project is consistent with this provision.**
L-16	The pace of new residential development should be such that new residents can be absorbed into the fabric of the town and existing residents are not overwhelmed by newcomers. This can be accomplished in part by requiring phasing of larger residential projects and by ensuring that adequate infrastructure and public		The project will be constructed in 4 phases and includes a Plan for Services. As identified elsewhere in this EIR, mitigation measures have been adopted to ensure project development provides adequate public services in accordance with City requirements. In addition, General Plan policies, as well as,

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Policy Number	Policy Summary	Applicable Specific Plan Policy Number	Consistency
	improvements are in place concurrently, or in advance of new development.		policies identified in the Specific Plan, ensure that adequate facilities will be in place concurrently with project development. **The project, as mitigated, is consistent with this provision.**
L-17	Major new residential development is appropriate in the areas on the east and north sides of the developed portions of the City.		The Miravale III Specific Plan area lies north of the developed portions of the City in an area planned for expansion. **The project is consistent with this provision.**
L-19	In general, higher densities of residential development shall be located in areas served by the widest range of urban services, and shall be preferred along collector and arterial streets, within walking distance of schools, city parks and transit stops.		The Plan provides 6 Village Residential neighborhoods. Villages 1, 2, 4, and 5 are within a ¼ mile walking distance to schools, commercial uses, parks, and transit. Village 3 is adjacent to commercial, transit, and parks. The sixth village (Village 6) is within walking distance to open space, parks, and transit. All villages are located adjacent to collector roads. **The project, as mitigated, is consistent with this provision.**
L-20	The approval of new residential subdivisions shall incorporate provisions to ensure that an appropriate amount of new multi-family development is constructed concurrently, or in advance of, new single family residences.		Multi-family development is planned in Phases 1-4. The development agreement will provide policies that require the multi-family development be constructed concurrently, or in advance of, new single family residences. **The project, as mitigated, is consistent with this provision.**
Land Use - Commercial Development			
L-21	New commercial development shall be encouraged in Soledad near the freeway interchanges with Highway 101. Limited new neighborhood commercial development will be allowed within areas designated *Expansion Area*, and/or at specified nodes to provide for the everyday needs of the surrounding residential neighborhoods.		The two commercial centers are sited in the southwest corner of the project site, nearest San Vicente road and the highway 101 freeway interchange. In addition, limited neighborhood serving commercial designations are also included as part of the Specific Plan, which is located within a designated expansion area. **The project is consistent with this provision.**
L-23	In general, new retail commercial development should provide a wider range of shopping opportunities for the community.		Two commercial centers; the Gateway Commercial Center, and the Village Commercial Center are planned to contain a variety of shopping opportunities for the community. **The project is consistent with this provision.**
L-24	New commercial development shall be designed to encourage safe and efficient pedestrian circulation within and between commercial sites and nearby residential neighborhoods.		The two commercial sites within the Plan Area contain pedestrian designated walkways through parking lots, wider sidewalks around the building and parcel perimeters, and pedestrian connections to adjacent residential neighborhoods. **The project is consistent with this provision.**
L-25	New commercial development shall be designed to minimize the visibility of parking areas from public roadways.	Section 2.16 – Guideline 1	Design level drawings are not available at this stage. Parking lots visible from public streets should be adequately screened from vehicle view through one or more of the following: rolling earth berms, low screen walls, landscaping, changes in elevation, or combinations of above. In addition, mitigation

Table 4.9-2
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Policy Number	Policy Summary	Applicable Specific Plan Policy Number	Consistency
			measures have been incorporated into this EIR to ensure that aesthetic/visual impacts are reduced to the maximum extent feasible. **The future project design must comply with this provision.**
L-26	The visitor-serving sector of the local economy shall be maintained and expanded. New motels/hotels shall especially be encouraged in areas within walking distance of the downtown. Visitors to the nearby Pinnacles National Monument offers another potential market for visitor-serving land uses.		The project includes an opportunity site for future hotel adjacent to the golf course to expand the visitor-serving sector of the City's economy. **The project is consistent with this provision.**
Land Use - Public-Quasi-Public/Office Development			
L-32	The City shall designate adequate, appropriately located land for the development of City and County facilities and offices, schools, medical facilities, water facilities, and public safety facilities.		**Project consistent.** The proposed project, as mitigated, will provide adequate public facilities, including parks, open space, schools, and a police and fire station.
L-34	When considering plans for large-scale development, the City shall designate adequate, appropriately-located land for the development of quasi-public land uses, such as, hospitals, churches, private schools, cemeteries, and utility uses.		The Plan Area provides a church opportunity site as well as areas for infrastructure/utilities on site. **The project is consistent with this provision.**
L-35	The City shall promote the clustering of public and quasi-public uses such as schools and parks, libraries, child care facilities, and community activity centers. Joint use of public facilities shall be promoted, and agreements for sharing costs and operational responsibilities among public service providers shall be encouraged.		Joint use of the three public schools and adjacent parks is intended to be implemented in the development agreement. Policies have been incorporated into the Specific Plan to promote the joint use of public facilities. **The project is consistent with this provision.**
L-36	The City shall encourage efforts to locate adequate emergency services and other types of health care facilities in Soledad to meet the present and future needs of its residents.		The plan provides a potential site for a joint police/fire station. **The project is consistent with this provision.**
Land Use- Expansion Areas/Specific Plan Areas			
L-42	The City shall use Community Design Guidelines as a decision-making tool to ensure that new development incorporates the qualities and character desired by Soledad residents.		Design Guidelines have been provided for each urban land use within the Miravale III Specific Plan. **The project is consistent with this provision.**
L-43	Specific plans prepared for major expansion areas shall incorporate the standards described in Appendix B – Standards for Specific Plans. In general: a. New residential projects should be designed to integrate with existing neighborhoods to ensure that they do not destroy the established character. Subdivisions in City expansion areas should be designed so that individual, separately developed projects work together to create true neighborhoods with a sense of identity, instead of disjointed or isolated enclaves. b. Subdivision design should emphasize pedestrian connectivity		a. Similar residential product types along the southern portion of the Plan Area and the extension of West Street and San Vicente Road creates neighborhoods that are integrated and linked with existing residential development b. Pedestrian connectivity has been emphasized with the provision of 65 pedestrian park connections and neighborhood connections (refer to section 4.2.7 of the Specific Plan). Local streets have been designed per City direction. Sidewalks are separated from curbs by landscaped parkway strips in all instances except for Hillside Roads which do not require a

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Policy Number	Policy Summary	Applicable Specific Plan Policy Number	Consistency
	within each project, and to adjacent neighborhoods, and nearby schools and parks. All streets and walkways should be designed to provide safe and pleasant conditions for pedestrians. Streets within neighborhoods should be no wider than needed to accommodate parking and two low-speed travel lanes. Sidewalks should be separated from curbs by parkway strips of at least four feet in width; and the parkways should be planted with canopy street trees. c. Specific plans should provide a range of residential housing types affordable to the widest range of income groups, consistent with the goals, policies and programs of the Housing Element of the General Plan. d. Subdivisions should be designed to provide usable public open spaces in the form of parks, linear bicycle and pedestrian trails, squares, and greens, as appropriate.		parkway strip. c. A variety of housing types are planned including single family detached, attached duplex, townhouses, and for rent apartments. The provision of affordable housing is consistent with the Housing Element of the City's General Plan. d. Development of the proposed project entails the provision of public open space, parklands, and a semi-private golf course. In addition, mitigation measures have been identified in order to ensure the proposed project provides adequate public facilities to meet project generated demands. **The project, as mitigated, is consistent with this provision.**
L-44	The City shall require that all new development be designed to complement the scale and character of existing development. Views of the surrounding hills and mountains shall be preserved through such means as design review, sign control, undergrounding of utilities, grading and tree removal standards.		**Project inconsistent.** Development of the proposed project, while physically transforming a previously undeveloped project site into a new development, would complement the existing residential character of Soledad. As identified in **Section 4.1 Aesthetics,** development of the proposed project would result in a significant unavoidable impact to a scenic vista. Although measures are incorporated to insure that these impacts would be minimized to the extent feasible, project development would substantially alter the existing visual character of the Hillside portion of the project site. Existing views of the project site as perceived from adjacent uses would consistent predominately of new urban features, such as roads, structures, and other factors. The proposed project, which includes several General Plan amendments pertaining to development within the Hillside would still degrade the existing character of the surrounding hills and mountains. Although these amendments would revise a number of policies prohibiting development above the 400' elevation contour, project impacts would still substantially alter the existing character of these resources.
L-45	The City shall require all new development to be planned and designed in a manner which employs design, construction and maintenance techniques that: a. Avoids locating structures along ridgelines and steep slopes. b. Incorporates design and screening measures to minimize the visibility of structures and graded areas. c. Maintains the character and visual quality of the area.		**Project inconsistent.** As previously identified in **Section 4.1 Aesthetics,** project development would substantially alter the existing visual character of the project site such that project impacts would be significant and unavoidable. Moreover, project development, including development above the 400' elevation contour, would also result in a significant unavoidable impact to a scenic vista. Although the proposed

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Project Consistency with Relevant City of Soledad General Plan Land Use Policies

Policy Number	Policy Summary	Applicable Specific Plan Policy Number	Consistency
			project includes several amendments to the General Plan to address potential inconsistencies with development within the Hillside portion of the site, project development would nevertheless conflict with the provisions of this policy as these impacts were identified as significant and unavoidable.
L-46	New development on hillsides shall employ design, construction and maintenance techniques that: a. Ensure that development near or on portions of hillsides do not cause or worsen natural hazards such as erosion, sedimentation, or fire hazards. b. Minimize risk to life and property from slope failure, landslides and flooding. c. Include erosion and sediment control measures including temporary vegetation sufficient to stabilize disturbed areas. d. Maintain the character and visual quality of the hillside.	4.1.2.12	**Project inconsistent.** Although the proposed Specific Plan contains numerous policies and guidelines to minimize erosion and potential geological hazards within the Hillside portion of the project site, development within the project area would result in a significant and unavoidable impact to the existing visual quality. As a result, the proposed project is considered inconsistent with this policy.
L-47	The City may, where appropriate, require new development to provide pedestrian amenities along public sidewalks, such as seating and 'pocket parks'.		Public amenities such as benches will be provided around commercial centers and parks. Pocket parks may be included in the ultimate design of the Village Residential areas. **The project is consistent with this provision.**
L-49	The form, scale and character of new residential development shall emulate the best characteristics of the existing residential neighborhoods, such as single and two-story dwellings with adequate off-street parking, landscaped front yards with trees, and sidewalks.		Figure 2-6 of the Specific Plan summarizes the number of floors for each product type. Local residential streets are required to provide street trees separated by a 5' wide planting strip. Single family units are also required to provide adequate off street parking and landscaped front yards. **The project is consistent with this provision.**
L-50	Multi-family development shall include usable open space for each dwelling and shall be designed to be integrated with the surrounding neighborhood.		**Project consistent.** Multi-family development is proposed within six areas designated as Village Residential. Currently, no formal plans have been submitted for development within these areas. Mitigation measures have been incorporated to ensure that adequate open space and improved parkland are provided within the Village Residential areas consistent with the intent of this policy. Moreover, individual applications for multi-family development within the Miravale III Specific Plan area would be required to adhere to the requirements of this policy.
L-51	All exterior lighting in new development shall be located and designed so as to avoid shining directly onto nearby residential properties, and shall minimize offsite glare. Proponents of commercial or industrial projects on property adjacent to residential areas shall submit a lighting plan to the City for review and approval; said plan shall incorporate features such as		City shall review lighting plan prior to approval of commercial projects. Design guidelines and mitigations have also addressed light glare issues. **The project, as mitigated, is consistent with this provision.**

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Policy Number	Policy Summary	Applicable Specific Plan Policy Number	Consistency
	low level, downward-directed exterior lights to achieve the intent of this policy.		
L-52	Historically or architecturally significant buildings shall not be demolished or substantially changed in outward appearance in a way that diminishes the historical character, unless doing so is necessary to remove a threat to health and safety and other means to avoid the threat are infeasible.		**Project consistent.** As identified in **Section 4.5 Cultural Resources,** the project applicant will be required to relocate the historically significant Lorentzen house in order to ensure project impacts are less-than-significant. Moreover, the relocation of this building would not diminish the historical character of the house.
Housing			
H-1	The City of Soledad shall promote the expansion of its LAFCO Sphere of Influence and annexation of additional land consistent with its General Plan Land Use Element to accommodate long-term demand for residential development.		The project site includes portions of the San Vicente West, Mirrasou, and Northwest Expansion Areas. These expansion areas combine for residential capacity of 9,012 units on 1,488 acres. **The project is consistent with this provision.**
H-3	The City of Soledad shall require new residential areas to contain a mix of housing types targeted to very low, low, moderate, and above moderate households in approximately the proportion that each of these income categories represent in the AMBAG Fair Share Housing Allocation.		Approximately 340 very low, 318 low, 569 moderate, and 1,047 workforce housing units are proposed within the Plan Area. The City Council (CC) shall review the merits of a development agreement (DA) which will demonstrate project's consistency with the city's affordable housing requirements per the housing element and inclusionary housing ordinance, Mitigation measures under the Population and Housing Sections of this EIR also incorporate this policy. **With PC determination on above, the project is consistent with this provision.**
Housing – Removal of Development Constraints			
H-9	The City of Soledad shall ensure that city site improvement standards, development review procedures, and development fees do not unreasonably constrain the development, conservation, and rehabilitation of housing.		Housing development shall comply with the Specific Plan and all applicable housing policies and will not unreasonably constrain the development, conservation, and rehabilitation of housing. **The project is consistent with this provision.**
H-10	The City of Soledad shall ensure the availability of adequate public facilities for the expected housing need of the city.		The developer will prepare a Development Agreement and Plan for Services. As identified elsewhere in this EIR, the proposed project, as mitigated, would be adequately served by public facilities. **The project, as mitigated, is consistent with this provision.**
Housing – Energy Conservation			
H-11	The City of Soledad shall support and initiate, where feasible, public and private energy conservation programs which will reduce the energy needs of housing in Soledad and so increase housing affordability.	5.1.4.10	The Specific Plan contains goals to maximize energy conservation. In addition, mitigation measures have been incorporated into this EIR to promote the use of solar energy devise and encourage solar orientation of residential and buildings building to reduce the use of fossil fuels. **The project, as mitigated, is consistent with this provision.**

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Policy Number	Policy Summary	Applicable Specific Plan Policy Number	Consistency
Circulation – Traffic Management			
C-1	Level of Service "D" or better shall generally be maintained on all streets and intersections. Lower levels of service may be accepted during peak times or as a temporary condition, if improvements to address the problem are programmed to be developed. To identify potential impacts of new development on traffic service levels, the City shall require the preparation of traffic impact analyses generally at the sole expense of the developer for developments determined to be large enough to have potentially significant traffic impacts.		According to Hexagon's 2006 Traffic Impact Analysis Report, a Level of Service "D" or better shall be maintained upon project build-out. Mitigation measures have been identified in this EIR to ensure that all project-related transportation impacts would be reduced to the greatest extent feasible. **The project, as mitigated, is consistent with this provision.**
C-2	Streets shall be dedicated, widened, extended and constructed in accordance with City standards. Dedication and improvements of full rights-of-way shall not be required in existing developed areas where the City determines such improvements are infeasible or undesirable. New development shall be responsible for improving a minimum one-half street along the outer-boundaries of each subdivision along subdivision property where street extensions are identified. Other deviations from these standards shall be permitted upon a determination by the City Engineer that safe and adequate public access and circulation are preserved by such deviations.		This policy will be implemented by the pending Vesting Tentative Map and the Developer Agreement. **The project is consistent with this provision.**
C-5	The street system in residential neighborhoods shall provide safe and logical connections to the existing street pattern, and connectivity to the range of complementary land uses within neighborhoods (housing, schools, parks, neighborhood shopping, etc.). The use of multiple collector streets shall be favored over the use of arterials in new residential subdivisions.		Connections to the existing street pattern have been provided via the proposed extension of West Street and San Vicente Road. New circulation alignments within the Plan Area have been designed to effectively connect residential neighborhoods to commercial and recreational areas. Sidewalks adjacent to commercial centers and schools will be wider to accommodate higher levels of pedestrian traffic. **The project is consistent with this provision.**
C-8	The City shall manage the street network so that the standards presented in policies C-1 and C-12. are not exceeded. The City will require new development to mitigate the traffic impacts it causes, or the City will limit development along streets where congestion levels are unacceptable		The project, as proposed, provides mitigation for traffic impacts including payment of traffic impact fees to maintain Level of Service "D" or better upon project build-out. **The project, as mitigated, is consistent with this provision.**
C-9	New local streets shall be developed consistent with the goals, policies and programs of the Land Use Element of the General Plan.		Local streets within the Miravale III Plan Area have been designed per City standards. **The project is consistent with this provision.**
C-10	Facilities that promote the use of alternate modes of transportation, including bicycle lanes, pedestrian and hiking trails, park-and-ride lots and facilities for public transit shall be incorporated into new development, and shall be encouraged in		Over 27 miles of trails, sidewalks, and bicycle lanes will be provided to promote alternative modes of transportation. Three transit stops are also planned. **The project is consistent with this provision.**

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Policy Number	Policy Summary	Applicable Specific Plan Policy Number	Consistency
	existing development.		
C-13	The City shall ensure through a combination of traffic impact fees and other funding mechanisms that new development pays its fair share of the costs of circulation improvements required by such development.		Site improvements will be constructed by the developer. Off-site improvements will be addressed through the EIR mitigation requirements. **The project, as mitigated, is consistent with this provision.**
C-14	The City shall prohibit the development of private streets in new residential projects, unless approved on a project specific basis where circumstances support such a use and the streets are privately maintained.		No private streets are proposed. **The project is consistent with this provision.**
C-15	New development shall continue the existing street pattern, where logical.		This has been accomplished with the planned extension of West Street and San Vicente Road. **The project is consistent with this provision.**
C-16	Roundabouts will be considered as an alternative to traditional intersection controls.		One roundabout is proposed at project entry. **The project is consistent with this provision.**
Circulation – Parking			
C-17	The City shall require the provision of adequate off-street parking in conjunction with all new development. Parking shall be located convenient to new development and shall be easily accessible from the street. The adequacy and appropriateness of parking requirements in the Zoning Ordinance shall be periodically evaluated.		Parking requirements are consistent with 17.36.020 of the City of Soledad's Municipal Code. All future applications for development within the Specific Plan area will be required to adhere to the parking requirements identified in Section 17.36.020 per the Specific Plan. **The project is consistent with this provision.**
Circulation – Bicycle Circulation			
C-21	Bicycle routes shall emphasize paths separate from vehicle traffic to the maximum extent feasible, but shall also include bicycle lanes within public streets.		Bike lanes are proposed on collector streets. **The project is consistent with this provision.**
C-22	Bike lanes and paths shall be designed and maintained to improve bicycling safety, and convenience, and encourage people to use bicycles to commute to work or school.		Over 4 miles of Class II bike lanes are planned. Bicycles will also be permitted on the Hillside Trail and Linear Park Trail. **The project is consistent with this provision.**
C-25	New development shall provide bike lanes and paths, secure bicycle storage and parking facilities.	Section 2.11 policy j	**Project consistent.** As proposed, the project includes over 4 miles of Class II bike lanes within the project area. Future development within the commercial and village residential areas will be required to provide additional bike facilities, including storage racks, consistent with this requirement
Circulation – Pedestrian Circulation			
C-27	The City shall complete a continuous network of sidewalks and separated pedestrian paths connecting housing areas with major activity centers and with trails leading into City and county open space areas.		Over 15 miles of separated sidewalks are planned. These sidewalks will connect housing areas to major activity centers such as parks, open space, commercial, and civic uses. **The project is consistent with this provision.**
C-28	New commercial development and development in Specific Plan areas shall provide sidewalks and pedestrian paths consistent with applicable State, federal and local plans, programs and		Figure 2-7 of the Miravale III Specific Plan illustrates the location of pedestrian amenities such as sidewalks and pedestrian paths. The Gateway Commercial Center is intended

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Policy Number	Policy Summary	Applicable Specific Plan Policy Number	Consistency
	standards.		to provide the same. **The project is consistent with this provision.**
Parks & Recreation – Parks			
PR-1	The City will acquire future park and recreation land and facilities by: a. Requiring park dedications from future residential subdivisions at the rate of one acre per 1,000 population anticipated in the project; b. Requiring payment of a park impact fee, or requiring the dedication of land and improvements in-lieu of fees, from all new development; c. Cooperating with Monterey County to acquire land for a new regional park in the Soledad planning area; d. Acquiring parkland near existing or potential public park or recreation sites, or near quasi- public or private sites that have a good opportunity for a joint use agreement. Acquired parkland should be contiguous to proposed or existing park and recreation facilities or provide a logical connection. e. Pursuing joint use agreements with public and private schools, other public government agencies, private park and recreation providers, and institutions with potential parkland to make existing or proposed park and recreation facilities available to the community on an extended basis.	4.1.2 policy 3	**The project, as mitigated, is consistent with this policy.** The proposed project, consistent with the requirements of this policy, provides park and recreational areas within the project area. a. As currently proposed, the project includes approximately 45.60 acres of parkland, including 24.27 acres of parkland to be provided in conjunction with the development of the multi-family Village Residential areas. In addition, the proposed project also includes an approximately 159 acre golf course, in addition, to approximately 62 acres of open space. b. The proposed project will be required to pay park impact fees, in addition to the dedication of land. c. Not applicable. d. Parks and recreational facilities are located throughout the proposed development and several facilities are planned adjacent to educational facilities. e. A joint use agreement may be established between the City and the School District for shared use of school recreational facilities.
Parks & Recreation – Trails			
PR-10	The City should provide a pedestrian network within the City Limits. The system should: a. Accommodate pedestrians and bicycles. b. Connect residential neighborhoods with: 1) Soledad's downtown, 2) schools, 3) City park and recreation facilities, and 4) regional trails.		The Specific Plan provides both bike lanes and pedestrian sidewalks. All parks within the Plan Area have pedestrian accesses logically located in key areas. Signage may be provided throughout the Plan area to guide bicyclist toward trails, parks and other points of interest. **The project is consistent with this provision.**
Parks & Recreation – Acquisition & Development			
PR-16	Parks shall be designed to be compatible with the neighborhoods in which they are located, and shall provide security and privacy to adjoining properties. Where necessary, buffers shall be provided between park and recreation lands and adjacent development to provide privacy and a physical separation between uses.[4]		Village 1 Park and Z Street Park are planned to be joint use facilities with the adjacent elementary schools. These parks will be lit to ensure security. I Loop Park and Crest St. Park are surrounded by residences which will provide "eyes on the park." Lighting will be provided at parks. **The project is consistent with this provision.**

[4] Buffers may include setbacks, landscaping, fencing, and/or dramatic breaks or changes in topography.

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Policy Number	Policy Summary	Applicable Specific Plan Policy Number	Consistency
Parks & Recreation – Management			
PR-24	New development shall be required to add to proposed or existing park and recreation projects where legally feasible. Public or private development shall provide, as appropriate and legally feasible: 1) a buffer between proposed development and existing park, recreation and/or open space parcels to minimize conflicts between development and existing facilities; and 2) gates, fences, or other deterrents when such facilities are deemed necessary to discourage prohibited or non-compatible uses from entering park, recreation or open space lands.	4.1.2 policy 12	The plan area is not adjacent to existing park and recreation facilities. Where new parks are proposed fencing will be provided as a component of the residential development. A 100' foot buffer will be provided between structures and the hillside open space area. **The project is consistent with this provision.**
PR-25	New development shall not adversely impact adjacent park, recreation or open space lands.	4.1.2 policy 12	There are no park or recreation lands adjacent to the Plan Area. A 100' foot buffer will be provided between structures and the hillside open space area. **The project is consistent with this provision.**
Parks & Recreation – Funding			
PR-33	New development shall be required where legally feasible to provide its fair share of public park and recreation opportunities. New development within the City shall be required to provide park and recreation lands or facilities consistent with this Element. Conditions placed on new development shall be reasonable and consistent with the nature and extent of such development plans. The City shall require the dedication and improvement of park land even in circumstances where the total cost to improve such parkland exceeds the value of the corresponding development impact fee.	4.1.2 policy 2	**Project consistent.** As identified in **Section 4.12 Public Services,** the proposed project, as mitigated, will provide approximately 45.60 acres of improved parkland consistent with existing General Plan policies, as well as provisions contained in the Miravale III Specific Plan. In addition, the proposed project also includes approximately 62 acres of open space and a 159 acre golf course.
Public Services & Facilities – Services & Facilities			
S-1	The City shall ensure through the development review process that adequate public facilities and services are available to serve new development. New development shall not be allowed until adequate public services and facilities to serve such development are provided. Where existing facilities are inadequate, new development may only be approved when the following conditions are met: a. The developer and/or City can demonstrate that all necessary public facilities will be adequately financed and installed in time (through fees or other means); and b. The facilities improvements are consistent with applicable facility plans approved by the City or other agencies in which the City is a participant.		Improvement s for the project infrastructure must be in compliance with the adopted City wide Urban Water Management Plan, Water Master Plan, project Water Supply Assessment and Written Verification of Supply, Long-Term Wastewater Management Plan, and other facility related planning documents. As proposed and with mitigation, adequate public services are available to serve the proposed project. Final design of project infrastructure will be required prior to the recordation of the final map and the City of Soledad will be responsible for insuring that project infrastructure is consistent with applicable City Standards. **The project is consistent with this provision.**
S-2	The City shall plan for the expansion of needed water and sewer infrastructure including, but not limited to, the expansion of		Adequate public services are available to meet project generated demands assuming project mitigation. Final

Table 4.9-2
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	water production, storage and distribution facilities, the expansion of wastewater collection and treatment capacity, and storm drainage facility expansion.		infrastructure plans will be reviewed by the City of Soledad prior to the recordation of the final map to insure that infrastructure sizing adheres to City requirements. For more information regarding project specifics, please refer to **Section 4.14 Utilities and Service Systems.**
S-3	Public facilities, such as wells, pumps, tanks, and yards shall be located and designed so that noise, light, odors, and appearances do not adversely affect nearby land uses.		**Project consistent.** Future development of project infrastructure, including wells, pumps, tanks, and similar public facilities would be required to be built in conformance with this policy.
Public Services & Facilities – Funding			
S-4	Where new development requires the construction of new public facilities, the new development shall pay its fair share of the construction. Where necessary, the City shall require the dedication of land within newly developing areas for public facilities		**Project consistent.** The proposed project, as mitigated, would provide adequate public facilities in order to accommodate project demand. More specifically, a site for fire and police facilities has been integrated into the plan area. School sites have also been integrated and coordinated with the School District. Park sites, open space trails, roads, and the golf course will be developed as a part of this plan.
S-5	The City shall require that new development pay its fair share of the cost of all existing facilities it uses based on the demand for these facilities attributable to the new development; exceptions may be made when new development provides alternative sources of funding or equipment to offset any shortfall in revenues.		**Project consistent.** Development of the proposed project would be required to submit payment of all impact fees consistent with current adopted City provision. Fore more information, please refer to **Section 4.12 Public Services** and **Section 4.14 Utilities and Service Systems.**
Public Services & Facilities – Water			
S-8	The City shall promote the efficient use of water and reduced water demand by: a. Requiring water-conserving design and equipment in new construction; b. Encouraging water-conserving landscaping and other conservation measures; c. Encouraging the retrofitting of existing fixtures with water-conserving fixtures.		**Project consistent.** All project wastewater would be treated at a wastewater treatment plant located on the southwest corner of the project area. Recycled wastewater would subsequently be used for irrigation purposes, including open spaces area, front yards, and golf course areas. Final infrastructure plans will be reviewed by the City of Soledad prior to the recordation of the final map to insure that infrastructure sizing adheres to City requirements. For more information regarding project specifics, please refer to **Section 4.14 Utilities and Service Systems.**
S-10	The City will manage the increase in water demand from new development to help insure groundwater resources are not overdrafted. The City will work with Monterey County and public and private water entities to plan for the efficient, long term management of groundwater resources.		**Project consistent.** As identified in the City Water Master Plan and the Urban Water Management Plan adequate water is available to serve the proposed development. Moreover, the WSA further identifies that adequate water exists to serve the proposed development
S-11	Gravity flow for sewer and water service shall be employed wherever feasible.		**Project consistent.** Gravity flow for sewer and water services will be employed where feasible. Final design of project

Table 4.9-2
Project Consistency with Relevant City of Soledad General Plan Land Use Policies

Policy Number	Policy Summary	Applicable Specific Plan Policy Number	Consistency
			infrastructure will be required prior to the recordation of the final map and will be subject to the review and approval of the City.
Public Services & Facilities – Drainage			
S-14	The City shall strive to improve the quality of urban stormwater runoff and quality of groundwater recharge through the use of appropriate mitigation measures including, but not limited to, infiltration/sedimentation basins, oil/grit separators, and other management practices, including storm water retention.		**Project consistent.** As identified in **Section 4. Hydrology and Water Quality** mitigation measures have been incorporated to ensure that project-impacts would be reduced to a less-than-significant level. These measures have been incorporated to ensure that project development is consistent with the City's adopted Storm Drain Master Plan.
S-15	The City shall require new development to adequately mitigate increases in stormwater peak flows and/or volume. Mitigation measures shall take into consideration impacts on adjoining properties and impacts on groundwater recharge related to existing and proposed water wells.		**Project consistent.** As identified in **Section 4. Hydrology and Water Quality** mitigation measures have been incorporated to ensure that project-impacts would be reduced to a less-than-significant level. These measures have been incorporated to ensure that project development is consistent with the City's adopted Storm Drain Master Plan.
S-16	The City shall encourage project designs that minimize drainage concentrations and impervious coverage and maintain, to the extent feasible, natural site drainage conditions. Drainage onto adjacent properties shall be restricted to pre-project levels minus any runoff from the area to be developed.		**Project consistent.** As identified in **Section 4.8 Hydrology and Water Quality** project-specific mitigation measures have been incorporated to ensure that project development is consistent with the City's adopted Storm Drain Master Plan and other relevant facility planning documents.
S-17	The City shall require projects to allocate land as necessary for the purpose of retaining flows and/or for the incorporation of mitigation measures for water quality and supply impacts related to urban runoff.		**Project consistent.** Mitigation measures have been incorporated to address water quality and urban runoff concerns. For more information please refer to **Section 4.8 Hydrology and Water Quality.**
S-19	Engineered drainage plans shall be required for all development projects. Engineered drainage plans shall incorporate a collection and treatment system for stormwater runoff consistent with applicable federal and State laws.		**Project consistent.** As a standard condition of approval the project applicant will be required to submit an engineered drainage plan consistent with the City's adopted Stormwater Drainage Master Plan.
Public Services & Facilities – Schools			
S-20	The City will work cooperatively with the Soledad Unified School District to monitor housing, population and school enrollment trends and in planning for future school facility needs. The City shall assist the District in locating new school sites.		**Project consistent.** The City of Soledad is currently working with the School District to identify a future high school site within the City of Soledad. For more information, please see **Section 4.12 Public Services**.
S-21	The siting of new schools shall be coordinated with the City's Circulation Element to ensure that traffic conflicts are avoided, the safety of students is addressed and roadway function is not reduced, including provisions for off street student drop-off/pick up.		The two elementary schools have been located along collector and local streets in order to provide safe student drop-off/pick up locations. All new school facilities provided in conjunction with the proposed project would be required to adhere to this policy. **The project is consistent with this provision.**
S-22	The City will work closely with the school district to secure		**Project consistent.** As identified in **Section 4.12 Public**

Table 4.9-2
Project Consistency with Relevant City of Soledad General Plan Land Use Policies

Policy Number	Policy Summary	Applicable Specific Plan Policy Number	Consistency
	adequate funding for new school facilities, and where legally feasible, shall provide a mechanism which requires development projects to mitigate the cost of providing school facilities needed to serve such development, consistent with relevant provisions of State law.		**Services** the project applicant/developer will be required to submit payment of a school impact fee for each type of development within the project area.
S-23	The City, to the extent feasible, shall ensure that new school facilities are constructed and operating prior to the occupation of residences which the schools are intended to serve.		**The project, as mitigated, is consistent with this policy.** The City is currently in the process of coordinating with the School District regarding the timing of new school facilities. In addition, all new facilities provided as part of the proposed project would be required to adhere to this policy.
Public Services & Facilities – Solid Waste			
S-27	The City shall require that all new development complies with applicable provisions of the Monterey County Integrated Waste Management Plan.		**Project consistent.** As requested by the Salinas Valley Solid Waste Authority, project-specific mitigation measures have been identified in order to insure that construction generated waste is recycled to the greatest extent possible. For more information, please see **Section 4.14 Utilities and Service Systems.**
Public Services & Facilities – Police Protection			
S-29	The City shall strive to achieve and maintain a ratio of a minimum of 1 police officer per 1,000 residents.		**Project consistent.** In order to maintain the desired ratio of police officers, development of the proposed project will be required to fund a fully operational police sub-station within the project site through the payment of development impact fees. Please see **Section 4.12 Public Services** for further information.
S-30	The City shall strive to achieve and maintain emergency response time to a maximum of 5 minutes for police emergencies.		**Project consistent.** As identified above, the proposed project includes a site for the future location of a police substation, which the applicant/developer will be responsible for funding. The construction of a substation in this location will insure that response times will be within this timeframe.
S-32	The City shall require new development to pay its fair share of providing or funding facilities that, at a minimum, achieve and maintain the above police protection standards.		**Project consistent.** As identified in **Section 4.12 Public Services** the project applicant/developer will be required to submit payment of all applicable fees in order to maintain the police protection standards enumerated above.
Public Services & Facilities – Fire Protection			
S-36	The City shall strive to achieve and maintain an emergency response time of 5 minutes or less for fire emergencies over 90% of the City.		**Project consistent.** The proposed project, as mitigated, contains measures to in order that adequate public facilities are provided to ensure that emergency response time are within the established target range. More specifically, project development would result in the construction of both a police and fire substation within the project area.
S-37	The City shall require new development to pay its fair share of		**Project consistent.** The project applicant/developer will be

Table 4.9-2
Project Consistency with Relevant City of Soledad General Plan Land Use Policies

Policy Number	Policy Summary	Applicable Specific Plan Policy Number	Consistency
	providing or funding facilities that, at a minimum, achieve and maintain the fire protection standards identified in Policies S-35 and S-36.		required to submit payment of fees in order to insure that facilities are adequately funded. For more information, please refer to **Section 4.12 Public Services.**
S-38	The City shall ensure that all proposed developments are reviewed for compliance with fire safety standards per the Uniform Fire Code and other City standards and ordinances.		**Project consistent.** All new development will be reviewed by the City for consistency with fire safety standards contained in the Uniform Building Code, as well as, other City standards and ordinances.
S-39	New non-residential development and non-residential additions of over 100 square feet of habitable space shall provide fire sprinklers in accordance with City standards, and as determined by the Fire Marshal. New residential development shall be provided with fire sprinklers unless the developer provides studies that prove the standard identified in Policy S-35 is not negatively affected.		**Project consistent.** Future buildout of the project site will be required to adhere to these standards.
Conservation / Open Space – Agricultural Resources			
C/OS-1	The City shall discourage "leapfrog" development and development in peninsulas extending into agricultural lands to avoid adverse effects on agricultural operations.		The project site is located directly north of existing city limits and the proposed project will not adversely affect surrounding agricultural operations. Project site includes Williamson Act property which will remain in open space/ag use per the contract until cancellation date (approximately 18 years). **The project is consistent with this provision.**
C/OS-2	The City shall retain the agricultural land use designation on lands within its planning area until the land is needed for urban development.		**Project consistent.** The project site is currently located within the County of Monterey and is zoned for agricultural use. The subject site, however, is designated within the City of Soledad General Plan as a future expansion area to accommodate projected growth as envisioned under the 2005 General Plan. Upon annexation, the subject site would be appropriately zoned for commercial and residential uses consistent with the Miravale III Specific Plan.
C/OS-3	The City shall ensure that new development and public infrastructure projects do not encourage expansion of urban uses outside the general plan area into areas designated *Agriculture* by the Monterey County General Plan.		The project site is located within expansion areas as designated in the Land Use Diagram of the General Plan. Williamson Act property will remain in open space/ag use per the contract until cancellation date. **The project is consistent with this provision.**
C/OS-4	The City shall support the agricultural economy by encouraging the location of agricultural support industries in the City, establishing and promoting marketing of local farm products, and providing its regional fair share of adequate housing to meet the needs of agricultural labor.		The proposed project will provide 2,276 units of affordable and workforce housing which will exceed City's regional fair share of adequate housing units (799 units) to meet the needs of agricultural labor. **The project is consistent with this provision.**
C/OS-5	The City shall require a right-to-farm condition to all future subdivision maps adjacent to farmlands.		**Project consistent.** The proposed project, as mitigated, contains right-to-farm measures. Please see **Section 4.2**

Table 4.9-2
Project Consistency with Relevant City of Soledad General Plan Land Use Policies

Policy Number	Policy Summary	Applicable Specific Plan Policy Number	Consistency
			Agricultural Resources for further discussion.
C/OS-6	The City shall require development within or adjacent to designated agricultural areas to minimize conflicts with adjacent agricultural uses.		A 100' wide linear parkway buffer has been provided on the western border of the Plan Area. **The project is consistent with this provision.**
Conservation / Open Space – Scenic Resources			
C/OS-7	The City shall require new public and private development to protect scenic resources by: a. Prohibiting structures along ridgelines, steep slopes (above the 400 foot elevation contour), or in other highly visible locations unless no practical alternative is available, or such a location is necessary to protect public health and safety; b. Utilizing natural landforms and vegetation for screening structures, access roads, building foundations, and cut and fill slopes; c. Requiring landscaping which provides a landscape transition between developed areas and adjacent open space or undeveloped areas; and is compatible with the scenic resource being protected; d. Incorporating sound Soil Conservation Service practices and minimizing land alterations. Land alterations shall be minimized by: keeping cuts and fills to a minimum; limiting grading to the smallest practical area of land; limiting land exposure to the shortest practical amount of time; replanting graded areas to insure establishment of plant cover before the next rainy season; and creating grading contours that blend with the natural contours on site or look like contours that would naturally occur; e. Designing roads, parking, and utilities to minimize visual impacts. If possible, utilities shall be underground. Roadways and parking shall fit the natural terrain; and f. Designing projects to fit the site's scale and character. Structures shall be designed and located so: they do not silhouette against ridgelines, or hilltops; roof lines and vertical architectural features blend with and do not detract from the natural background or ridge outline; residential density and massing is decreased with increased elevation where it would mar the scenic quality of the scenic resource; they fit the natural terrain, and they utilize building materials, colors, and textures that blend with the natural landscape and avoid the creation of high-contrast	4.1.2 policy 12	**Project inconsistent.** Although the proposed project includes several General Plan amendments to facilitate project development, the project, as currently proposed, would result in significant and unavoidable visual impacts due to development above the 400' elevation contour. Therefore, the proposed project is considered to be inconsistent with the provisions of this policy. It is important to note, however, that despite the inconsistencies, the Miravale III Specific Plan identifies specific measures and guidelines for development within areas of visual sensitivity.

Table 4.9-2
Project Consistency with Relevant City of Soledad General Plan Land Use Policies

Policy Number	Policy Summary	Applicable Specific Plan Policy Number	Consistency
	situations.		
Conservation / Open Space – Hillside Protection			
C/OS-8	The City shall require public or private development to: a. The City shall designate hillside areas above the 400 foot elevation contour as *Open Space/Grazing, Public Facility* (parkland) or *Agricultur*e. b. Locate primary structures, accessory structures, paving, and grading at the base of a hill (generally that are below the 400 foot contour or 15 percent slope) unless: (1) no practicable alternative is available, (2) the location on a greater slope or at a greater elevation provides more aesthetic quality, or (3) the location is necessary to protect public health and safety. c. Utilize design, construction, and maintenance techniques that: (1) preserve and enhance the hillsides; (2) ensure that development near or on portions of a hill do not cause, or make worse natural hazards (such as erosion, sedimentation, fire, or water quality concerns); (3) include erosion and sediment control practices including temporary vegetation sufficient to stabilize disturbed areas; (4) minimize risk to life and property from slope failure, landslides, and flooding; (5) maintain the character and visual quality of the adjacent hillside. d. Incorporate recreation and public access on or near hillsides consistent with this Element.		**Project inconsistent.** As identified above, the project, as proposed, consists of several General Plan amendments pertaining to the development above the 400' elevation contour. Despite the incorporation of General Plan amendments to facilitate development within the project area, the proposed project would nevertheless conflict with this policy as significant and unavoidable visual impacts would occur due to project development. Moreover, as discussed previously, this policy was adopted in order to mitigate potential adverse impacts associated with buildout of the General Plan.
C/OS-9	The City shall support the preservation and enhancement of natural land forms, natural vegetation, and natural resources to the maximum extent feasible.		**Project Consistent.** The Hillside Development Standards Section II in Appendix A of the Miravale III Specific Plan states that the project development will: • Maintain the existing open rural character, • Be in harmony with the natural setting, • Conserve land forms and other features of the natural landscape, • Preserve wildlife habitat and movement corridors, • Protect and preserve viewsheds of the mountains, and • Promote the establishment of native trees and shrubs.
Conservation / Open Space – Plant, Animal & Related Habitat Protection			
C/OS-10	The City shall support State and federal laws and policies to preserve populations of rare, threatened, and endangered species		**Project consistent.** As identified in **Section 4.14 Biological Resources** the project will provide mitigation to limit adverse

Table 4.9-2
Project Consistency with Relevant City of Soledad General Plan Land Use Policies

Policy Number	Policy Summary	Applicable Specific Plan Policy Number	Consistency
	by ensuring development does not adversely affect such species in a significant way or by fully mitigating adverse effects.		impacts to rare, threatened, and endangered species. In addition, project development will be required to adhere to all applicable State and Federal requirements pertaining to biological resources within the project area. Compliance with existing laws, in addition to the incorporation of project specific mitigation insures that the proposed project is consistent with this provision.
C/OS-11	The City shall require that significant natural, open space, and cultural resources be identified in advance of development and incorporated into site-specific development project design to the extent feasible.		**The project, as mitigated, is consistent with this policy.** In addition to providing 45.60 acres of improved parkland, the proposed project also entails 62 acres of natural open space. The project, as mitigated, also includes provisions to insure that impacts to historically significant structures within the project area are minimized to the extent feasible. For more information, please refer to **Section 45 Cultural Resources** and **Section 4.12 Public Services.**
C/OS-12	The City shall require developers to use native and compatible non-native species, especially drought-tolerant species, to the extent possible in fulfilling landscaping requirements imposed as conditions of project approvals or project mitigations.		Plant palettes will be developed in conjunction with the vesting tentative map. **The project is consistent with this provision.**
Conservation / Open Space – Air Quality			
C/OS-13	The City will encourage the improvement of air quality in Soledad and in the region by implementing the measures described in the Monterey County Air Quality Management Plan. Such measures include, but are not limited to, measures to reduce dependence on the automobile and encourage the use of alternate modes of transportation such as buses, bicycles and walking.		The Specific Plan Area contributes to improving air quality by providing non motorized amenities such as pedestrian and bicycle trails, bicycle lanes, and transit stops. **The project is consistent with this provision.**
C/OS-14	The City shall, to the extent feasible, separate sensitive land uses from significant sources of air pollution.		No significant sources of air pollution are proposed as part of this project or in the project vicinity. **The project is consistent with this provision.**
C/OS-16	The City shall promote and encourage the use of alternate modes of transportation by incorporating public transit, bicycle, and pedestrian modes in City transportation planning and by requiring new development to provide adequate pedestrian and bikeway facilities.		The Miravale III Specific Plan provides 3 transit stops, 4 + miles of bicycle lanes, and over 20 miles of pedestrian amenities such as separated sidewalks and trails. **The project is consistent with this provision.**
Conservation / Open Space – Tree Preservation/Landscaping			
C/OS-17	When considering the approval of activities that result in the removal of mature trees, the following factors shall be considered: a. The size, age, health and species of tree(s) to be removed. b. Whether or not the removal of the tree(s) is necessary for the reasonable development and use of the site.		**The project, as mitigated, is consistent with this policy.** As identified in **Section 4.4 Biological Resources** development of the proposed project would result in the removal of existing mature trees in order to accommodate project development. Mitigation has been incorporated in order to ensure consistency with this policy, in addition to minimizing potential impacts

Table 4.9-2
Project Consistency with Relevant City of Soledad General Plan Land Use Policies

Policy Number	Policy Summary	Applicable Specific Plan Policy Number	Consistency
	c. Whether the tree(s) to be removed is (are) a native or introduced species.		associated with tree removal.
C/OS-18	The City shall institute and promote a vigorous program of tree planting in new development areas and in older portions of the City to increase the number and density of tree cover.	See Section 2.13 Landscaping.	**Project consistent.** Final landscaping plans will be required for development within the specific plan area. As identified in the Specific Plan, numerous policies have been identified regarding the use of street trees and accent trees.
C/OS-19	When mature trees are removed to accommodate new development, they shall be replaced at a ratio of at least two new trees for every one tree removed, or such additional number and size of trees as considered appropriate by the reviewing body at the time of approval of such development.	See Section 2.13 Landscaping.	**The project, as mitigated, is consistent with this policy.** Development of the proposed project would result in the removal of several mature trees. As identified in **Section 4.4 Biological Resources,** the project applicant/developer will be responsible for preparing a Forest Management Plan that identifies replanting ratios consistent with the requires identified in this policy.
C/OS-21	Landscaping plans for new development incorporate water conservation methods and shall employ native varieties of plants that are drought tolerant.	See Section 2.13 Landscaping.	**Project consistent.** To the extent feasible all front yards and landscaped areas will be irrigated using recycled water.
Conservation / Open Space – Archaeological & Cultural Resources			
C/OS-23	If development of a site uncovers cultural resources, the recommendations of Appendix K of the Guidelines for Implementation of the California Environmental Quality Act (Public Resources Code Section 15000 et seq.) shall be followed for identification, documentation, and preservation of the resource.		This policy is included as mitigation during project construction. **The project is consistent with this provision.**
C/OS-24	The City shall document and record data or information relevant to prehistoric and historic cultural resources which may be impacted by proposed development. The accumulation of such data shall act as a tool to assist decision-makers in determinations of the potential development effects to prehistoric and historical resources located within the City.		A single historic structure is located on the site and mitigation measures are identified in the EIR. The historic structure will be relocated from its current location. **The project, as mitigated, is consistent with this provision.**
Conservation / Open Space – Mineral Resources			
C/OS-26	The City and County shall discourage urban uses adjacent to State-designated regional resource deposits if such uses would be incompatible with mining operations, or would restrict future extraction of significant mineral resources.		The project site is not located adjacent to State-designated regional resource deposits. **The project is consistent with this provision.**
Safety – Flood Hazards			
HZ-2	The City shall prohibit the construction of facilities essential for emergencies and large public assembly in the 100-year floodplain, unless the structure and access to the structure are free from flood inundation.		**Project consistent.** No emergency facilities are located within the 100-year floodplain.
HZ-4	The City shall manage flood prone areas consistent with the		**Project consistent.** The proposed project is not located with an

Table 4.9-2
Project Consistency with Relevant City of Soledad General Plan Land Use Policies

Policy Number	Policy Summary	Applicable Specific Plan Policy Number	Consistency
	requirements of the Federal Emergency Management Agency (FEMA) and the Monterey County Water Resources Agency.		area that is prone to flooding as defined by the Federal Emergency Management Agency of the Monterey County Water Resources Agency.
Safety – Seismic Safety			
HZ-5	All new development shall satisfy the applicable requirements of the Uniform Building Code.		**Project consistent.** All new development within the Specific Plan will be required to adhere to all applicable requirements contained in the Uniform Building Code.
HZ-6	The City shall require the preparation of a soils engineering and geologic-seismic analysis prior to permitting development in areas prone to geologic or seismic hazards (ie, groundshaking, landslides, liquefaction, expansive soils).		**The project, as mitigated, is consistent with this policy.** A soils engineering and geological/seismic analysis was prepared for the project. Specific geological and geotechnical constraints were identified in these reports and incorporated as part of this EIR. In addition, mitigation has been incorporated requiring that final-design level plans be developed in accordance with individual project-specific geotechnical evaluations.
HZ-7	The City shall limit development in areas of steep or unstable slopes to minimize hazards by landslides or liquefaction.		**Project consistent.** The proposed project includes development above the 400 foot elevation contour. Due to the underlying geological unit, these areas have been identified as not being prone to liquefaction and/or landslide potential. Nevertheless, the proposed project includes specific Hillside Development Standards to insure that development within these areas would not be prone to geological hazards.
HZ-8	In landslide hazard areas, the City shall prohibit alteration of land in a manner that could increase the hazard, including concentration of water through drainage or irrigation systems; removal of vegetative cover; and steepening of slopes and undercutting the bases of slopes.		**Project consistent.** See response above.
Safety – Emergency Preparedness			
HZ-9	New development shall provide fire flow, emergency access and hydrants consistent with Fire Department requirements	Policy 5.2 - 7	All new development shall provide fire flow, emergency access and hydrants consistent with Fire Department Requirements. . **The project is consistent with this provision.**
HZ-12	The City will encourage site planning which helps reduce crime potential through appropriate lighting, access, ease of surveillance, and other features such as alarms and security systems as may be required by the police department.	Policy 5.2 - 8	All new development shall help to reduce crime potential through appropriate lighting, access, ease of surveillance, and other features such as alarms and security systems as may be required by the police department. . **The project is consistent with this provision.**
Noise			
N-1	The City shall not allow development of new noise-sensitive land uses where existing or ambient noise levels exceed those shown on Figure X-1, as measured immediately within the property line of the new development, unless effective noise mitigation measures have been incorporated into the development design to		As identified is **Section 4.10 Noise**, effective noise mitigation measures have been incorporated to achieve standards in Table 4.10-1 of the City's Noise Element.

Table 4.9-2
Project Consistency with Relevant City of Soledad General Plan Land Use Policies

Policy Number	Policy Summary	Applicable Specific Plan Policy Number	Consistency
	achieve the standards set by Figure X-1.		
N-2	Where non-residential land uses are likely to generate noise levels exceeding those shown on Figure X-1 on adjacent or nearby existing or planned noise-sensitive uses, the City shall require preparation of an acoustical analysis as part of the environmental review process so that noise mitigation may be included in the project design.		**The project, as mitigated, is consistent with this policy.** An acoustical analysis has been prepared by Illingworth & Rodkin, Inc. and the mitigation measures identified in their report have been incorporated into this EIR. See **Section 4.10 Noise** for more information.
N-3	New residential development shall comply with State Noise Insulation Standards.		**Project consistent.** Development of the proposed project will be required to comply with all applicable State Noise Insulation Standards.
N-4	New commercial and industrial development shall incorporate design elements to minimize the noise impact when residential neighborhoods are nearby.		A conceptual site plan has been prepared for Village 4. Noise reduction techniques include providing parking lots interior to the center and the provision of a landscaped sound wall where adjacent to residential uses. The City should consider limiting delivery times to mid-day and restrict truck idling times.
N-5	Where noise mitigation measures are required to achieve the standards described in Figure X-2, the emphasis of such measures shall be placed on site planning and project design. The use of noise barriers shall be considered as a means of achieving the noise standards only after all other practical design-related mitigation measures have been integrated into the project.		**Project consistent.** As identified in **Section 4.10 Noise** mitigation measures have been identified in order to insure project-related noise impacts are reduced to the extent feasible. While some noise sensitive land uses would be expose to noise in excess of applicable standards, mitigation measures emphasize site planning and project design principles, including the use of building materials to minimize noise related impacts.

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4.10 NOISE

Introduction

A *Environmental Noise Assessment* was prepared for this project by Illingworth & Rodkin, Inc. (March 14, 2007), and the following discussion incorporated that analysis. This report (herein referred to as "Noise Assessment") is included as Technical Appendix T-7 in Volume II of the DEIR. This section assesses the potential noise impacts from project operations (long-term) and construction equipment (short-term) on nearby sensitive receptors.

Setting

Noise is defined as unwanted or objectionable sound. State and local regulations and ordinances define objectionable noise levels and identify land use compatibility standards. Sound is comprised of three variables: magnitude, frequency, and duration. The magnitude of variations in air pressure associated with sound waves results in the quality commonly referred to as "loudness." Variations in loudness are measured on the decibel (dB) scale. The dB scale is logarithmic; noise at zero decibels is barely audible, while noise at 120-140 decibels is painful and may cause hearing damage.

The second characteristic of sound is frequency. The human ear responds to sounds whose frequencies are in the range from 20 hertz (HZ) to 20,000 HZ. Within the audible range, subjective response to noise varies. People generally find that they are more sensitive to higher pitched sound than lower pitched sounds. Noise is typically characterized using the A-weighted sound level or dBA. This scale gives greater weight to the frequencies that the human ear is most sensitive. The third characteristic of noise is duration. Annoyance due to noise is often associated with how long noise persists.

For evaluating noise over extended periods, the "Day-Night Noise Level" scale (L_{dn}) and the "Community Noise Equivalent Level" (CNEL) are used to express the average sound level (L_{eq}) during a 24-hour period. The L_{eq} can be thought of as the steady sound level that, in a stated period of time, would contain the same acoustic energy as the time-varying sound level during the same period. These measures of noise account for greater sensitivity of noise receptors at night by averaging in weighted sound levels during hours of greater noise sensitivity (evenings and nights).

As described in the Noise Assessment, sensitivity to noise increases during the evening and at night; therefore, twenty-four hour descriptors have been developed that incorporate artificial noise penalties for quiet-time noise events. The Community Noise Equivalent Level, CNEL, is a measure of the cumulative noise exposure in a community, with a 5 dB penalty added to evening (7:00 pm - 10:00 pm) and a 10 dB addition to nighttime (10:00 pm - 7:00 am) noise levels.

Another method of accounting for nighttime noise levels is the day/night average level (L_{dn}), which usually measures at approximately the same dBA level as the CNEL scale. The day/night average level, or L_{dn}, is an average sound level that occurs between the hours of 10:00 p.m. and 7:00 a.m. Levels during these hours are treated as though they are 10 dBA higher than they actually are because sensitivity to noise is greater during nighttime hours. The State of California requires either the L_{dn} scale or the CNEL scale to be incorporated into city and county general plan noise elements. The City of Soledad uses the CNEL scale as its noise element measure of scale. The L_{dn} has been adopted by the Environmental Protection Agency (EPA) and is used by the County of Monterey.

Sensitive Noise Receptors

The City of Soledad General Plan contains guidelines for determining noise and land use compatibility. Based on these guidelines, noise-sensitive uses are identified as residential neighborhoods, schools, churches, hospitals, and playgrounds. Sensitive receptors in the project area include existing residences surrounding the project site, several schools, the Soledad Branch Library, and several medical facilities. See Figure 4.10-1 for a map of nearby sensitive noise receptors. The figure also depicts the potential sensitive receptors along the southern border of the project site that may be affected by construction activities. The project proposes a large residential development in an area that is currently vacant or in agricultural production. Proposed residential, commercial, office, and school uses would increase the traffic generated to the site, as well as activity levels, thereby affecting existing noise levels.

Regulatory Environment

The State of California and the City of Soledad have regulations, plans and policies to limit noise exposure at existing and proposed noise sensitive uses. These are established in the following documents: 1) the California Building Code, 2) the City of Soledad Noise Element of the General Plan, and 3) the City of Soledad Municipal Code, as described below.

California Building Code

The California Building Code regulates environmental noise intrusion into new multi-family housing. Interior noise levels attributable to exterior sources cannot exceed 45 L_{dn}. Residential structures proposed where exterior noise levels exceed 60 L_{dn} shall require an acoustical analysis demonstrating that the proposed design will maintain interior noise levels at or below 45 L_{dn}.

City of Soledad General Plan

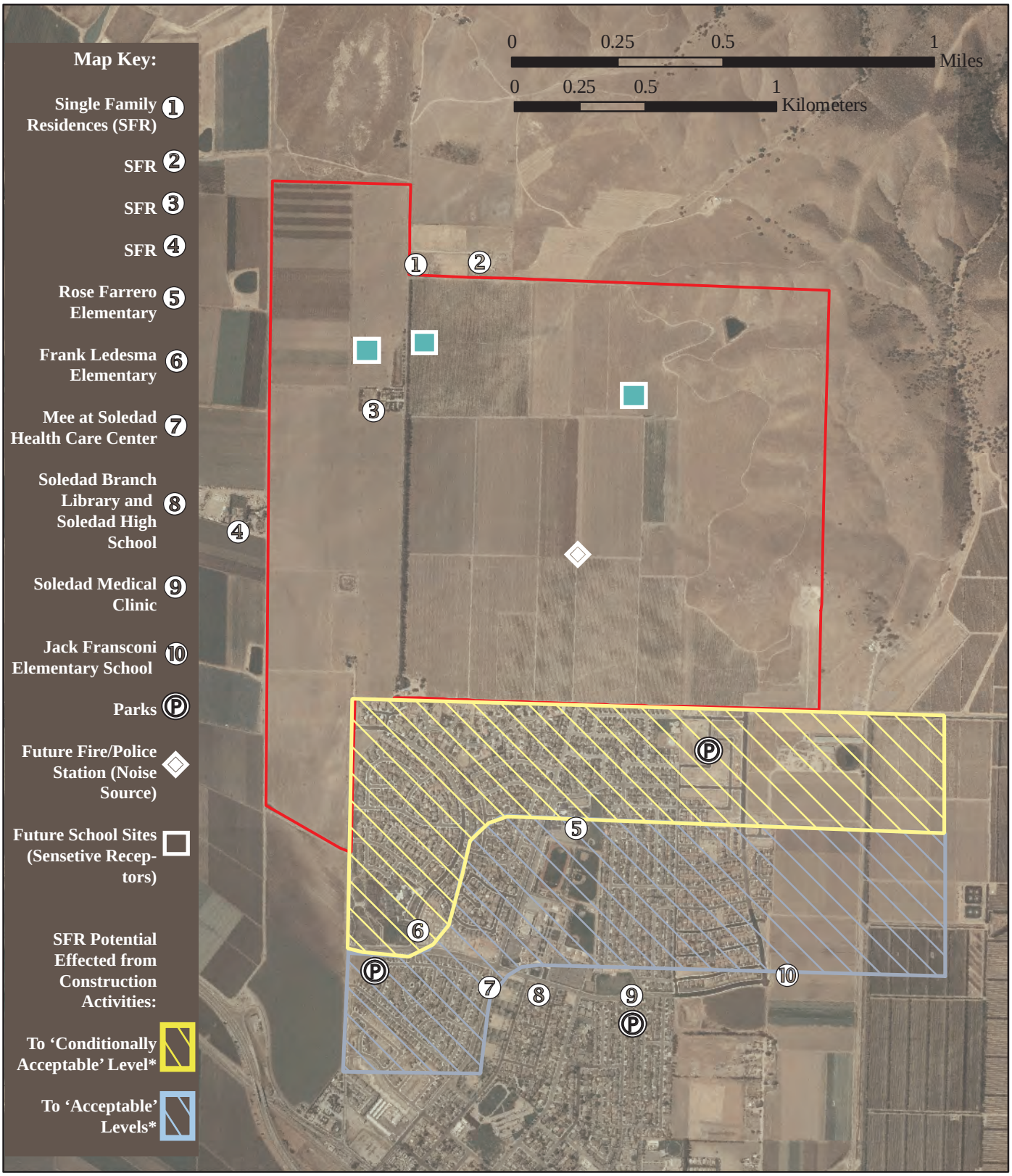
The City of Soledad has established policies in the Noise Element of the General Plan to guide the development of new land uses with respect to noise exposure. The following policies are applicable to the proposed project.

Policy N-1 The City shall not allow development of new noise-sensitive land uses where existing or ambient noise levels exceed those shown on Table 4.10-1, as measured immediately within the property line of the new development, unless effective noise mitigation measures have been incorporated into the development design to achieve the standards set by Table 4.10-1.

Policy N-2 Where non-residential land uses are likely to generate noise levels exceeding those shown on Table 4.10-1 on adjacent or nearby existing or planned noise-sensitive uses, the City shall require preparation of an acoustical analysis as part of the environmental review process so that noise mitigation may be included in the project design.

Policy N-3 New residential development shall comply with State Noise Insulation Standards.

Policy N-4 New commercial and industrial development shall incorporate design elements to minimize the noise impact when residential neighborhoods are nearby.



* Calculations based on Construction noise estimates from Table 4

N	Sensitive Noise Receptors	Figure 4.10-1

Policy N-5 Where noise mitigation measures are required to achieve the standards described in Table 4.10-1, the emphasis of such measures shall be placed on site planning and project design. The use of noise barriers shall be considered as a means of achieving the noise standard sonly after all other practical design-related mitigation measures have been integrated into the project.

Policies and implementation programs outlined in the Noise Element focus on establishing noise projections for proper planning and reducing the noise impacts at sensitive receptor locations. They include: 1) identifying noise structures and determining noise exposure levels; 2) adopting acceptable levels of noise for land use categories; 3) adopting a comprehensive noise ordinance; 4) promoting effective enforcement of existing federal and state noise standards; 5) requiring proper acoustical site planning and acoustical construction; and 6) evaluating noise analyses which have been required for new development projects.

Table 4.10-1
Allowable Noise Standards Measured in CNEL (dBA)

Land Use Category	Maximum Exterior		Maximum Interior*
	Acceptable	Conditionally Acceptable**	
Residential: Low-Density Single Family, Duplex, Mobile Homes	60	65	45
Residential: Multiple Family	65	70	45
Transient Lodging: Hotels, Motels	65	70	45
Schools, Libraries, Churches, Hospitals, Nursing Homes	70	70	45
Auditoriums, Concert Halls, Amphitheaters	NA	70	45
Sports Arena, Outdoor Spectator Sports	NA	75	NA
Playgrounds, Neighborhood Parks	70	NA	NA
Golf Courses, Riding Stables, Water Recreation, Cemeteries	70	NA	NA
Office Buildings, Business Commercial and Professional	70	75	50
Industrial, Manufacturing, Utilities, Agriculture	75	80	65

*It is preferred that the interior noise standards be attained with open windows. However, where the interior noise standard is attainable only with closed windows and doors, mechanical ventilation shall be required.
**Requires analysis of noise reduction requirements and insulation measures
Source: *City of Soledad General Plan*

Environmental Impact Report on the Soledad General Plan. The General Plan EIR evaluated potential noise impacts associated with the adoption and implementation of the Soledad General Plan, including future development within the project area. This program-level EIR focused on general impacts associated with implementation of the General Plan, rather than project-specific impacts associated with individual development projects, such as the Miravale III Specific Plan project. According to the General Plan EIR, the following noise impacts were identified:

- Noise associated with construction activities may adversely impact nearby noise-sensitive uses. This impact was considered significant unless mitigated.

- Noise associated with motor vehicle traffic generated by the development of land uses accommodated by the General Plan will increase, which may result in the exceedances of the applicable standards. This impact was considered significant unless mitigated.

- Buildout of land uses accommodated under the General Plan will increase the exposure of people to new and existing stationary sources of noise. This impact was considered adverse but not significant.

- Noise from ongoing agricultural operations could periodically exceed the City's noise standards for adjacent residences. This impact was considered adverse but not significant**.**

City of Soledad Municipal Code

The City of Soledad has also established noise regulations in Chapters 9.09 and 17.38.240 of the Municipal Code. Chapter 9.09 addresses general noise regulations and prohibits excessive or loud noises that result in a public nuisance. Chapter 17.38.240 establishes exterior noise limits that apply to residential, commercial, and industrial land uses measured at the property line of the receiving land use. Specifically, noise impacts are limited to 55 dBA at the adjacent residential property lines, 65 dBA at adjacent commercial property lines, and 68 dBA at adjacent industrial property lines. Limit adjustments for temporary, non-continuous noise are given based on the following criteria:

Table 4.10-2
Type or Location of Operation Correction in Decibels

Character of Noise	**Decibels**
1. Daytime operation only	Plus 5
2. Noise source operated less than: (Apply only one subcategory only)	
a. 20% of any 1-hour period	Plus 5
b. 5% of any 1-hour period	Plus 10
3. Noise of impulsive character such as hammering	Minus 5
4. Noise of periodic character such as hammering or screeching	Minus 5
Source: *City of Soledad Municipal Code Table 17.38.240B*	

Miravale III Specific Plan

Section 2.0 (Land Use) and Section 4.0 (Parks, Recreation, and Open Space) of the Miravale III Specific Plan contain policies concerning noise impacts. Section 2.0 identifies land use goals and policies regarding the physical development for each respective land use category (i.e. residential, commercial, etc.). Section 4.0 identifies goals and policies in regard to the uses and development in open space and recreational areas. The following policies are applicable regarding noise impacts.

Policy 2.8.k New commercial developments should incorporate design elements to minimize the visual and noise impact when adjacent to residential neighborhoods.

Policy 4.1.2.10 Parks should be designated and located to minimize noise and activity conflicts with residential areas.

The following analysis evaluates potential noise impacts from the project consistent with the General Plan EIR mitigation.

Existing Noise Environment

Farmland borders the project site to the west, north, and east. Single family residences exist along the northern border of the project site. The major noise source in Soledad, as well as at the project site, is vehicular traffic. Railroads, aircraft, farming activities, quarry activities, and industrial and food packaging facilities also contribute to local ambient noise levels.

Several sites along the project site border and within the neighboring residential development were assessed for noise conditions. Three long-term noise measurements were analyzed to determine daily trends in noise levels along roadways leading to the project site, and four short-term sites were analyzed to measure levels at specific noise sources, including roadways leading to the proposed site. Noise measurement locations are shown on Figure 4.10-2. Further, Table 4.10-3 shows the noise assessment levels from the Noise Assessment Report for long-term sites (LT) and short-term sites (ST).

Table 4.10-3
Summary of Short-Term Noise Measurement Data (dBA)

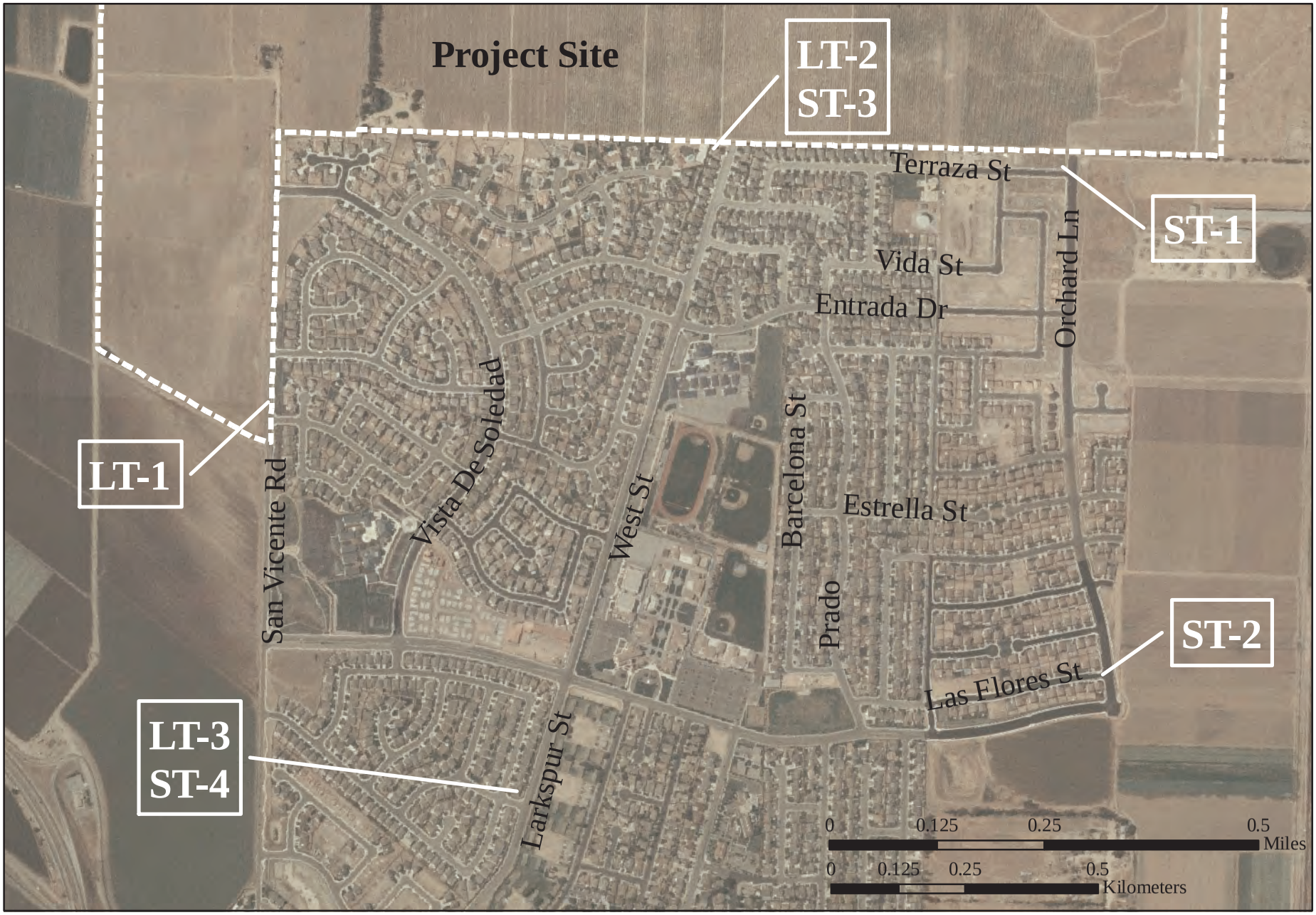
Site Location	Noise Measurement Location	Average CNEL
LT-1	20 feet from the center of San Vincente Road near Saavedra Street*	71
LT-2	North end of West Street near existing residential receptors	53-55
LT-3	25 feet from the center of West Street near Sundew Street	69
ST-1	North end of Orchard Lane near Terraza Street.	53-55
ST-2	45 feet from the center of Orchard Lane near Las Flores Street	61
ST-3	North end of West Street	53-55
ST-4	65 feet from the center of West Street near Sundew Street.	65
*Data reported resulted additionally from wind noise.		

The ambient noise environment in the project vicinity results primarily from local and distant vehicular traffic. Intermittent sources of environmental noise include railroad trains along the Union Pacific Railroad and agricultural related activities. The noise monitoring survey included three long-term noise measurements to quantify the daily trend in noise levels along roadways serving the site and four short-term noise measurements to identify specific noise sources and associated noise levels at representative locations in adjoining neighborhoods.

The daily trend in noise levels along San Vincente Road was measured at Site LT-1 from September 6 to 7, 2006, according to the Noise Assessment prepared by Illingworth and Rodkin, Inc. Noise measurement location LT-1 was approximately 20 feet from the center of San Vincente Road near Saavedra Street. Noise levels at this location resulted primarily from local vehicular traffic. During periods of the noise measurement, wind noise also contributed to the measured levels. Daytime hourly average noise levels typically ranged from 62 to 73 dBA L_{eq}. At night, hourly average noise levels ranged from 52 to 70 dBA L_{eq}. The day-night average noise level at LT-1 was 71 dBA CNEL.

A second long-term noise measurement position (LT-2) was selected at the north end of West Street to quantify noise levels near existing residential receivers. Noise levels at this location resulted primarily from local neighborhood activities and periods of wind. Daytime hourly average noise levels at Site LT-2 typically ranged from 50 to 55 dBA L_{eq} excluding atypical high noise level events occurring close to the sound level meter. Hourly average noise levels were relatively low at night ranging from about 33 to 47 dBA L_{eq}. The day-night average noise level calculated at LT-2 was 61 dBA CNEL. The estimated CNEL at this location, excluding periods of wind and the atypical noise events occurring near the sound level meter is approximately 53 to 55 dBA CNEL.

A third long-term noise measurement was made approximately 25 feet from the center of West Street near Sundew Street. Noise levels at this location resulted primarily from local vehicular traffic. Daytime hourly average noise levels at Site LT-3 typically ranged from 61 to 70 dBA L_{eq} and from 49 to 67 dBA L_{eq} at night. The day-night average noise level at LT-3 was 69 dBA CNEL.



N

Noise Assessment Site Locations

Figure 4.10-2

DENISE DUFFY & ASSOCIATES, INC.

Four short-term noise measurements were made to complete the noise monitoring survey. These measurements were made near noise sensitive receptors that could be affected by increased traffic resulting from the proposed project. Refer to Table 4.10-3

Relevant Project Characteristics

The Miravale III Specific Plan proposes a mixed-use development including 1,470 single-family residential units, 2,730 multi-family residential units (includes affordable housing, workforce housing, and senior housing units), 120 hotel rooms, 275,000 square feet of retail commercial space, and an 18-hole golf course. Construction of the project is anticipated to begin in 2008 and be completed no later than 2028.

Thresholds of Significance

In accordance with CEQA Guidelines, a project impact would be considered significant if the project would:

- expose persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- expose persons to or generation of excessive groundborne vibration or groundborne noise levels;
- have substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- have a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;
- expose people residing or working in the project area to excessive noise levels for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport; or
- expose people residing or working in the project area to excessive noise levels for a project within the vicinity of a private airstrip.

The following criteria were used to evaluate the significance of noise impacts associated with the proposed project.

Noise and Land Use Compatibility. A noise impact would occur where noise-sensitive land uses are proposed in exterior noise environments exceeding 60 dBA L_{dn}. A noise impact would also be identified if the project creates noise levels in excess of the General Plan noise standards or the noise level limits established in the City's Municipal Code

Vibration Compatibility. A noise/vibration impact would be identified where noise-sensitive land uses are exposed to excessive vibration levels. Although there are no local standards that control the allowable vibration in a new residential development, Caltrans has developed vibration impact assessment criteria to address vibration associated with transit projects. The Federal Transit Administration has proposed vibration impact criteria, based on maximum overall levels for a single event. The criterion for "infrequent" vibration events is 80 VdB.

Substantial Increase in Noise Levels. A noise impact would be identified where the project results in a noise level increase of 3 dBA L_{dn} or more in noise environments of 60 L_{dn} or greater or 5 dBA L_{dn} in noise environments where noise levels would remain below 60 dBA L_{dn}. These thresholds represent the point at which the change in noise levels become perceptible within the respective various noise environments.

Construction Noise. Since noise generated by construction would be short-term and vary considerably day-to-day, construction noise is evaluated somewhat differently than operational noise. When construction activities are predicted to cause prolonged interference with normal activities at noise-sensitive receiver locations, generate noise levels in excess of 60 dBA L_{eq}, and exceed ambient noise levels by five dBA or more, the impact is considered significant. Prolonged interference is defined as a substantial noise level increase that occurs for one or more years.

Impacts and Mitigation

Noise and Land Use Compatibility

The Noise Assessment determined that future residential development at the project site would be exposed to elevated exterior noise levels in excess of the 65 dBA CNEL limit allowed by the 2005 City of Soledad's General Plan. Interior noise levels also have the potential to be in excess of the allowed 45 dBA CNEL limit without the incorporation of noise insulation features in the project design.

Exterior Noise Levels – Vehicular Traffic

Several proposed noise-sensitive land uses are in the vicinity of Highway US 101 and collector roadways, which have the potential to expose those land uses to exterior noise levels greater than the allowed 65 dBA CNEL. Further, California Building Code insulation standards require that noise levels exceeding 60 dBA CNEL need additional noise analysis for noise reduction measures.

Traffic noise increases were calculated using traffic noise models to determine the worst-case projection of noise contours and where additional noise analyses are required. According to the model, the southernmost portion of the planning area would most likely be affected by US 101 traffic. The project is located at a distance sufficient to allow US 101 traffic noise to dissipate before exceeding the required 65 dBA CNEL noise standard. However, the section of multi-family residences on the proposed project's southern boundary would expect to have ambient noise levels increase to 60 dBA, which requires additional noise analysis for internal levels.

The Noise Assessment identified several roadways within the project area would generate traffic noise levels greater than the allowed 65 dBA CNEL with the addition of the project buildout. Those roadways include San Vincente Road, West Street, and Orchard Lane, identified in Table 4.10-4. Exterior noise levels would exceed 65 dBA CNEL within 90 feet of the center of San Vincente Road and West Street, and within 50 feet of the center of Orchard Lane. Where exterior noise levels exceed the City's noise level goal of 65 dBA CNEL, mitigation is required to provide a compatible exterior noise environment.

Table 4.10-4 Future Noise Contours for Roadways in Project Vicinity				
		Distance from Roadway Center (feet)		
Roadway	**Segment**	**70 dBA CNEL**	**65 dBA CNEL**	**60 dBA CNEL**
Highway 1	Camphora-Gloria Road to North Soledad	620’	1330’	2860’
San Vincente Road	North of Project Entrance	*	90’	200’
West Street	North of Project Entrance	*	90’	200’
Orchard Lane	North of Project Entrance	*	50’	100’
*Data not reported within 50 feet or less of the roadway center, since no development would occur in these areas. Source: *Miravale III Specific Plan Environmental Noise Assessment*. Illingworth & Rodkin, Inc. 2007.				

Interior Noise Levels – Vehicular Traffic

As mentioned previously, US 101, San Vincente Road, West Street, and Orchard Lane would have the potential to generate Community Noise Equivalent Levels greater than 60 dBA CNEL. Typically, interior noise levels are 15 dBA less than exterior noise levels with windows open. Per California Building Code, interior noise levels must be maintained at or below 45 dBA CNEL. If those levels are not achieved with standard construction practices, forced air ventilation systems with closed windows would decrease interior noise levels. Incorporating this measure would typically reduce noise levels from 65 dBA to 60 dBA. Other methods that would provide additional noise impact reduction would be limiting window size facing noise source or sound-rate construction methods.

Exterior Noise Levels – Commercial Uses

With the development of approximately 275,000 square feet of retail commercial space, several noise-generating factors would be created, including loading docks, heating and ventilation systems, cooling equipment, emergency generators, trash compactors, parking lots, and other mechanical equipment. The Noise Assessment estimated that loading docks and parking lots would generate approximately 50 to 60 dBA $L_{eq.}$ The total L_{eq} for proposed loading docks would be dependent on the number of trucks accessing the loading dock, the frequency of truck trips, and use of other equipment on the loading dock, such as forklifts. Temperature control systems typically generate from 50 to 70 dBA L_{eq}, which is also dependent on use factors. Noise generated from trash compactors ranges to a maximum of 40 to 50 dBA. Parking lot noise impacts were identified as deriving from vehicle circulation, car alarms, squealing tires, door slams, and human voices. These factors generate approximately 35 to 45 dBA L_{eq}. According to the City of Soledad Zoning Code, these uses have the potential to exceed allowed noise limits for the area depending on the configuration of the final land use plan parcels designated for commercial development.

Exterior Noise Levels – Educational and Public Parks

Several educational and recreational facilities are proposed adjacent to residential land uses, including the development of two elementary schools, and one middle school. The noise generated from student arrival and departures would raise noise levels. Further, several parks and outdoor recreational facilities are proposed, such as active parks, ball fields, and sports complexes. Outdoor activities and spectators at these facilities have the potential to increase community noise levels, especially during evenings and weekends. In some cases, noise levels can exceed 80 dBA L_{max}. Outdoor activities, including soccer games, baseball games, and dog walking activities, average at 55 to 60 dBA L_{eq}. These activities would

have the potential to exceed acceptable noise levels, thereby requiring site specific analysis, as identified in the mitigation below.

In addition to outdoor recreation facilities, several passive parks, or neighborhood parks with playgrounds, picnic areas, walking paths, and open turf areas, have been proposed. These areas create minimal noise level increases. Per the Noise Assessment, these activities are not anticipated to adversely impact noise levels of existing or future noise-sensitive receptors in the project vicinity.

Police and Fire Sub-Stations

The proposed project includes the addition and of a police/fire sub-station at the northwest corner of West Street and J Street. The emergency response facility has the potential to produce elevated noise levels associated with the operation of a police station and fire station. Police station noise generation typically includes vehicle circulation, testing, and maintenance, as well as emergency mechanical equipment. With the combination of the police and fire sub-station, the proposed project would also include noise generation from fire station activities, such as sirens sounding, engine testing, horns, training exercises, and emergency generator checks. During equipment checks, noise levels have the potential to reach 80 to 85 dBA L_{max}. With the added vehicular traffic noise from nearby roadways, impacts to neighboring sensitive receptors may exceed City Noise Ordinance standards triggering additional study.

In order to ensure that project-induced impacts are reduced to a less-than-significant impact, the Noise Assessment identified the following mitigation measures as necessary. Implementation of the following mitigation measures would not result in any new environmental impacts beyond those identified in this EIR.

Impact **Future residential uses developed at the project site would be exposed to exterior noise levels greater than 65 dBA CNEL, which exceeds the noise and land use compatibility standards presented in the City of Soledad's General Plan. Interior noise levels would be expected to exceed 45 dBA CNEL without the incorporation of noise insulation features into the project's design.** ***This is a significant impact that can be reduced to a less-than-significant level with the mitigation below.***

Mitigation

4.10-1 Maintain a sufficient buffer distance between transportation noise sources and future sensitive land uses, or alternatively, construct noise barriers or create acoustically shielded outdoor use areas utilizing buildings to achieve noise exposures of 65 dBA CNEL or less. The specific determination of necessary mitigation measures will occur during project level environmental review and design. Results of the analysis shall be submitted to the City prior to issuance of a building permit.

4.10-2 Retain a qualified Acoustical Specialist to prepare for City review and approval a detailed acoustical analysis of interior noise reduction requirements and specifications for all projects proposed within the 60 dBA CNEL contours of area roadways, in accordance with State and City standards. Interior noise levels must be maintained at or below 45 dBA CNEL. Building sound insulation requirements will include forced air mechanical ventilation in noise environments exceeding 60 dBA CNEL. Special building construction techniques (e.g., sound-rated windows and building facade treatments) may be required where exterior noise levels exceed 65 dBA CNEL. These treatments include, but are not limited to, sound rated windows and doors, sound rated exterior wall assemblies, and acoustical caulking. The specific determination of required treatments will be made on a unit-by-unit basis during project design. Results of the analysis,

including the description of the necessary noise control treatments, will be submitted to the City along with the building plans prior to issuance of a building permit. Feasible construction techniques such as these would adequately reduce interior noise levels to 45 L_{dn} or lower.

4.10-3 Non-residential development will comply with the noise standards established in the Zoning Code at existing or planned residential properties in the vicinity. Further, efforts will be made to reduce noise impacts through the following planning and equipment requirements:

- Development site planning will be utilized in a fashion that reduces noise impacts for nearby sensitive receptors, such as by not locating loading docks near residences.
- Equipment screens, fan silencers, and engine mufflers will be used to mitigate noise from mechanical equipment.
- Noise barriers will be used to control noise from parking and vehicle circulation.
- For recreational uses, proposed development must consider impacts upon the adjacent residential development in terms of the location of active sports areas, their orientation on the site, whether or not lights are included, and speech amplification systems.

Project Generated Traffic Noise

The *Miravale III Mixed-Use Development Draft Transportation Impact Analysis*, prepared by Hexagon Transportation Consultants, Inc., was reviewed to calculate the relative change in traffic noise levels resulting from project-generated traffic. The study was incorporated into the Noise Assessment prepared for the proposed project. The project area contains a variety of land uses with varying sensitivities to noise. Residential land uses would be most affected by noise generated by additional traffic. Office and commercial uses are not typically affected by traffic noise increases along the local roadway network. However, existing noise levels would noticeably increase along some roadway segments with the implementation of the project, as described below.

A comparison of existing, background, and project traffic volumes was evaluated, and the relative change in traffic noise along identified roadway segments was calculated as part of the noise study. Roadway segments experiencing a traffic noise level increase of less than three dBA L_{dn} were excluded from further analysis, as the noise level increase would not be noticeable. Table 4.10-5 shows the roadway links that are calculated to experience a substantial noise increase (three dBA or more) as a result of the project.

Table 4.10-5
Traffic Noise Level Increases Above Existing Levels Resulting from Project

Roadway	Segment	CNEL Noise Levels (dBA)at 75 feet from Roadway Center			
		Existing	Background	Project	Project Increase
San Vincente Road	Gabilan Dr. to Project Entrance	57	57	64	+7
West Street	Market St. to Gabilan Dr.	60	60	65	+5
West Street	Gabilan Dr. to Project Entrance	59	59	66	+7
Main Street	Market St. to Gabilan Dr.	57	57	63	+6

Source: *Miravale III Specific Plan Environmental Noise Assessment*. Illingworth & Rodkin, Inc. 2007.

Traffic noise levels would be substantially increased at noise-sensitive residential receivers along San Vincente Road, north of Gabilan Drive, along West Street, north of Market Street, and along Main Street between Market Street and Gabilan Drive. Exterior noise levels would exceed 65 dBA CNEL at a distance of 75 feet from the roadway center along West Street north of Gabilan Drive. Noise levels along the remaining roadway segments would be 65 dBA CNEL or less and would be considered acceptable for residential development.

In order to minimize potential project-related impacts to the greatest extent feasible, the following mitigation measure was identified as necessary. Implementation of this mitigation measure would not result in any new environmental impacts beyond those identified in this EIR.

Impact **Traffic volume increases from the project would increase traffic noise along the local roadway network. In some locations, there would be a substantial, permanent increase in noise levels at sensitive receptors. Measures available to reduce the project noise level increases would not likely be feasible in all areas.** ***The impact, therefore, is considered significant and unavoidable.***

Mitigation

4.10-4 The project shall incorporate noise reduction methods, subject to the review and approval of the City of Soledad. Methods to reduce noise on the project site may include the following measures:

- Pave and re-pave streets with "quieter" pavement types, such as Open-Grade Rubberized Asphaltic Concrete, that would reduce noise levels by 2 to 3 dBA depending on the existing pavement type, traffic speed, traffic volumes, and other factors. All new and improved streets within the project area shall use quieter pavement types.

- Implement new or larger noise barriers that may reduce noise levels by 5 dBA CNEL in areas that would not impair access requirements. Final design of such barriers, including an assessment of their feasibility and reasonableness, must be approved by the City during project-specific development applications. An increase in barrier height per foot equates to approximately 1 dBA noise reduction. However, noise barriers must be considered as a last resort to alternative noise reduction methods per the City of Soledad General Plan.

- Install traffic calming measures to slow traffic and provide qualitative improvement by smoothing out the rise and fall in noise levels caused by speeding vehicles. For each 5 mph reduction in average speed, noise generation is reduced by approximately 1 dBA.

- Provide affected residences with building sound insulation, such as sound rated windows and doors on a case-by-case basis to reduce interior noise levels to below the 45 dBA CNEL noise standard.

A combination of mitigation measures such as the repaving of area roadways, the replacement or construction of noise barriers, traffic calming, and sound insulation could be implemented to reduce the effects of project generated traffic noise at affected residences along identified segments of as San Vincente Road, West Street, and Main Street .

Case studies have shown that the replacement of dense grade asphalt (standard type) with open-grade or rubberized asphalt can reduce traffic noise levels along residential-type streets by 2 to 3 dBA. A possible noise reduction of 2 dBA would be expected using conservative engineering assumptions. Table 4.10-6 shows the expected project noise level increases assuming the replacement of existing pavement with open-grade or rubberized asphalt. Project-generated traffic noise increases along West Street, between Market Street and Gabilan Drive could be mitigated to a less-than-significant level as the mitigated traffic noise increase would be 3 dBA CNEL and the resulting noise level would be less than 65 dBA CNEL. In order to provide permanent mitigation, subsequent repaving would also have to be “quieter” pavements.

Table 4.10-6 Traffic Noise Level Increases Assuming Re-pavement of Affected Roadways with "Quieter" Pavement		
Roadway	**Segment**	**Noise Level Increase after Mitigation (dBA, CNEL)**
San Vincente Road	Gabilan Dr. to Project Entrance	+5
West Street	Market St. to Gabilan Dr.	+3
West Street	Gabilan Dr. to Project Entrance	+5
Main Street	Market St. to Gabilan Dr.	+4
Source: *Miravale III Specific Plan Environmental Noise Assessment*. Illingworth & Rodkin, Inc. 2007.		

As identified in the Noise Assessment, newer residential land uses constructed in the vicinity of San Vincente Road have existing noise barriers that would provide additional shielding in rear yard areas. Exterior noise levels, although substantially increased over existing conditions, would be less than 65 dBA CNEL in the rear yards of these homes. It is likely that these recently constructed residences were planned and constructed recognizing the future development at Miravale III. Existing noise barriers in older developments may also be sufficient to reduce exterior noise levels in rear yard areas to 65 dBA CNEL or less. Even with mitigation, noise levels might still be substantially and permanently increased in nearby residential areas. Some noise reduction levels require individual homeowner cooperation; therefore, they cannot be guaranteed. The noise impact, therefore, is considered significant and unavoidable.

Construction Noise

Future construction within the plan area would generate temporary noise level increases for adjacent residential land uses to the south of the project site. Construction noise would also affect the noise environment of noise-sensitive land uses developed during the first phases of the project as later phases are developed. Noise impacts resulting from construction depend on the equipment used, timing and duration of activities, and the distance between construction noise sources and noise sensitive receptors. Where noise from construction activities exceeds 60 dBA L_{eq} and exceeds the ambient noise environment by at least five dBA at noise-sensitive uses in the project vicinity, the impact would be considered significant. Additional significant impacts include extended noise level increases for a duration exceeding one year.

Construction activities generate considerable noise, especially during the construction of project infrastructure when heavy equipment is used. Typical hourly average construction generated noise levels are about 81 to 88 dBA at 50 feet from the center of the site during busy construction periods (e.g., earth moving equipment, use of impact tools). The highest maximum noise levels generated by project construction would typically range from about 90 to 98 dBA at a distance of 50 feet from the noise source. Construction-generated noise levels drop off at a rate of about six dBA per doubling of distance between the source and receptor. Additionally, construction-related noise levels are normally less during building framing, finishing, and landscaping phases. There would be variations in construction noise levels on a day-to-day basis depending on the specific activities occurring at the site. Table 4.10-7 identifies the distance needed from the noise source to reduce the construction noise to "Conditionally Acceptable" and "Acceptable" Noise Levels. Figure 4.10-1 identifies sensitive noise receptors in the project vicinity that may be affected during periods of maximum noise-generating construction.

Table 4.10-7 Noise Contour Calculations for Construction Sources	
CNEL Noise Levels (dBA)	**Distance from Construction Source (ft.)**
90 – 98	50
84 – 92	100
78 – 86	200
72 – 80	400
66 – 74	800
60 – 68*	**1600**
54 – 62*	**3200**
Notes: * Denotes "Acceptable" and "Conditionally Acceptable" ranges as defined by the City of Soledad General Plan - Calculations are based on the assumption that noise levels will decrease by 6 dBA per distance doubled, as mentioned above. - Calculations do not take into account noise barrier structures, such as buildings and landscaping.	

The build out of the plan area would increase the ambient noise environment at existing homes bordering the project site, as well as residential units built within the plan area during the earlier construction phases. Construction noise levels are anticipated to exceed 60 dBA L_{eq} and exceed ambient levels by five dBA or more over extended periods of time. It is conceivable that a particular receiver or group of receivers would be subject to construction noise levels in excess of 60 dBA L_{eq} and in excess of the ambient noise level by five dBA for durations exceeding one construction season (one year). Construction of the project would result in a significant temporary noise level increase at neighboring noise-sensitive properties and would exceed the City's ordinance regarding construction noise.

In order to ensure that project-induced impacts are reduced to the greatest extent feasible, the Noise Assessment identified the following mitigation measures as necessary. Implementation of these mitigation measures would not result in any new environmental impacts beyond those identified in this EIR.

Impact **Existing and proposed noise-sensitive land uses would be exposed to construction noise levels in excess of the significance thresholds for a period of more than one construction season. Although mitigation measures would reduce noise generated by construction, the impact would remain significant and unavoidable as a result of the extended period of time that adjacent receivers would be exposed to construction noise.** ***This is a significant and unavoidable impact.***

Mitigation

4.10-5 Noise-generating activities at the construction site or in areas adjacent to the construction site associated with the project in any way should be restricted to the hours of 7:00 a.m. to 7:00 p.m., Monday through Friday, and 8:00 a.m. to 6:00 p.m. on Saturdays, unless otherwise approved by the City. No construction activities should occur on Sundays or holidays, including New Years and 4th of July.

4.10-6 Equip all internal combustion engine driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.

4.10-7 Locate stationary noise generating equipment (e.g., portable concrete crusher) as far as possible from sensitive receptors. Construct temporary noise barriers to screen stationary noise generating equipment when located near adjoining sensitive land uses.

4.10-8 Utilize "quiet" air compressors and other stationery noise sources where technology exists.

4.10-9 Route all construction traffic to and from the project site via designated truck routes where possible. Prohibit construction related heavy truck traffic in residential areas where feasible.

4.10-10 Control noise from construction workers' radios to a point that they are not audible at existing residences bordering the project site.

4.10-11 Consider the use of multiple-pile drivers to expedite construction where pile driving is required. (Although noise levels generated by multiple pile drivers would be higher than the noise generated by a single pile driver, the total duration of pile driving activities would be reduced.)

4.10-12 Use temporary noise control blanket barriers to shroud pile drivers or erect in a manner to shield the adjacent land uses. Such noise control blanket barriers can be rented and quickly erected.

4.10-13 Pre-drill foundation pile holes to minimize the number of impacts required to seat the pile. Pre-drilling reduces the number of blows required to seat the pile and is a standard construction noise control technique.

4.10-14 The contractor shall prepare a detailed construction management plan identifying the schedule for major noise-generating construction activities. The construction management plan shall identify a procedure for coordination with the adjacent noise sensitive facilities so that construction activities can be scheduled to minimize noise disturbance. Prior to the issuance of any grading and/or building permit, the project applicant shall submit a detailed construction management plan to the City of Soledad for review and approval.

4.10-15 The project applicant shall designate a "disturbance coordinator" who shall be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall require that reasonable measures warranted to correct the problem are implemented. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule. Prior to the issuance of any grading and/or building permit, the project proponent shall provide the City of Soledad with the contact information for the designated "disturbance coordinator."

Although the above measures would reduce noise generated by the construction of the project, the impact would remain significant and unavoidable as a result of the extended period of time that receivers would be exposed to construction noise.

4.11 POPULATION AND HOUSING

Introduction

This section describes the population and housing issues related to the proposed project, including background and documentation to support the growth inducement analysis contained within Section 5.0 of this EIR. The key sources of information for this analysis include the 2000 Census, the 2004 Association of Monterey Bay Area Governments (AMBAG) Projections, the California Department of Finance (DOF), and the City of Soledad.

Setting

Based on 2008 data from DOF, Monterey County had a population of approximately 428,549 people. The County's population has grown at an overall rate of 1.1 percent annually since 2000. While communities along the Salinas Valley have experienced an increase in population, the majority of communities along the Monterey Peninsula have experienced a decrease in population as a result of the closure of the Fort Ord military base. According to data published by the DOF, Soledad, Greenfield, King City, and Gonzales were all among the fastest growing cities in the State in 1999. Approximately 25 percent of the population of Monterey County resides in the unincorporated areas, with the remaining 75 percent residing in the county's 12 cities. Salinas is the largest city, followed by Seaside, Monterey, and Marina.

The population of Soledad includes residents within the incorporated limits of the City, as well as inmates at the Soledad Valley State Prison and Correctional Training Facility, which was annexed to the City in 1992. In 1997, the prison was expanded, bringing its total inmate population to 11,200 and a total full-time workforce to 2,700. The current prison population is 11,929, and the state has no immediate plans for expansion.

Table 4.11-1 presents projected population growth along the Salinas Valley through 2020, based on the current population and historic trends. These projections suggest that all the cities will experience growth between 2000 and 2020. The population of the City of Soledad is projected to increase by 63 percent during this time period.

Table 4.11-1
Current and Projected Population Summary By Jurisdiction

Place of Residence	2000 Census Population	2015 Projected Population	2020 Projected Population
City of Gonzales	7,525	14,627	16,791
City of Greenfield	12,583	21,570	24,512
City of King City	11,094	32,465	34,362
City of Salinas	143,776	174,787	184,434
City of Soledad	22,634	35,938	39,463
Unincorporated Monterey County	100,252	114,776	124,067
Monterey County Total	401,762	495,961	527,069

Sources: 2000 Population and Household data from the U.S. Census Bureau. *DP-1. Profile of General Demographic Characteristics: 2000.* Summary File 1; and population projections from AMBAG, *2004 AMBAG Regional Population and Employment Forecasts.*

Monterey County's total population resides in approximately 121,236 households (Census 2000). The average number of persons per household is 3.06, although this is far from uniform throughout the County. The average household size is about 4.0 persons per dwelling for single-family dwelling units and 4.52 persons per dwelling for multi-family dwelling units in the City of Soledad (Census 2000).

Cities along the Salinas Valley also tend to have larger household sizes possibly due to the seasonal influx of field workers and the absence of farm labor housing. Families often pool their resources and share housing in Soledad. Table 4.12-2 shows the distribution of housing stock among the cities and the unincorporated parts of the County.

Table 4.11-2
Housing Stock In Monterey County (Dwelling Units)

Jurisdiction	Total Housing Units
Carmel	3,331
Del Rey Oaks	727
Gonzales	1,738
Greenfield	2,727
King City	2,855
Marina	8,543
Monterey	13,420
Pacific Grove	7,998
Salinas	39,612
Sand City	92
Seaside	11,005
Soledad	2,543
Unincorporated	37,579
Total	**132,170**
Source: U.S. Census, 2000.	

Based on current conditions and trends, growth is projected to continue throughout the county. Estimated growth projections are higher in southern Monterey County while the majority of occupied and unoccupied housing units are located in northern Monterey County. As a result, southern Monterey County communities are expanding their city limits to provide areas in which to grow. According to the City of Soledad General Plan, 28 percent of housing to be added to the City over the next two or three decades will be in the designated expansion areas, which are outside of the City's Sphere of Influence. According to the 2000 Census, the City had about 2,472 dwelling units, not counting dwellings approved or under construction. Since then, about 600 additional units have been constructed, which brings the total in the City to about 3,072. This leaves a remaining development potential of 6,600 to 8,600 units that could be constructed within the City's general plan area. The proposed project site includes areas in the Mirrasou, Northwest, and San Vicente West expansion areas, which are identified in the General Plan and located outside the City's Sphere of Influence. Housing capacity projections do not account for these areas. Sphere of Influence expansion and annexation of these areas are required for development of the project site. The General Plan carrying capacity for these areas combined is 1,806 single family units, 357 medium density residential units, and 488 units of high density residential on 553 acres.

AMBAG assigns each community within its jurisdiction a "fair share" of the regional housing needs, and the communities are required to show how they will meet these needs. Based on the 2002 AMBAG Regional Housing Needs Allocation (RHNA), the total number of new housing units that need to be constructed in Soledad between 2000 and 2007, in order to meet Soledad's "fair share" of the regional housing need, is 1,283. This includes very low, low, moderate, and above moderate households. 525 building permits at above-moderate income level and 2 building permits at the moderate income level were issued between January 2000 and August 2002 according to Soledad's Housing Element. A remaining 799 units affordable at very low, low, and moderate income levels should be filled in order to meet AMBAG's fair share allocation. According to the recently updated RHNA, the city of Soledad has been allocated a "fair share" of 897 new units for the 2008-2014 planning period to meet regional housing

needs. Jurisdictions are required to meet previous planning period allocations of affordable housing if they have not been met in addition to current planning period allocations. The Specific Plan will ultimately provide approximately 4,200 attached and detached residential units, of which 1,229± will be affordable (including 500 senior housing units) and another 1,047± workforce housing units. Table 4.11-3 shows the residential potential for the Miravale III project site according to the Specific Plan. The Housing Element allows for variations to the residential portion as long as the housing objectives are met pursuant to the goals identified in the City of Soledad General Plan.

Table 4.11-3
Residential Potential For Miravale III Specific Plan Area
(Miravale III Project Site)

Proposed Zone District	Proposed Housing Type	Residential Acreage (Acres)	Average Density (Units/Acre)	Potential Number of Units
LDR (Low Density Residential) *Duplex/Small Lots*	Single-Family Residential	~ 240.88	6.10	~ 1,470 *~ 116*
(VR) Village Residential*	Multi-family Residential & High Density Residential	~ 146.88	18.99**	~ 2,614
	TOTAL	~ **387.76**		~ **4,200**

Source: Miravale III Specific Plan, Table 2-1, June 2007
*Assumes 500 Senior Housing Units
**This assumes that parks, roads, and parking required for VR is included in the 17.91 du/ac

City of Soledad General Plan

The Housing Element of the General Plan demonstrates the existing condition and projected needs of the City. It also contains goals, policies, programs, and quantified objectives to ensure the City will be able to provide for the residential need of the community. The following housing and population policies apply to development within the project area.

Policy H-1 The City of Soledad shall promote the expansion of its LAFCO Sphere of Influence and annexation of additional land consistent with its General Plan Land Use Element to accommodate long-term demand for residential development.

Policy H-3 The City of Soledad shall require new residential areas to contain a mix of housing types targeted to very low, low, moderate, and above moderate households in approximately the proportion that each of these income categories represent in the AMBAG Fair Share Housing Allocation.

Policy H-5 The City shall provide incentives to housing developers that provide housing opportunities for large families in new residential development areas.

Policy H-6 The City shall require housing developers to offer an optional design to homebuyers whose household has one or more disabled person.

Policy H-9 The City of Soledad shall ensure that city site improvement standards, development review procedures, and development fees do not unreasonably constraint the development, conservation, and rehabilitation of housing.

Policy H-10 The City of Soledad shall ensure the availability of adequate public facilities for the expected housing need of the city.

Policy H-11 The City of Soledad shall support and initiate, where feasible, public and private energy conservation programs which will reduce the energy needs of housing in Soledad and so increase housing affordability.

Additional land use policies from the City General Plan would also apply to this project.

Policy L-10 The City shall monitor development and adjust land use designations and new residential project approvals as needed to promote a reasonable balance between employment-generating land uses and housing.

Policy L-11 The City shall encourage large residential development projects to be phased or timed with development that will provide primary wage-earner jobs.

Policy L-12 The City shall maintain an adequate supply of land in appropriate designations to accommodate projected household growth, maintain affordability to moderate and below moderate income groups, and maintain acceptable vacancy rates.

Inclusionary Housing Ordinance

On July 6, 2005, the City Council adopted Section 17.42, Inclusionary Housing Ordinance (IHO), with the intent of increasing the production and affordability of affordable housing units. The IHO requires that 20 percent of the proposed affordable units be restricted affordable units pursuant to execution of an Affordable Housing Agreement between the Developer and City. Inclusionary units must be affordable to the target income categories in the following proportions: 8 percent moderate income, 6 percent low income, and 6 percent very low income. The ordinance establishes several development principles for development of inclusionary units:

> 17.41.050 A-5: "Inclusionary units should be similar in size and design to market rate units within the development;"
>
> 17.41.140 "(1) The development shall provide for the dispersal of inclusionary units to the maximum extent feasible. (2) Multi-family buildings may contain any proportion of inclusionary units, but no inclusionary units should be located to or in the immediate vicinity of another inclusionary housing development."

Environmental Impact Report on the Soledad General Plan. The General Plan EIR evaluated potential effects on population and housing associated with the adoption and implementation of the Soledad General Plan, including future development within the Miravale III project site. This program-level EIR focused on general impacts associated with implementation of the General Plan, rather than project-specific impacts associated with individual development projects, such as the Miravale III project. According to the General Plan EIR, the following Housing and Population impacts were identified:

- Continued development of the City as contemplated in the General Plan will result in considerable additional housing and population growth, which in turn could affect the supply of affordable housing and the relationship between jobs and housing. This impact is considered adverse but not significant.

Miravale III Specific Plan

One of the primary goals of the Miravale III project is to provide the City of Soledad with workforce and affordable housing that is integrated in neighborhoods with market rate housing. This includes housing in the "very low," "low," and "moderate" categories. It is also includes workforce housing, which is comprised of smaller detached and attached units that are more affordable by design.

The Specific Plan would ultimately provide approximately 4,200 attached and detached residential units, of which 54 percent would be affordable per the Housing Element requirements. To assure development of affordable housing, Section 2.5 of the Specific Plan contains the following policies and implementation measures:

- All six of the Village Residential (VR) areas are located next to single family residential neighborhoods. The VR residential areas should arrange units/lots that abut or face onto adjacent single family residential (LDR) neighborhoods to face the street. This will create neighborhood streets lined with lots and homes and not segregate the affordable units by separating them with parking areas.

- Sprinkle affordable lots throughout the single family neighborhoods.

    - Locate smaller lots adjacent to the mid-block pedestrian parkway connections. The pedestrian parkway will give the appearance of a larger lot.

    - Locate duets or duplexes on key corner lots. This will keep the building massing consistent within the neighborhood and allow for one garage door to be accessed off of one street and the other off the intersecting street (avoiding double garage doors on one elevation).

Relevant Project Characteristics

The project's proposed development would protect and enhance the quality of the City's existing housing stock and allow for future economic growth that would help maintain a local jobs/housing balance. Implementation of the project includes the development of approximately 4,200 residential units on approximately 388 acres within the 920-acre planning area and the creation of 550 jobs. Development of the project would occur over a 15- to 20-year time period, with buildout occurring between 2023 and 2028.

The overall gross density at buildout would average 10.8 units per acre. The residential neighborhoods would contain a variety of housing types and lot sizes enhanced by open space and recreational amenities. The types of housing may include custom homes, production detached homes, cluster homes—attached and detached, and garden apartments.

The lowest density neighborhoods with the largest lots are located on the eastern hillsides. Typical lot sizes range from 7,000 sf to 55,000 sf (0-2 du/ac). Approximately 983 single-family units are planned for the first two phases of the project, while another 487 single-family homes would be built in Phases 3 and 4 for a total of 1,470 units. There are approximately 118 smaller affordable lots "sprinkled" throughout the single family neighborhoods. Medium density neighborhoods (6.1 - 12 units per net acre) occur within the Village Residential designated areas. Typical lot sizes range from 2,500 square feet to 5,000 square feet. This designation is intended to provide for detached and attached single-family homes, duplex homes, and triplex homes on smaller lots within walking distance to neighborhood parks. Higher

residential density neighborhoods are generally found in proximity to the neighborhood commercial center in areas designated for Village Residential. Allowable density ranges from 12.1 to 25 units per acre with an average density of 18.5 dwelling units per acre. Housing products range from attached single-family homes (townhomes) to garden apartments and larger apartment complexes.

Thresholds of Significance

In accordance with CEQA Guidelines, a project impact would be considered significant if the project would:

- induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension or expansion of infrastructure);
- displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; or
- displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

The only threshold that would apply to the project is the inducement of population growth, since the project would not displace existing housing or people.

Impacts and Mitigation

Displacement

The Specific Plan area is composed of eight separate but contiguous parcels totaling approximately 920 acres of rolling grasslands and agricultural lands. The project site is currently used for grazing and agricultural uses. There are two single family homes, the only existing structures on the site, and a row of eucalyptus trees that line one side of San Vicente Road, which will be removed as part of this project. There are an additional 10 existing residential units which are not part of the project but are centrally located within the project area. They are located on a 3.58 acre parcel (APN # 257-081-32). Removal of these existing houses is not proposed as part of this project. **The project would have no significant impact associated with displacement of housing or people.**

Population Growth

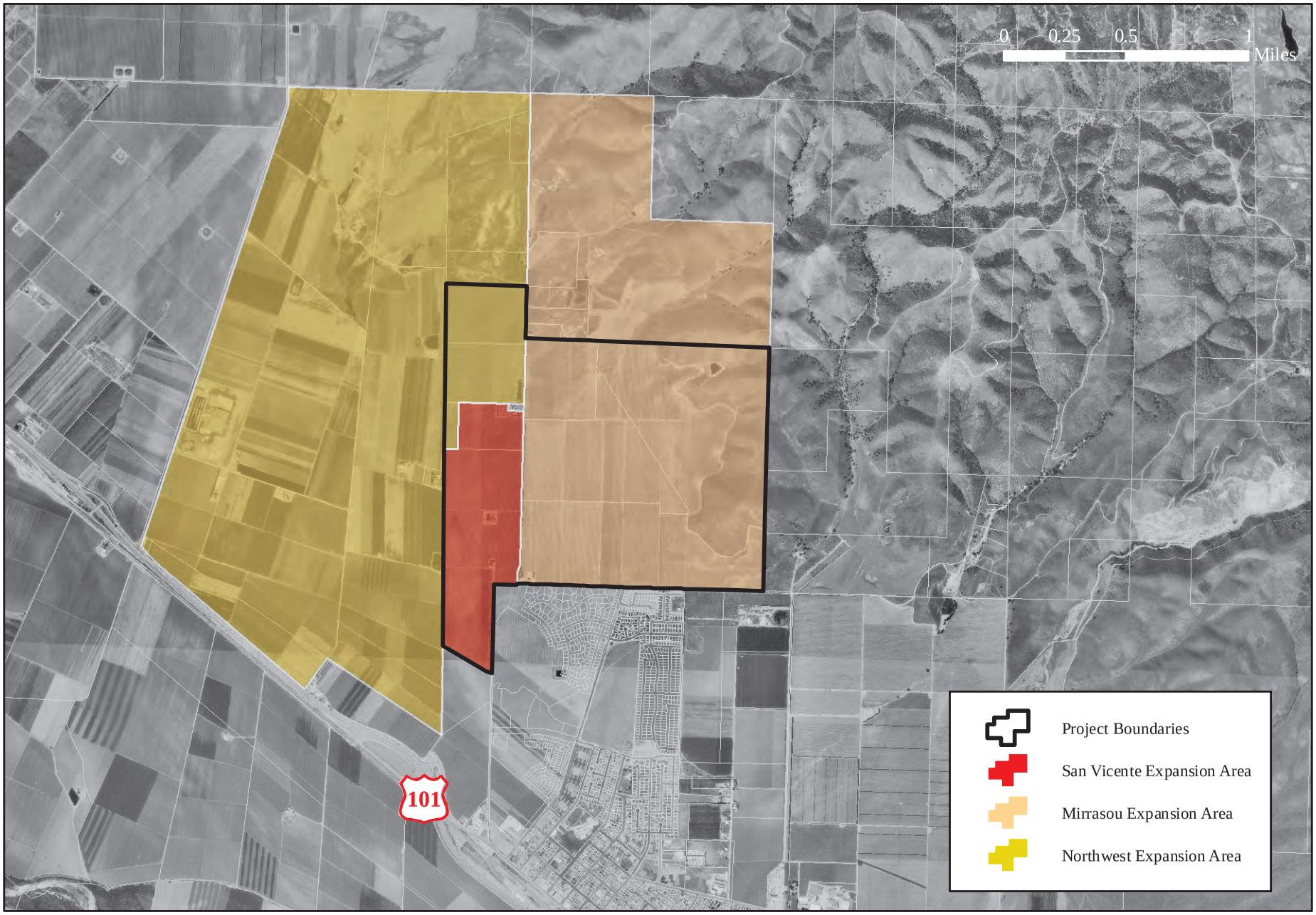
The project would increase population in the area from Soledad's existing population (2008) of 27,905 which includes the prison population. The housing component of the Specific Plan includes the development of 4,200 residential units, including 1,470 single family units and 2,730 multi-family units. Based on assumptions for persons per housing type developed by City staff, the number of persons per dwelling unit is assumed to be 4.5 for three bedroom multi-family residential, 4 for two bedroom multi-family residential and single-family residential, and 1.75 for senior and studio/one bedroom multi-family residential.[1] Using these factors, the 4,200 new units proposed by the project could result in an additional 15,201 people. Table 4.11-4 shows the persons per household factor by residential type and estimated population from project residential development. This additional population represents about 54 percent of Soledad's existing (2008) population, 42 % of its projected population in 2015 (35,938) and 39% of its projected population in 2020 (39,463).

[1] Table 4-1 Miravale III Specific Plan, June 2007.

Table 4.11-4 Persons per Household Miravale III Specific Plan Area			
Proposed Housing Type	**Total Units**	**Persons per Household**	**Total Population**
M3-LDR	1,470	4	5,880
M3-VR			
Senior	500	1.75	875
Studio & 1 bedroom	335	1.75	585
2 bedroom	1,338	4	5,352
3 bedroom	558	4.5	2,509
TOTAL	**4,200**		**15,201**
Source: Miravale III Specific Plan, Table 4-1, June 2007			

The project site is however, in an area planned and designated for future expansion and the General Plan anticipated a significant population growth associated with the development of the future expansion areas, including the project site. The EIR estimated the population holding capacity for the project site, as shown below in Table 4-11.5 under the expansion areas for Mirassou, San Vincente and Northwest Expansion Area. The following holding capacity and population projections for each expansion area estimate a total population in these expansion areas of 36,052 persons and approximately 9,012 additional dwelling units out of a total population at full buildout of 57,000. The Miravale III project site contains only a portion of the Northwest Expansion area (approximately 8%) and Mirrasou expansion area (approximately 75%) and the entire San Vicente West expansion area (see figure 4.11-1). Using these approximations, the project site, comprised of portions of three identified expansion areas, has a holding capacity of 3,110 units.

Table 4.11-5 Holding Capacity and Population Projections from City 2005 General Plan EIR			
Portion of Planning Area	**Holding Capacity**		
	Total Res. Acres	**Dwelling Units (80% of Maximum)**	**Population[1]**
City Limits[2]	736	3,847	15,571
Miravale II	186	1,146	4,582
San Vicente West*	155	950	3,802
North Entry	39	267	1,069
Mirassou*	383	2,262	9,050
Northwest Expansion Area*	950	5,800	23,200
Total At Buildout:	2,449	14,273	57,000[4]
Existing[3]:		3,192	15,000
Remaining To Buildout:		11,081	42,000
1. Excluding prison population of 11,200. 2. Source: City of Soledad 2002 3. California Department of Finance, January 2004 4. Total dwelling units x 4.0 persons per dwelling. *Area of the Miravale III Specific Plan. Please note that the Miravale III project site consists of a portion of these expansion areas. (Source: Table IV-4: 2004 General Plan)			



N

Soledad General Plan Expansion Areas

Figure 4.11-1

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The General Plan identified a non-prison population of about 28,000 residents by 2020 and 57,000 residents at full buildout. Assuming 3,192 existing dwelling units (2005 General Plan EIR), the remaining residential development potential of the General Plan was estimated at about 11,000 units that could be constructed within the City's Planning area.

This growth in population in the expansion areas including the project site would increase demands on existing community facilities, requiring construction of new facilities as well as the extension of infrastructure to the site. According to the adopted General Plan, the site is within an area of planned growth and expansion although outside of the current City limits and sphere of influence for the City. The City will be requesting approval from the Monterey County Local Agency Formation Commission to amend the City's Sphere of Influence to include the acreage for the property and to annex the properties into the City of Soledad. The General Plan and EIR anticipates that "subsequent to adoption of the draft General Plan, and to carry out its objectives, the City will apply to [LAFCO] for a revision to its sphere of influence to denote areas into which the City will extend public services for urban development." *See also, General Plan*, Program 2.1 on p. II-32 ("The City will pursue an application to [LAFCO] for an amendment of its sphere of influence consistent with this General Plan").

The City has identified holding capacities for individual major properties within these expansion areas. The proposed Specific Plan for Miravale III proposes an increase in the applied density for the project site, approximately 1,500 units above the estimated holding capacity for the Miravale III site, according to City Planning staff (Susan Hilinski, email communication, September 2006). Estimation for the purposes of this EIR found a holding capacity for the project site to be 3,110 dwelling units. Based on these estimations, development of the proposed project is anticipated to exceed the projected holding capacity of the project site by approximately 1,090 units. Although the 2005 General Plan EIR identified population estimates in the Planning Areas (table 4.11-5), these figures don't account for types of housing units which can influence population projections. Moreover, the General Plan and EIR anticipate and analyze the impacts of the development of property within the City limits and the expansion areas based on the entire Planning Area's aggregate estimated development potential at buildout. Proposed density associated with project development exceeds development anticipated in the 2005 General Plan and therefore could impact planned services and city wide infrastructure and could be considered growth inducing.

Impact **The project would represent an increase in overall residential holding capacity identified in the 2005 General Plan EIR for portions of the Mirassou, San Vincente and Northwest Expansion Areas within the project area and could be considered growth inducing if annexations and development in the remaining expansion areas exceed development potential addressed in the General Plan EIR. *This would represent a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation measures.***

Mitigation

4-11.1 Phase approval of development applications and annexations in the Mirassou, San Vincente and Northwest Expansion Areas to maintain holding capacity and population projections in Table 4.11-5 of the General Plan EIR. Monitor development approvals in these expansion areas to limit overall density and population growth to the holding capacity identified to ensure consistency with projections in approved City planning documents.

4-11.2 Implement General Plan policies L-2 to L-7 and other applicable policies for phased development and population growth in the project and expansion areas. General Plan policies L-

2 to L-7, (below) identify expansion area requirements and applicable policies for annexation of these areas:

L-2 Further annexations to the City may occur when a) a substantial portion of the development capacity within the existing city limits has been developed, b) a substantial public benefit can be realized through the annexation, such as the provision of public open space, additional parkland, or the protection of scenic vistas, or natural resources, or c) a special type of use is proposed that cannot be practically accommodated in the existing city limits, and d) the project can be found to provide a financial benefit to the City or to be fiscally neutral. The Planning Commission shall review the merits of a request for annexation based on these criteria, and make a recommendation to the City Council.

L-3 A specific plan shall be required for all annexations and development of properties designated *Expansion Area*. Specific plans shall be prepared in accordance with the standards provided in Appendix B of the General Plan.

L-4 The City shall promote patterns of development that allow for the efficient and timely extension of infrastructure and services.

L-5 New development shall not be allowed unless adequate public services are available to serve such new development, or that can be provided at the time of development.

L-6 New development shall pay its fair share of providing additional public services needed to accommodate such development.

L-7 Master plans for sewer, water, roads, drainage and other public improvements shall be required for new development on large undeveloped parcels and may be included in the specific plan required by policy L-3, and as determined by the City.

The additional population increase (15,201) associated with buildout of the project site over the projected 15-20 years of project development represents approximately 54 percent of Soledad's existing (2008) population. Depending upon the timing of project development, this additional population represents a major portion of the projected City wide population of 28,000 by year 2020. This growth in population would increase demands on existing community facilities, requiring construction of new facilities that could cause significant environmental effects. The project also proposes office and commercial uses that would have a direct, economic growth-inducing impact by providing new employment. The project would generate an estimated 550 jobs at the project site. Residential development and residential-serving commercial development is included in the Land Use Plan to meet the needs of new employees.

Impact **Although the project site is located in an area that has been identified for future population growth in City's General Plan, based on the above discussion, the project would result in a significant growth-inducing impact through the introduction of new sources of employment and a significant portion of the City's projected population growth, which would result in additional demands on existing facilities. *This represents a significant and unavoidable impact that cannot be reduced to less-than-significant level with mitigation.***

Housing Element

The Housing Element requires that specific plan areas provide, at a minimum, 15 percent of housing affordable to very low-income households, 14 percent affordable to low-income households, and 25 percent affordable to moderate-income households. The Specific Plan will ultimately provide approximately 4,200 attached and detached residential units of which 1,229± will be affordable (including 500 senior housing units) and another 1,047± workforce housing units. The Housing Element does not contain a definition of workforce housing, therefore units proposed as workforce housing may or may not be restricted in price or rent and at this time cannot be considered affordable. Program 4.3 of the Housing Element requires each subdivision in a Specific Plan area to have a development agreement with the City of Soledad that prescribes the proportion of very low, low, and moderate income housing to be built in the project, the location of these units within the subdivision, and the qualifying incomes of families to which the sale and resale of the units shall be limited. Each Planned Development area will require an affordable housing development agreement which will ensure the project's consistency with the City's Housing Element. Table 4.11-6 outlines both the Housing Element and Inclusionary Housing Ordinance affordability requirements and the affordable units proposed by the Specific Plan.

Table 4.11-6
Proposed Affordable Housing Units for Miravale III Specific Plan Area

City Requirements				Proposed			
Affordability Target Group	**GP Housing Element Affordability Requirement (54%)**	**Inclusionary Ordinance Requirement (20%)**	**Minimum Density Required by GP**	**Proposed General Plan Affordable Units**	**Proposed Percentage/Number of Inclusionary Units**	**Development Location**	**Proposed Construction Phases**
Very Low Income	15%	6%	18 du's/net acre	15% 341± GP Units	6% 136± Inclusionary Units	PD-1,2,3,4,5,6	1 to 4
Low Income	14%	6%	18 du's/net acre	14% 318± GP Units	6% 136± Inclusionary Units	PD-1,2,3,4,5,6	1 to 4
Moderate Income	25%	8%	12 du's /net min.	25% 569± GP Units	8% 182± Inclusionary Units	PD-1,2,3,4,5,6	1 to 4
Workforce housing	N/A		N/A	1047± Workforce Units		PD-1,2,3,4,5,6	1 to 4
				2276 Units	454 Units		
TOTAL	**54%**	**20%**		**54%**	**20%**		

NOTE: Workforce housing / entry level is defined for the Miravale III Specific Plan as housing units/ lots that are smaller in size, therefore more affordable by design. It is the intent of this Plan to provide workforce housing which will be affordable by design, but not restricted in price or rent. The Housing Element requirement of 54% is also a requirement to be affordable by design.

Source: Miravale III Specific Plan, June 2007

The Specific Plan does not, however, meet the Housing Element's requirement for "integrated" neighborhoods where higher density and more affordable housing are integrated with market-rate housing. Figure 2-4 from the Miravale III Specific Plan depicts 59 affordable housing unit lots in the Low Density Residential (LDR) neighborhoods. Development of two units on each of these lots would result in 118 affordable housing units in the LDR neighborhoods, representing only 8% of the 1,470 total single family units. Village Residential areas which contain a majority of the Specific Plan's affordable housing are located "next to" single family neighborhoods. Therefore, affordable housing units are not "integrated" as the Housing Element Program 4-2 stipulates.

Impact **The Miravale III Specific Plan is inconsistent with the Housing Element, which requires affordable housing to be fully integrated with market rate housing.** ***This would represent a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation measures.***

4.11.3 The applicant shall enter into a Development Agreement per Program 4.3 of the City's Housing Element with the City that prescribes the parameters of the development of affordable housing consistent with the City's Housing Element, Inclusionary Housing Ordinance, and the revised Specific Plan. The Development Agreement shall be reviewed and approved by the City of Soledad prior to or concurrent with project approval.

Inclusionary Housing

The Miravale III Specific Plan proposes 454 units restricted affordable pursuant to the City of Soledad's Inclusionary Housing Ordinance. Of these 454 units, 6 percent would be deed restricted for very low-income households, 6 percent to low-income households, and 8 percent to moderate-income households. 454 affordable units represent only 11% of the total 4,200 units proposed. These units would be affordable to target income categories according to income limits established by State Department of Housing and Community Development for Monterey County. As proposed, the Specific Plan does not meet the 20 percent requirement and therefore the project would not be consistent with the City's Inclusionary Housing Ordinance.

Impact **The Miravale III Specific Plan is inconsistent with affordable housing requirements of the City's Inclusionary Housing Ordinance.** ***This would represent a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation measures.***

4.11.4 Prior to project approval, the Specific Plan shall be revised to provide 20% of the units proposed in each Planned Development area and the Low Density Residential area to be affordable housing units. Alternatively, the project applicant shall dedicate real property for affordable housing or submit payment of in-lieu fees in order to ensure project consistency with the requirements of the City of Soledad's Inclusionary Housing Ordinance, subject to the approval of the City of Soledad. The project's consistency with the City's Inclusionary Housing Ordinance shall be evidenced in the Development Agreement (DA) prepared for the project, subject to the approval of the City of Soledad. The DA shall be reviewed concurrently with the project's General Plan amendments, Specific Plan and the Vesting Tentative Map.

4.12 PUBLIC SERVICES AND RECREATION

Introduction

This section assesses the proposed project's potential impacts on public services and recreation. To obtain information from public service providers, DD&A contacted the City of Soledad Police and Fire Departments in order to gather information on existing fire and police facilities, staffing for the project area, and current, as well as, target response times. The Soledad Unified School District was contacted to obtain information on student enrollment capacity.

Setting

Police and Fire

Fire protection services within the City of Soledad are provided by the City of Soledad Fire Department. The closest fire station is located on 525 Monterey Street in Soledad. Mission Rural Fire Protection District also contracts with the City of Soledad to provide fire department services to the rural areas surrounding the City. According to the City of Soledad General Plan EIR, the Soledad district is approximately 42,000 acres and is bounded by the foothills of the Gabilan Range and the Santa Lucia Mountains.

In May of 2006, a fire analysis, prepared by Citigate and Associates regarding fire services within the City of Soledad, found that existing fire personnel levels and responses times were inadequate to meet the needs of a small, but growing city. The report further concluded that the City should adopt a target response time of seven (7) minutes. In response to this analysis, the City of Soledad Fire Department hired additional staff to insure that adequate fire personnel were available to meet current demands. Currently, the City maintains a full-time staff consisting of ten full time personnel, a part-time staff consisting of 12 individuals and 14 Volunteers. The Fire Department is equipped with two fire engines, an aerial ladder, a wildland fire engine, water tender, a utility pick-up, a staff vehicle and a new Type I fire engine on order. In 2007, the fire department responded to 1300 alarms, of which 795 were located within the City of Soledad. The Fire Department also provides emergency response services to area residents.

The Soledad Police Department, which is located at 236 Main Street, provides police protection services within the City of Soledad. The City currently has 23 sworn officers and six non-sworn officers (pers. comm. Police Chief Richard Cox, September 20, 2006). This is equivalent to approximately 1.1 officers per 1,000 residents. Currently, there are five shifts per day with approximately 2-3 sworn officers on duty per shift. In 2005, the Police department responded to 16,303 calls, with the majority of calls being related to burglary attempts. Average response times are approximately three minutes. In order to augment its services, the Police Department has a mutual aid agreement with the cities of Greenfield and Gonzales and the Monterey County Sheriff's Department.

Schools

The Soledad Unified School District (SUSD) provides educational services to the City, which includes San Vicente School, Gabilan School, Rose Ferrero Elementary School, Frank Ledesma Elementary School, Jack Franscioni Elementary School, Main Street School, and Soledad High School. SUSD has five (5) elementary schools serving grades K through 6, one middle school serving grades 7-8, and one High School for grades 9 through 12. Currently, adequate capacity exists to accommodate additional students, although several of the SUSD's schools are approaching full capacity. Table 4.12-1 depicts current student enrollment and student capacity. There are also two continuing education facilities

(Shalom High School and Pinnacles High School) within the City that provide opportunity for students to complete their high school diploma or GED, as well as, providing practical work experience and English language training. While there are no community colleges located within the City, Hartnell community college is located approximately 30 miles north in the city of Salinas. Currently, new school facilities are being proposed throughout the community, including three elementary schools. Construction of these facilities is dependent on future development and will be constructed as the City continues to expand.

Table 4.12-1
Current Student Enrollment

School	Grade Level	Student Enrollment	Capacity	Enrollment Capacity (%)
San Vicente	K-6	557	650	85.6%
Gabilan	K-6	400	650	61.5%
Rose Ferrero	K-6	401	650	61.6%
Frank Ledesma	K-6	589	650	90.6%
Jack Franscioni	K-6	447	650	68.7%
Main Street	7-8	630	652	96.6%
Soledad High	9-12	1,093	1,400	78.0%
Source: City of Soledad General Plan and Soledad Unified School District 2007.				

Libraries

The Monterey County Free Libraries network supports Soledad residents with a branch at 401 Gabilan Drive. The County also operates two bookmobiles, a books by mail program, deposits collections in local schools, and a number of special programs, including a literacy program that operates a literacy outreach vehicle focused on family literacy and kindergarten readiness. Funding for the Soledad Library comes primarily from a share of the property tax collected within its service area.

Recreation

According to the City of Soledad General Plan, approximately 27 acres of land are dedicated to recreational uses within Soledad. These facilities include a little league field, an indoor swimming pool, and public parks. Table 4.12-2 depicts recreational facilities within the City and classifies each park type based on the type of recreational usage (i.e., passive or active). Active recreational facilities include a mix of recreational uses and may include athletic fields, hard courts, children's play areas, and structures for recreational activities. Passive recreational facilities are generally undeveloped or minimally improved lands that include landscaped areas, non-landscaped open space, trail systems, and other similar uses. Parkland is further classified according to type and size. According to the General Plan, parkland within the City of Soledad is classified as the following:

- **Linear Parks**: A linear park is often developed along natural or human made corridors, such as creeks, drainage facilities, or roads. The size of a linear park may vary but should be of sufficient width to protect sensitive resources and to accommodate a pedestrian and/or bicycle trail. Facilities provided with linear parks are usually limited to seating, picnic tables, and in some instances, a tot-lot and par course.

- **Pocket Park/Mini Parks**: A pocket park is a small facility designed to serve a limited population or group (such as seniors or small children) within about a one quarter mile radius. Such parks are typically between 0.25 to 2 acres in size and provide limited amenities that may include play equipment, seating, picnic areas, and landscaping.

- **Neighborhood Park**s: Neighborhood parks serve primarily one neighborhood and provide active and passive facilities for all age groups. Such parks may range in size from 2 to 15 acres and generally provide open turf areas, picnic areas, play equipment, multiuse game courts, drinking fountains, restrooms, parking, and landscaping. Neighborhood parks typically serve an area within one quarter to one half mile of the park.

- **Community Parks**: A community park serves multiple neighborhoods or an entire community. These parks are usually developed on large sites (15 to 30 acres) and provide a wide range of facilities and activities, such as larger play areas for children, picnic areas, play fields and courts (tennis, basketball, baseball, etc.), and open turf areas, as well as parking, lighting, landscaping and restrooms.

- **Regional Parks**: Regional parks serve multiple communities, provide larger facilities and amenities on sites, and range in size from 100 to 200 acres. Regional parks may provide large open areas, group picnic facilities, trails, campgrounds, sports fields, a golf course, courts for tennis and volleyball, and other amenities, such as parking, landscaping, and restrooms. The communities served by a regional park should be within one hour driving distance and may be subject to user fees. The Draft Monterey County General Plan proposes to locate a regional park near Soledad between the existing city limits and the Los Coches Adobe near the confluence of the Salinas and Arroyo Seco Rivers.

As identified in Table 4.12-2, in addition to active recreational opportunities, there are three (3) passive park facilities located within Soledad, totaling approximately 36.35 acres. There are also several regional parks and open space areas within the vicinity of the City, including the Mission Nuestra Senora de la Soledad, Pinnacles National Monument, and the Arroyo Seco area that are available to area residents. According to the City of Soledad's General Plan, a regional park is planned north of the project-site on the Windmill property. Additionally, there are three parks totaling approximately 6.52 acres that are planned within the City.

Table 4.12-2
Park and Recreation Facilities

Park Name	Size (acres)	Recreational Type
Vosti Park	6.4	Active
Ramirez Park	1.25	Active
Bill Ramos Park	1.25	Passive
Front Street Park (Old Town Park)	0.6	Passive
Chester Aaroe Park	2.8	Active
Indoor Swimming Pool	4.0	Active
Lum Park	2.5	Active
Gallardo Park	4.0	Active
Los Coches Adobe	-	-
Veterans Park	4.0	Active
Santana Park	4.2	Active
Rotary Park	4.0	Active
Salinas River Open Space	50	Passive
TOTAL:	+/- 89.0	

Source: City of Soledad General Plan and General Plan EIR 2005, LAFCO Municipal Service Review 2006.

Regulatory Environment

City of Soledad General Plan

The Public Services/Facilities and the Park/Recreation Elements of the General Plan contain numerous goals and policies to enhance the level of recreational amenities and public services provided to the City and surrounding areas. Please refer to Table 4.9-2 of the Land Use section for a detailed analysis of the project's consistency with the relevant provisions of the Soledad General Plan. The following recreational and public services policies apply to development within the project area:

Policy PR-1 The City will acquire future park and recreation land and facilities by:

a. Requiring park dedications from future residential subdivision at the rate of three acres per 1,000 population anticipated in the project;
b. Requiring payment of a park impact fee, or requiring the dedication of land and improvements in-lieu of fees, from all new development;
c. Cooperating with Monterey County to acquire land for a new regional park in the Soledad planning area;
d. Acquiring parkland near existing or potential public park and recreation sites, or near quasi-public or private sites that have a good opportunity for a joint use agreement. Acquired parkland should be contiguous to proposed or existing park and recreation facilities or provide a logical connection.
e. Pursuing joint use agreement with public and private schools, other public government agencies, private park and recreation providers, and institutions with potential parkland to make existing or proposed park and recreation facilities to the community on an extended basis.

Policy PR-10 The City should provide a pedestrian network within the City Limits. The system should:

a. Accommodate pedestrians and bicycles.
b. Connect residential neighborhoods with: 1) Soledad's downtown, 2) schools, 3) City park and recreation facilities, and 4) regional trails.

Policy PR-16 Parks shall be designed to be compatible with the neighborhoods in which they are located, and shall provide security and privacy to adjoining properties. Where necessary, buffers shall be provided between park and recreation lands and adjacent development to provide privacy and a physical separation between uses.[1]

Policy PR-24 New development shall be required to add to proposed or existing park and recreation projects where legally feasible. Public or private development shall provide, as appropriate and legally feasible: 1) a buffer between proposed development and existing park, recreation and/or open space parcels to minimize conflicts between development and existing facilities; and 2) gates, fences, or other deterrents when such facilities are deemed necessary to discourage prohibited or non-compatible uses from entering park, recreation or open space lands.

Policy PR-25 New development shall not adversely impact adjacent park, recreation, or open space lands.

[1] Buffers may include setbacks, landscaping, fencing, and/or dramatic breaks or changes in topography.

Policy S-20 The City will work cooperatively with the Soledad Unified School District to monitor housing, population, and school enrollment trends and in planning for future school facility needs. The City shall assist the District in locating new school sites.

Policy S-21 The siting of new schools shall be coordinated with the City's Circulation Element to ensure that traffic conflicts are avoided, the safety of students is addressed and roadway function is not reduced, including provisions for off street student drop-off/pick up.

Policy S-22 The City will work closely with the school district to secure adequate funding for new school facilities and where legally feasible, shall provide a mechanism which requires development projects to mitigate the cost of providing school facilities needed to serve such development, consistent with relevant provisions of State law.

Policy S-23 The City, to the extent feasible, shall ensure that new school facilities are constructed and operating prior to the occupation of residences which the schools are intended to serve.

Policy S-29 The City shall strive to achieve and maintain a ratio of a minimum of 1 police officer per 1,000 residents.

Policy S-30 The City shall strive to achieve and maintain emergency response time to a maximum of 5 minutes for police emergencies.

Policy S-32 The City shall require new development to pay its fair share of providing or funding facilities that, at a minimum, achieve and maintain the above police protection standards.

Policy S-36 The City shall strive to achieve and maintain an emergency response time of 5 minutes or less for fire emergencies over 90 percent of the City.

Policy S-37 The City shall require new development to pay its fair share of providing or funding facilities that, at a minimum, achieve and maintain the fire protection standards identified in Policies S-35 and S-36.

Police S-38 The City shall ensure that all proposed developments are reviewed for compliance with fire safety standards per the Uniform Fire Code and other City standards and ordinances.

Policy S-39 New non-residential development and non-residential additions of over 100 square feet of habitable space shall provide fire sprinklers in accordance with City standards, and as determined by the Fire Marshal. New residential development shall be provided with fire sprinklers unless the developer provides studies that prove the standard identified in Policy S-35 is not negatively affected.

Environmental Impact Report on the Soledad General Plan. The General Plan EIR evaluated potential recreational and service systems impacts associated with the adoption and implementation of the Soledad General Plan, including future development within the project area. This program-level EIR focused on general impacts associated with implementation of the General Plan, rather than project-specific impacts associated with individual development projects, such as the Miravale III project. According to the General Plan EIR, the following recreational and service systems impacts were identified:

- Buildout of the General Plan would significantly increase the City's population and demand for parkland. This impact was identified as significant, unless mitigated.

- Buildout of the General Plan would increase the need for fire fighting personnel and equipment. This impact was considered significant, unless mitigated.

- Buildout would require additional fire protection facilities and equipment to maintain an acceptable response time. This impact was considered significant, unless mitigated.

- Buildout would increase the need for police protection personnel and equipment. This impact was considered significant, unless mitigated.

- Buildout would generate additional school aged children. The number of new households and associated students would significantly increase the demand for school facilities. This impact was considered significant and adverse.

Soledad Municipal Code

The following discussion provides a general overview of applicable provisions of the City of Soledad Municipal Code, in addition to associated Ordinances and City Council Resolutions, as they pertain to development impact fees for various public facilities. This information is intended to provide a contextual background of various City requirements pertaining to the payment of public facilities impact fees. Moreover, as discussed below, the City of Soledad annually updates the various development impact fees to reflect the percentage change in the construction index for San Francisco. As a result, the proposed project will be subject to the requirements of the adopted impact fee in effect at the time of building permit issuance.

Ordinance No. 637

On October 18, 2006 the City Council adopted Ordinance No. 637, which added Chapter 14.06 to Title 14 of the Soledad Municipal Code. The purpose of Ordinance No. 637 was to identify impact fees for public facilities in order to mitigate potential impacts to public facilities associated with new developments. As required pursuant to Section 14.06 of the Soledad Municipal Code, all public impact fees are required to be annually adjusted to reflect the annual percentage change in the construction index for San Francisco as reported in the Engineering News-Record. In order to mitigate potential project-induced impacts to public facilities, the project applicant would be required to submit payment of public facilities impact fees consistent with the requirements of Ordinance No. 637 and the corresponding impact fee in effect at the time of building permit issuance.

Miravale III Specific Plan.

Sections 4.0 and 5.0 of the Miravale III Specific Plan identify goals and policies to ensure the adequate provision of public services and recreational space. Applicable goals are summarized as follows:

- Parks, Recreation, and Open Space Goal P-1 states that adequate park, open space, and recreational facilities shall be provided in order to meet project demands. Numerous policies are contained in the Specific Plan to insure that adequate facilities are provided to meet anticipated demands.

- Public Services and Facilities Goal PSF-1 states that project development should provide an efficient, self sustaining system of public facilities that accommodate the needs of project build-out.

- Goal PSF- 2 further states that project development should provide adequate and reliable services and utilities to area residents and business while ensuring that adequate maintenance of these facilities is provided.

Relevant Project Characteristics

The Specific Plan calls for a mixed-use urban development consisting of new roads and infrastructure, single-family and multi-family residential units, retail commercial space, a golf course, school and public safety sites, a 120-unit hotel, and open space and recreation areas.

As identified in Section 6.3.4 of the Miravale III Specific Plan, a centrally located site along West Street has been designated for the future location of a fire station substation and a remote police station in order to meet project generated demands for police and fire protection services (See Figure 3-3). Moreover, according to Section 5.2.1 of the Specific Plan, three school sites have been identified within the Specific Plan area. Specifically, the proposed project would provide two elementary school sites located on the southeast corner of Orchard Lane and Crest Street and north of West Street between San Vicente Road and Crest Street. A junior high site is also planned east of San Vicente Road and north of West Street. However, the proposed junior high site is located within lands contracted by the Williamson Act. If the proposed junior high school must be constructed prior to the expiration of the Williamson Act contract, an alternative location has been identified east of San Vicente Road and north of the elementary school proposed between San Vicente Road and Crest Street. The proposed project also includes a site for the future location of a Community Education Center/Continuation school within the northwest portion of the project site.

As previously identified, the proposed project would also provide recreational opportunities to area residents. Specifically, in addition to providing an approximately 159-acre semi-private golf course and driving range, development of the proposed project would result in the construction of four pocket parks totaling approximately 11.52 acres. The four pocket parks would be distributed throughout the proposed development to provide active recreational uses to area residents. Moreover, according to the Specific Plan, approximately 24.27 acres of additional parkland would be provided in the six Village Residential areas. Although no formal plans have been prepared for these areas, future development of these sites would be required to provide improved parkland consistent with the Specific Plan and General Plan requirements. Table 4.12-3 provides an estimated parkland requirement according to maximum allowable density for each of the proposed Village areas per the Village Residential standards contained in the Specific Plan.[2] The Specific Plan also identifies approximately 5.96 acres of pedestrian trails within the planning area, 1.90 acres of park connections, and a 1.95 acre linear park. In addition to active recreational uses, the Specific Plan has identified approximately 61.90 acres of open space for passive recreational use. In addition to the 5.96 acres of pedestrian trails, the proposed project also includes an additional 4.22 miles of Class II bike lanes, as well as, another 4.04 miles of trails within the golf course alignment.

[2] It is important to note, however, that parkland requirements may vary depending on project-specific plans. The calculations in Table 4.12-3 assume maximum buildout per the Village Residential standards contained in the Specific Plan. Future development of the proposed Villages may be subject to variation.

Table 4.12-3 Parkland Requirements for Proposed Village Areas	
Village Area	**Required Parkland**
Village 1	9.27 Acres
Village 2	6.0 Acres
Village 3	1.0 Acres
Village 4	1.0 Acres
Village 5	3.5 Acres
Village 6	3.5 Acres
Source: Miravale III Specific Plan	

Thresholds of Significance

In accordance with CEQA Guidelines, a project impact would be considered significant if the project would:

- result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any public services:
  - fire protection;
  - police protection;
  - schools;
  - parks;
  - other public facilities;

- impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan;

- expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands;

- increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or

- include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Impacts and Mitigation

Police and Fire

Implementation of the proposed project would create an increased demand for police and fire services due to the increase in the square footage of commercial space and the development of new residential units. Project development would result in the introduction of 15,201 persons within the City, effectively increasing the response area for both police and fire services. The increased demand for police services would be generated by potential crimes that could occur within the proposed project site. The increased

demand for fire protection services would be generated by the expansion of the service area and the potential for fire hazards, including but not limited to, structural fires, medical emergencies, and hazardous conditions associated with project buildout.

According to the City of Soledad Fire Department, average response times to the main entrances of the project site vary between five and seven minutes (Interim Fire Chief Steven Negro, personal communication, September 2006, and Fire Chief Richard Foster, personal communication, June 2007). According to a fire analysis prepared by Citigate, which was adopted by the City Council in April 2006, the first fire engine should arrive on scene within seven minutes, 90 percent of the time. As indicated by the City of Soledad Fire Department, project development would impact existing response times for fire protection services due to the expansion of coverage area. As a result, the Fire Department would not be capable of achieving the identified target response time of seven minutes due to project development (Interim Fire Chief Steven Negro, personal communication, September 2006, and Fire Chief Richard Foster, personal communication, June 2007).

As previously identified above, a site has been designated along West Street to ensure that average responses times would be within acceptable levels. According to the City of Soledad Fire Chief, the proposed location of the fire substation would be adequate to provide fire protection services to the project area (Fire Chief Richard Foster, personal communication, January 2008). Project-specific mitigation, however, would be warranted to ensure that the proposed facility is operational prior to the initiation of construction activities associated with Phase 2 of the proposed development. More specifically, the Fire Department has indicated that average response times outside of Phase 1 would be in excess of established standards. Therefore, the Department has determined that it is necessary that the fire substation be constructed and operational prior to additional construction in subsequent phases of the proposed project to minimize potential fire-related hazards. Implementation of Mitigation Measure 4.12-1 would reduce project-related impacts to a level considered less-than-significant.

In addition to adversely affecting target response times, development of the proposed project would expose people and/or structures to wildland fire hazards. More specifically, the foothill portions of the project site are identified as being subject to wildland fires and are identified as a "State Responsibility Area" by the State of California. According to the State of California, these areas are subject to fire hazards and typically consist of "timber, brush, undergrowth or grass…which protects the soil from erosion, retards runoff of water, or accelerates percolation, and lands principally used for range of forest purposes." Figure 4.12-1 identifies portions of the project site that are located within the State Responsibility Area. Vegetation within these areas is consistent with the State's definition. Currently, fire protection services within these areas are provided by the California Department of Forestry; however, upon annexation, these areas will be under the jurisdiction of the Soledad Fire Department. Although fire services would be provided by the City, homesites within these areas would be required to adhere to fire safety standards, including setbacks in the form of defensible spaces from areas designated as Open Space. While agricultural/urbanized areas are considered to have a relatively low fire hazard compared to wildlands, wildland fire hazards, due to prevailing wind patterns in the Salinas Valley, are considered significant. To minimize these hazards, the City Fire Chief implements the fire prevention regulations of the Uniform Fire Code. These regulations specify minimum safety standards for water flow, water pressure, street width and access, and turning radius for fire equipment. The proposed development would be required to be constructed in accordance with all applicable fire and building safety codes, including both the Uniform Building Code and Uniform Fire Code. In addition to adhering to the requirements of applicable fire and building safety codes, implementation of project-specific mitigation requiring a 100-foot defensible space for structures constructed within the foothill areas would ensure that fire hazards are reduced to the extent feasible. Project-related impacts are further reduced to a less-than-significant level through the incorporation of mitigation requiring that a fully operational fire station at the designated West Street location be constructed prior to the issuance of any building permits for Phase 2 of the

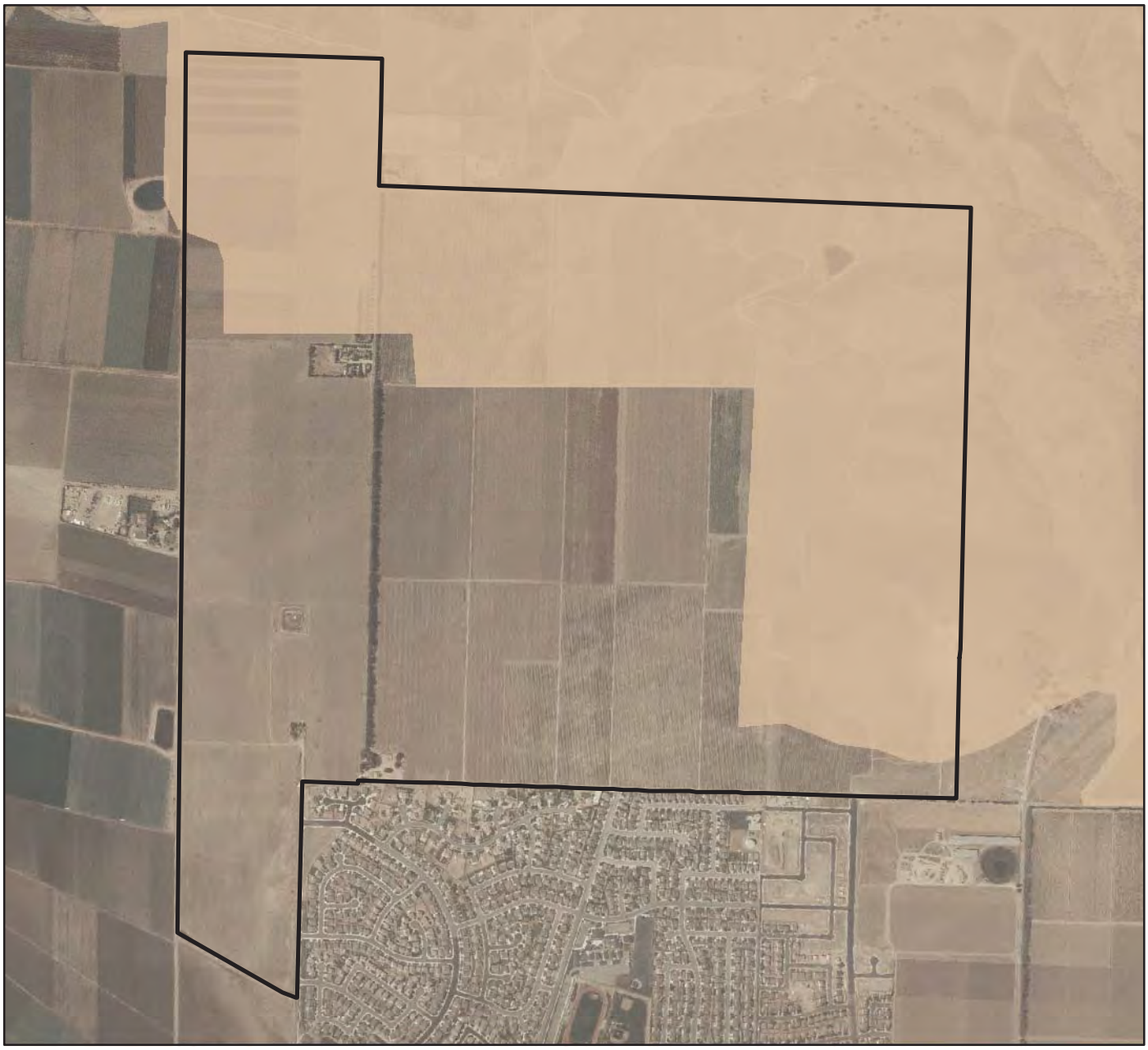
proposed project. As a result, project-related impacts associated with the exposure of people and/or structures to fire hazards are considered less-than-significant.

Development of the proposed project would also result in potentially significant impacts in terms of police protection services. More specifically, development of the proposed project has the potential to adversely affect average response times and generate additional demands for services beyond current levels. Additionally, development of the proposed project would also conflict with several General Plan policies pertaining to police staffing and target response times.

According to the City of Soledad Police Department, current responses times within the City average approximately three minutes. The annexation and subsequent buildout of the project site would effectively increase the response area for police protection services. Consequently, project development has the potential to adversely affect emergency response times. According to General Plan Policy S-30, the "City shall strive to achieve and maintain emergency response time to a maximum of five minutes for police emergencies." Development of the proposed project, without mitigation, would exceed this threshold and would have a significant adverse impact on existing police protection services. As identified in Section 6.3.4 of the Specific Plan, a centrally located site has been designated for the future siting of a remote police station and a fire station. Implementation of the mitigation identified below requiring that the police substation be constructed in proposed location prior to the issuance of any building permit for Phase 2 would ensure that average response times are within the identified target range. As a result, project-related impacts would be reduced to a level considered less-than-significant.

Development of the proposed project would also generate additional demands for police protection services associated with the expansion of service area and corresponding increase in population. In 2005, according to the Monterey County Emergency Communication Department, the City of Soledad Police Department responded to 16,303 calls, which included traffic violations, thefts, burglary, peace disturbances, and medical emergencies. The introduction of 15,201 persons would substantially increase the population of Soledad and thereby increase demands for police services. As identified in the City of Soledad General Plan, the desired police officer to resident ratio is one officer per 1,000 residents (General Plan Policy S-29). At current staffing levels, development of the proposed project would result in an officer to resident ratio of 0.5 officers per 1,000 residents. Therefore, existing staff levels are insufficient to maintain the identified officer to resident ratio. In order to maintain the established ratio, development of the proposed project would require an additional 15 police officers. This represents a significant impact that can be reduced to a less-than-significant level through the incorporation of mitigation identified below. More specifically, the mitigation measures identified below ensure that adequate funding and facilities would be available to hire additional staffing as necessary and thereby accommodate project development.

The project would result in an increase in the number of calls for police protection and emergency response. Access to the main entrances of the project site is within range of the average response times, however, additional staffing, equipment, and infrastructure (substation) would be necessary in order to serve the proposed development and maintain average response times (Interim Fire Chief Steven Negro, personal communication, September 2006, and Police Chief Richard Cox, personal communication, September 2006). While the proposed development would substantially increase the demand for police and fire protection services within the City of Soledad, the proposed development can effectively mitigate project-related impacts to a less-than-significant level. Additionally, the project would not interfere with an adopted emergency response/evacuation plan since the project site is currently undeveloped and located east of existing urban areas. Implementation of the following mitigation measures would not result in any new environmental impact beyond those identified elsewhere in this EIR.



0 0.125 0.25 0.5 Miles

0 0.25 0.5 Kilometers

Project Boundaries

State Responsibility Area

N

State Responsibility Areas

Figure 4.12-1

Impact **The project would result in an increased demand for police and fire services. *This would represent a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation measures.***

Mitigation

4.12-1 Prior to the initiation of construction for Phase 2 of the proposed development, the proposed fire and police facilities located on West Street shall be constructed and operational. Prior to the issuance of any building permit for new residential and commercial development in Phase 2, the project applicant shall obtain written documentation from the Soledad Fire and Police Departments indicating that the fire and police substations are operational, subject to the review and approval of the City of Soledad.

4.12-2 Prior to the issuance of building permits, the applicant/developer shall pay a City Public Facilities Development Impact Fee for each type of new development in accordance with the adjusted impact fee in effect at the time of building permit issuance. All fees shall be subject to the review and approval of the City of Soledad Community Development Director.

4.12-3 Prior to the recordation of each final map for development within areas currently designated as "State Responsibility Areas," the applicant shall submit evidence, subject to the review and approval of the City of Soledad Fire Department, demonstrating that a minimum 100-foot defensible space will be provided around any structure constructed within the foothill area. The defensible space shall be cleared of and maintained free of brush and combustible debris, and any landscaping placed within the defensible space shall be irrigated.

Schools

Within the Soledad planning area, the SUSD currently operates five (5) elementary schools (grades K-6), one middle school (grades 7-8), one high school (grade 9-12), and two continuation/alternative high schools. Development of the proposed residential uses would generate additional students, associated with the increase in population. The SUSD has prepared student generation rates for residential uses. Using these rates, project buildout is anticipated to generate 4,291 school-aged children, as presented in Table 4.12-4 below.

Table 4.12-4
Projected Student Generation

Grade Level	Generation Rate/Unit	No. Units[1]	No. New Students
K-6	0.662	3,700	2,449
7-8	0.169	3,700	625
9-12	0.329	3,700	1,217
		Total:	4,291

1. Senior units are excluded from total number of units as these units are not anticipated to generate additional students.
Source: Soledad Unified School District 2008.

Project development would result in an increase in student population thereby exceeding existing enrollment capacity of the SUSD. In order to accommodate anticipated student capacity, the project proposes to provide three school sites, including two elementary schools and one middle school. The proposed middle school is currently located on a portion of the site under Williamson Act contract. An alternative middle school location has been proposed in the event that the middle school, depending on

future capacity and enrollment figures, requires construction prior to the expiration of the Williamson Act contract. Figure 3-3 shows the proposed school locations, including the alternative middle school location.

The project, as currently proposed, however, does not provide adequate school sites to accommodate projected students associated with project development. More specifically, according to the SUSD additional school sites are necessary in order to accommodate project demand. In a September 2007 correspondence regarding the potential impacts of the proposed development on school facilities, SUSD indicated that two additional elementary and one high school site would need to be provided to meet project demands. At the time, SUSD projected that project development would result in approximately 4,872 school aged children. These estimates have subsequently been revised based on additional information regarding the number of senior units proposed as part of the proposed project. As indicated in recent correspondence from SUSD (March 2008), senior units are not anticipated to generate additional students. Table 4.12-4, above, reflects the revised student projections, which take into account the number of senior units. Based on the revised student projections and existing school capacity, at least two additional elementary sites and a high school site would be necessary to meet project demands. As a result, the proposed project does not provide adequate school facilities. This is considered a potentially significant impact.

While overcrowding itself does not constitute a significant effect on the environment, previous court rulings have determined that overcrowding would constitute a significant impact if the overcrowding would ultimately require physical changes in the environment, such as construction of new school facilities. As previously discussed, project development would necessitate the construction of at least three additional facilities beyond those currently identified in the Specific Plan. According to the SUSD, an additional 40-acre high school location would be warranted to accommodate projected students. Based on current enrollment projections, as well as anticipated student growth associated with previously approved projects, the additional High School site would need to be operational to accommodate Phase II of the proposed project. Moreover, based on the projected student population figures contained in Table 4.12-4, an additional two elementary schools would also be warranted. At least one of the additional elementary sites would also need to be operational at the time of Phase II of the proposed project to ensure adequate facilities are available to meet project demands associated with Phase I and II of the proposed project. Based on the preceding discussion, the project, as currently proposed, provides inadequate school facilities to accommodate projected students. This is considered a potentially significant impact that can be reduced to a less-than-significant level through the incorporation of mitigation. To further minimize project impacts, the City of Soledad requires that school impact fees be paid to the school district to mitigate project-related impacts. California State law (Government Code Section 65995) specifies the payment of a school impact fee for each type of new development as an acceptable method of offsetting the effect of new development on the adequacy of school facilities.

Based on current enrollment figures and project generated student population, project development, as currently proposed, would exceed the capacity of existing schools within the SUSD (Jorge Guzman, SUSD, personal communication, August, September, November 2007, February, and March 2008). Project adherence to the General Plan and Specific Plan education policies requiring that new school facilities are constructed and operational prior to the occupation of residences that require the facilities, as well as implementation of the mitigation identified below would ensure that project-related impacts are reduced to a less-than-significant level. Implementation of the following mitigation measures would not result in any new environmental impact beyond those identified elsewhere in this EIR. If, however, the additional school sites are not provided within the project boundaries, development of these facilities may result in additional environmental impacts beyond those identified in this EIR and additional environmental review would be warranted.

Impact **The project would result in an increased demand for educational services.** ***This would represent a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation measures.***

Mitigation

4.12-4 Prior to project approval, the project applicant shall submit evidence, including a revised Specific Plan and tentative map, demonstrating that an additional two elementary school sites of sufficient size and a 40-acre high school site will be designated within the project boundaries to meet project demands, subject to the review and approval of the City of Soledad and the Soledad Unified School District. The 40-acre high school site shall be operational prior to the issuance of any certificate of occupancy for Phase II of the proposed project, unless otherwise approved by the City of Soledad and the Soledad Unified School District[3]

4.12-5 The applicant/developer shall pay a school impact fee for each type of development pursuant to the criteria set forth within California Government Code Section 65995. Prior to the issuance of building permits, the applicant shall pay required school mitigation fees. As indicated above, the fees set forth in Government Code Section 65996 constitute the exclusive means of both "considering" and "mitigating" school facilities impacts of projects [Government Code Section 65996(a)]. They are "deemed to provide full and complete school facilities mitigation" [Government Code Section 65996(b)].

Parks and Recreation

The project proposes to provide public park lands to serve the recreational needs of the proposed development and surrounding community. As identified in the Miravale III Specific Plan, an array of active and passive recreational opportunities would be provided in conjunction with project development, including an approximately 159-acre golf course, four pocket parks totaling 11.52 acres, 61.90 acres of open space, and approximately 4.22 miles of class II Bike Lanes within the Specific Plan area. Moreover, project development includes 1.90 acres of park connections, 5.96 acres of trails, and a 1.95-acre linear park located along the western boundary of the project site. The proposed linear park also serves as an agricultural buffer.

According to General Plan Policy PR-1, new residential subdivisions are required to provide parkland at a ratio of three (3) acres per 1,000 residents anticipated as part of new development. Buildout of the proposed Specific Plan is anticipated to provide housing for approximately 15,201 new persons within the City of Soledad. As such, project development would be required to provide a minimum of 45 acres of improved parkland. As proposed, the project consists of 11.52 acres of improved parks, 1.90 acres of park connections, 5.96 acres of trails, and a 1.95 linear park/agricultural buffer totaling 21.33 acres of improved parkland. For the purpose of this analysis, the golf course is not included as parkland because access would be restricted to persons with scheduled tee times and, therefore, would not be immediately available to area residents. Figure 4.12-2 provides a graphical representation of open space and parkland to be provided as part of project development.

[3] Alternatively, if additional school sites will not be provided in conjunction with project development, the project applicant shall obtain written documentation from the Soledad Unified School District demonstrating that adequate school facilities, including a 40-acre high school and two appropriately sized middle schools, will be available within the City of Soledad to accommodate anticipated project demands. If, however, adequate capacity does not exist, development shall be restricted until such time that additional capacity is available to accommodate subsequent phases of development.

According to the projected population figure identified in **4.11 Population and Housing**, which includes estimates for the buildout of the six Village areas, project development does not meet the minimum required parkland contribution. More specifically, the Specific Plan identifies that future park sites would be provided in conjunction with the development of the six Village areas. As no formal plans have been submitted for these areas, no formal park sites have been officially delineated within these areas of the project site. Therefore, additional park sites would be required as part of development of the Village areas consistent with the requirements of the Specific Plan. As these additional sites have not been officially designated at this time, the project does not meet the minimum required parkland contribution pursuant to the General Plan. This is considered a significant impact. As identified in Table 4.12-3 above, it is estimated that a minimum 24.27 acres of parkland would be necessary in order to achieve the minimum required parkland contribution pursuant to General Plan requirements. Implementation of project-specific mitigation identified below would ensure that future residents have adequate access to parkland consistent with City standards. Because all of the parks and recreation facilities necessitated by the project would be provided on the project site, the environmental impacts of constructing the parks and recreation facilities (e.g., dust and noise emitted during grading) are addressed in the relevant chapters of this EIR. Implementation of the following mitigation measure would not result in any new environmental impact beyond those identified elsewhere in this EIR.

Impact **As proposed, the project does not meet the minimum required parkland ratio of three acres per 1,000 residents.** ***This would represent a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation measure.***

Mitigation

4.12-6 In order to ensure adequate improved parkland is provided as part of project development, the applicant shall submit detailed plans, including a revised Specific Plan and Tentative Map, demonstrating that adequate parkland (3 acres/1,000 residents) is designated within the project boundaries consistent with the requirements of the General Plan and Miravale III Specific Plan dated June 2007, prior to project approval, subject to the review and approval of the City of Soledad.

In addition, anticipated population growth of future residents of the project would also create additional demands on existing park and recreational facilities throughout the City such that physical deterioration of these facilities would occur. This is a potentially significant impact that can be reduced to a less-than-significant level through the incorporation of mitigation measure 4.12-7 identified below, in addition to adhering to applicable Miravale III Specific Plan and City of Soledad General Plan policies. These impacts are, therefore, reduced to a less-than-significant level. Implementation of the following mitigation measure would not result in any new environmental impact beyond those identified elsewhere in this EIR.

Impact **Population growth anticipated under the Miravale III Specific Plan would create additional demands on park and recreational facilities.** ***This would represent a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation measure.***

4.12-7 Prior to the issuance of any building permit, the applicant/developer shall submit payment of a Park Facilities Impact Fee in accordance with the adjusted impact fee in effect at the time of building permit issuance, if determined to be applicable. All fees shall be subject to the review and approval of the City of Soledad Community Development Director.



Source: RRM Design Group, 2007

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Miravale III Parkland and Open Space Map

Figure 4.12-2

DENISE DUFFY & ASSOCIATES, INC.

4.13 TRAFFIC AND CIRCULATION

Introduction

A *Transportation Impact Analysis* was prepared for this project by Hexagon Transportation Consultants (August 15, 2007), and the following discussion incorporates that analysis. A copy of this analysis (excluding appendices) is included as Technical Appendix T-8 in Volume II of this EIR. A complete copy of this analysis, including appendices, is available for review at the City of Soledad.[1] Additionally, all key figures and tables of the report are included in Appendix J of this EIR. This section identifies the potential traffic impacts related to the proposed development in accordance with the requirements of the City of Soledad and CEQA.

Setting

The project site is located in the northern outskirts of the City of Soledad between San Vicente Road and Orchard Lane. Soledad is located in the southern Salinas Valley along Highway 101, one of the three main north-south traffic arteries serving central California. Regional access to the project site is provided solely via US 101. Local access to the site is provided by Moranda Road, Front Street, San Vicente Road, West Street, Orchard Lane, and Gabilan Drive.

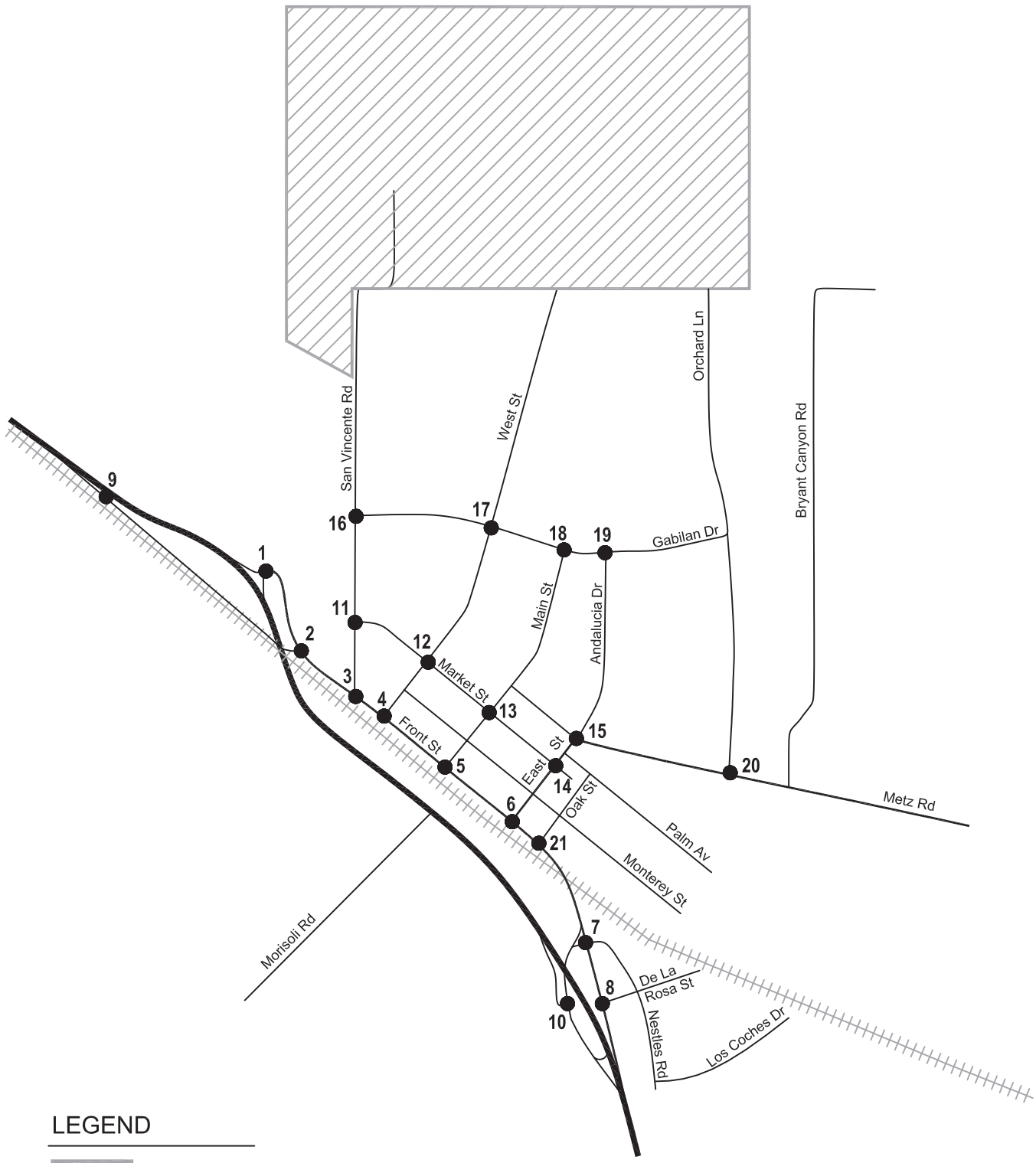
Traffic Study and Methodology

A traffic analysis was prepared for the project by Hexagon Transportation Consultants, August 15, 2007. This study was conducted for the purpose of identifying the potential traffic impacts related to the proposed development. The project as proposed will consist of 1,470 single-family homes, 2,230 multi-family units, 500 senior housing units, 120 hotel rooms, and up to 275,000 square feet of supporting retail. A golf course, schools, and parks will also be part of the 920-acre site. The traffic analysis is based on peak-hour levels of service for unsignalized intersections. The traffic study also includes an evaluation of peak-hour signal warrant and roadway and freeway level of service analysis. In summary, the study includes an analysis of 21 unsignalized intersections, 11 roadway segments, and 11 freeway segments in the vicinity of the project site. Study intersection and roadway and freeway segments are identified in Figure 4.13-1. Traffic conditions at the intersections were analyzed for the weekday AM and PM peak hours of traffic. The AM peak hour of traffic is generally between 7:00 and 9:00 AM, and the PM peak hour is typically between 4:00 and 6:00 PM. It is during these periods that the most congested traffic conditions occur on an average day. The following intersections, freeway segments, and roadway segments were analyzed as part of the traffic analysis prepared by Hexagon Transportation Consultants:

Study Intersections

1. Moranda Road and US 101 Northbound Ramps
2. Moranda Road and Front Street
3. San Vicente Road and Front Street
4. West Street and Front Street
5. Main Street and Front Street
6. East Street and Front Street
7. Front Street and Nestles Road
8. Front Street and US 101 Northbound Ramps

[1] Appendices A through G of this report are not included as part of Technical Appendix T-8 due to the size of the appendices. These appendices are available for public review during regular business hours at the City of Soledad Community Development Department, 248 Main Street, Soledad, CA, (831) 223-5000.



Source: Hexagon Transportation Consultants, Inc., 2007

Site Location, Study Intersections, Roadway and Freeway Segments

Figure 4.13-1

9. Front Street and US 101 Southbound Ramps
10. Front Street and Morisoli Road
11. San Vicente Road and Market Street
12. West Street and Market Street
13. Main Street and Market Street
14. East Street and Market Street
15. East Street and Metz Road
16. San Vicente Road and Gabilan Drive
17. West Street and Gabilan Drive
18. Main Street and Gabilan Drive
19. Andalucia Drive and Gabilan Drive
20. Orchard Lane and Metz Road
21. Oak Street and Front Street

Freeway Segments

1. US 101 between North Gonzalez and 5th Street
2. US 101 between 5th Street and Gloria Road
3. US 101 between Gloria Road and Soledad Prison
4. US 101 between Soledad Prison and Camphora
5. US 101 between Camphora and North Soledad
6. US 101 between North Soledad and South Soledad
7. US 101 between South Soledad and Arroyo Seco Road
8. US 101 between Arroyo Seco Road and North Greenfield
9. US 101 between North Greenfield and Walnut Avenue
10. US 101 between Walnut Avenue and Oak Avenue
11. US 101 between Oak Avenue and South Greenfield

Road Segments

1. Front Street, between Front Street and San Vicente Road
2. Front Street, between San Vicente Road and West Street
3. Front Street, between West Street and Main Street
4. Front Street, between Main Street and East Street
5. Front Street, between East Street and Nestles Road
6. Gabilan Drive, between San Vicente Road and West Street
7. Gabilan Drive, between West Street and Andalucia Drive
8. San Vicente Road, between Market Street and Gabilan Drive
9. San Vicente Road, North of Gabilan Drive
10. West Street, between Market Street and Gabilan Drive
11. West Street, North of Gabilan Drive

The traffic analysis also includes an evaluation of peak-hour signal warrant and roadway and freeway level of service analysis (LOS). LOS is a measure of roadway quality of service. LOS describes traffic conditions on a scale of A to F, with LOS A indicating free flow conditions with minimum delay, and LOS F representing severe congestion with major delay. Table 1 shows the LOS criteria at unsignalized intersections in terms of delay per vehicle. The traffic study analyzed traffic conditions under the following scenarios:

Scenario 1: *Existing Conditions.* Existing conditions were represented by existing peak-hour traffic volumes on the existing roadway network. Existing traffic volumes were obtained from July 2006 traffic counts.

Table 4.13-1
Unsignalized Intersection Level of Service Criteria Based on Delay

Level of Service	Average Control Delay Per Vehicle (sec.)
A	0 – 10
B	> 10 – 15
C	> 15 – 25
D	> 25 – 35
E	> 35 – 50
F	> 50

Source: Transportation Research Board, Highway Capacity Manual (Washington, D.C., 2000) pp. 17-2.

Scenario 2: *Background Conditions.* Background conditions were represented by future background traffic volumes on the near-term roadway network. Background traffic volumes were estimated by adding to existing peak-hour volumes the projected volumes from approved but not yet completed developments. The latter component was developed based on a list of approved projects provided by the City of Soledad.

Scenario 3: *Project Conditions.* Project conditions were represented by future traffic volumes, with the project, on the near-term future roadway network. Future traffic volumes with the project (hereafter called *project traffic volumes*) were estimated by adding to background traffic volumes the additional traffic generated by the project. Project conditions were evaluated relative to background conditions with improvements in order to determine potential project impacts.

Scenario 4: *Cumulative Growth No Project Conditions.* Traffic volumes for cumulative conditions without the project were estimated by adding traffic associated with pending developments in the City of Soledad to background traffic volumes. The analysis of cumulative growth conditions was conducted at the request of the City of Soledad and is in conformance with CEQA.

Scenario 5: *Cumulative Growth with Project Conditions.* Cumulative traffic volumes with the project were estimated by adding to cumulative no project traffic volumes the additional traffic generated by the project.

Scenario 6: *Year 2030 Conditions.* Year 2030 conditions were represented by forecasted Year 2030 traffic volumes. The traffic forecasts for Year 2030 were produced using the Association of Monterey Bay Area Governments (AMBAG) Regional Traffic Model. The 2030 model includes land use growth and transportation improvements associated with build-out of all General Plans within the AMBAG region and 30 year through-traffic growth on major regional facilities.

Existing Conditions

Existing Roadway Network

US 101 is a four-lane freeway within the City of Soledad. It extends north through Salinas and south through King City. Access to the site is provided via its interchanges with Moranda Road and Front Street within the City of Soledad.

Moranda Road is a north/south roadway that runs from Front Street to US 101. Moranda Road serves as the access road to and from the US 101 northbound ramps in the northern part of the city. The roadway is one lane in each direction with a 35-mph speed limit.

Front Street is an arterial that runs parallel to and along the east side of US 101 and the Union Pacific Railroad tracks, between Moranda Road and Oak Street. South of Oak Street, Front Street crosses under the tracks and terminates at the US 101 northbound off ramp at Hector De La Rosa Sr. Street. The roadway varies in width between its north and south termination points at US 101. Between the US 101 northbound off-ramps in the southern part of Soledad and West Street, Front Street is two lanes. Between West Street and Moranda Road, the roadway widens to four lanes prior to narrowing once again to two lanes at its intersection with Moranda Road. The roadway has a 25-mph speed limit through downtown and increases to 35-mph north and south of downtown.

San Vicente Road is a north/south collector roadway that extends north from Front Street to the project boundary. The roadway is one lane in each direction with a 25-mph speed limit. The project includes the extension of San Vicente Road into the site, providing direct access to the project area from northern Soledad.

West Street is a north/south collector roadway that runs from Front Street to the project boundary and will extend from the project boundary to Metz Road, as part of the Miravale II development. The roadway is four lanes wide with speed limits ranging from 25 to 35 mph. The project includes the extension of West Street into the site providing direct access to the project area from central Soledad.

Orchard Lane is a north/south roadway that runs from Gabilan Drive to the project boundary. As part of the Miravale II development, Orchard Lane will be extended from the project boundary to Metz Road. The roadway is one lane in each direction with a 25-mph speed limit. The project includes the extension of Orchard Lane into the site, providing direct access to the project area from southern Soledad.

Gabilan Drive is an east/west arterial roadway that extends from Orchard Lane to San Vicente Road. The roadway is four lanes wide with a 25-mph speed limit between San Vicente Road and Prado Drive. Gabilan Drive narrows to one lane in each direction from Toledo Street to its terminus as a cul-de-sac just west of Bryant Canyon Road.

Existing Transit Service

Soledad is currently not served by regularly scheduled intra-city public transit. However, the Monterey-Salinas Transit system, which is the largest single public transit provider in Monterey County, provides regularly scheduled service between King City and Salinas with a stop in Soledad. In addition taxi, service is provided on-demand within the City. Greyhound Bus Lines provides intercity transportation to locations north and south; the bus stops in Soledad four times per day.

Existing Bicycle and Pedestrian Facilities

There is an existing network of Class II bikeways throughout the City. Bike lanes are provided along Front Street between East Street and Nestles Road, and along Gabilan Drive from San Vicente Road to West Street and from Toledo Street to Orchard Lane; and along Orchard Lane from the projects south boundary to Gabilan Drive with future extension of Orchard Lane to Metz Road. In addition, a City Bike Plan that identifies proposed future bicycle facilities was adopted in May 2007.

Pedestrian facilities in the study area consist primarily of sidewalks and crosswalks at intersections. Sidewalks are found along all previously described local roadways in the study area and along the local residential streets and collectors surrounding the project area.

Existing Traffic Conditions

Existing peak-hour traffic volumes were obtained from new manual intersection turn-movement counts conducted in July 2006. The existing peak-hour intersection volumes are shown on Figure 4.13-2. The traffic count data can be found in Appendix A of the Transportation Impact Analysis (Technical Appendix T-8).

Intersection Operations

Measured against the City of Soledad LOS standards, all but one of the study intersections currently operates at an acceptable LOS D or better. The intersection of Oak Street and Front Street currently operates at an LOS F during both peak hours. A summary of the existing intersection LOS analysis can be found in Figure 4.13-3.

In addition, peak-hour signal warrant checks were completed for all study intersections to determine whether signalization would be justified on the basis peak-hour volumes. A summary of the signal warrant checks can be found in Appendix D of the Transportation Impact Analysis. The analysis showed that the Caltrans peak-hour volume warrant is met during at least one peak hour at the following four intersections under existing conditions:

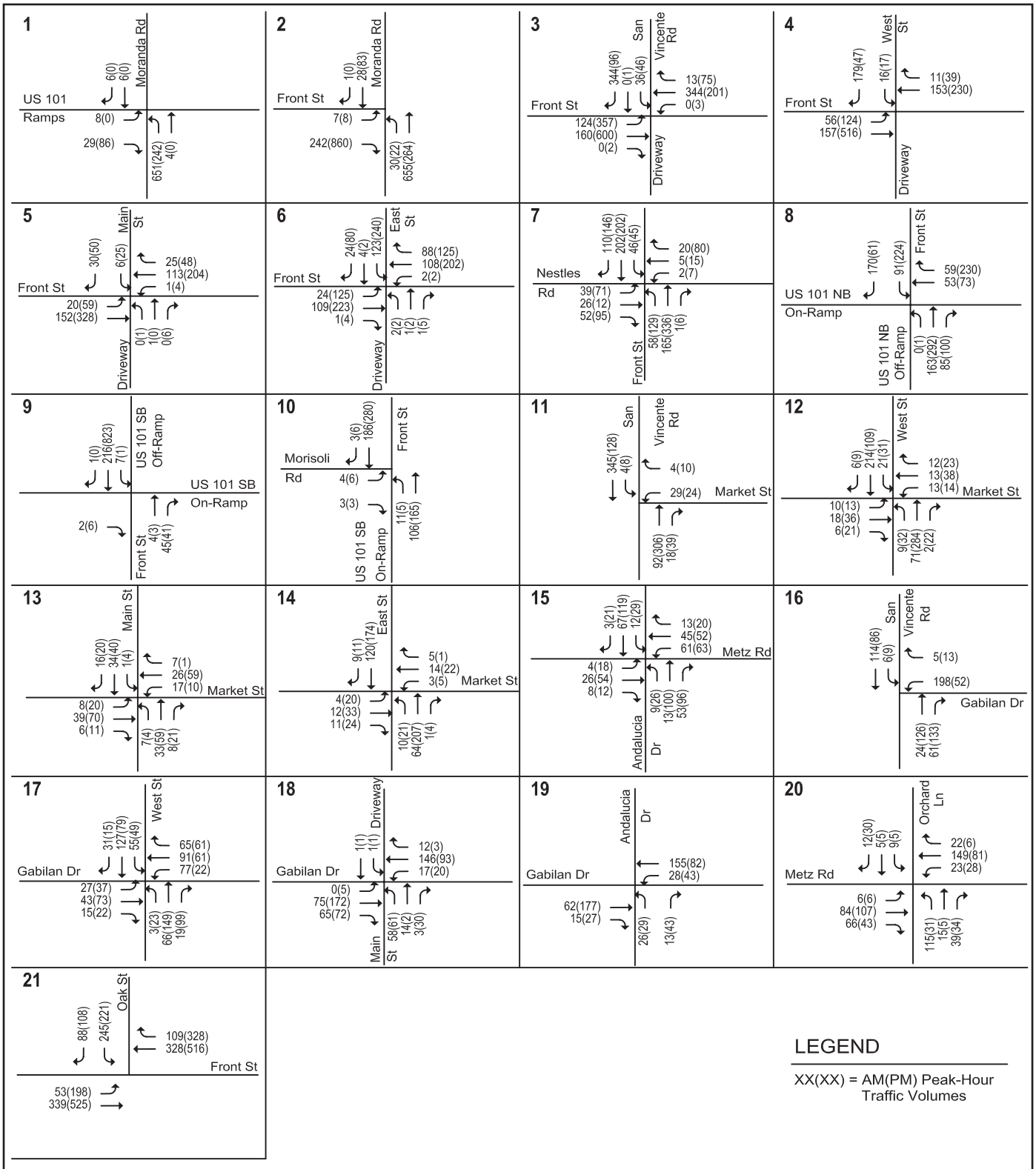
2. Moranda Road and Front Street
3. San Vicente Road and Front Street
6. East Street and Front Street
21. Oak Street and Front Street

Roadway Segment Operations

Twenty-four hour roadway segment tube counts were conducted on all major roadways serving the selected study intersections. The collected counts provide peak hour as well as daily volumes along some of the major roadways within the City of Soledad. The collected segment volumes were used to evaluate roadway segment operations. Since there is no evaluation criteria for roadway segments, the roadway segment analysis is presented for informative purposes only. The roadway segment analysis indicates that all studied roadway segments currently operate at LOS A during both peak hours. Figure 4.13-4 presents the results of the roadway segment analysis.

Freeway Segment Operations

Traffic volumes for the studied freeway segments were obtained from 2005 data collected by the Traffic and Vehicle Data Systems Unit for Caltrans District 5. The collected data provides average annual daily and peak hour volumes along each freeway segment for both directions of travel. Peak hour splits for each segment were developed using directional peak-hour volume data collected by Caltrans. The directional peak hour volume provides a percentage of total peak hour traffic by direction. The freeway segment analysis indicates that all freeway segments analyzed currently operate at LOS C or better. Freeway segment analysis is presented in Figure 4.13-5.



Source: Hexagon Transportation Consultants, Inc., 2007

Existing Peak Intersection Volumes

Figure 4.13-2

	Intersection	Intersection Control	Peak Hour	Count Date	Existing Conditions Ave. Delay	Existing Conditions LOS	Background Conditions Ave. Delay	Background Conditions LOS	Background with Improvements Ave. Delay	Background with Improvements LOS	Project Conditions Ave. Delay	Project Conditions LOS	Project Mitigated Ave. Delay	Project Mitigated LOS	Project With Gabilan Ext. Ave. Delay	Project With Gabilan Ext. LOS	No Project Cumulative Conditions Ave. Delay	No Project Cumulative Conditions LOS	With Project Cumulative Conditions Ave. Delay	With Project Cumulative Conditions LOS	With Project Cumulative With Gabilan Ext. Ave. Delay	With Project Cumulative With Gabilan Ext. LOS
1	Moranda Road and US 101 NB Ramps	TWSC	AM	7/26/06	16	C	33	D			**425**	**F**	13	B	18	B	8	A	14	B	18	B
			PM	7/26/06	11	B	14	B			**72**	**F**	12	B	10	B	15	B	16	B	10	B
2	Moranda Road and Front Street	TWSC	AM	7/26/06	10	A	***11***	***B***	14	B	**172**	**F**	7	A	14	B	10	A	5	A	15	B
			PM	7/26/06	28	D	***102***	***F***	21	C	**189**	**F**	6	A	13	B	18	B	11	B	14	B
3	San Vicente Road and Front Street	AWSC	AM	7/26/06	12	B	***22***	***C***	19	B	**143**	**F**	12	B	16	B	19	B	13	B	16	B
			PM	7/26/06	14	B	***40***	***E***	18	B	**146**	**F**	15	B	16	B	20	C	17	B	19	B
4	West Street and Front Street	AWSC	AM	7/26/06	9	A	10	A			***18***	***C***	18	B	15	B	11	B	19	B	14	B
			PM	7/26/06	11	B	13	B			***34***	***D***	20	B	12	B	25	C	34	C	13	B
5	Main Street and Front Street	AWSC	AM	7/27/06	8	A	9	A			11	B	19	B	10	B	9	A	23	C	21	C
			PM	7/27/06	10	B	12	B			***28***	***D***	23	C	17	C	24	C	22	C	23	C
6	East Street and Front Street	AWSC	AM	7/27/06	9	A	***14***	***B***	19	B	22	C			22	C	20	B	24	C	23	C
			PM	7/27/06	14	B	***73***	***F***	23	C	27	C			24	C	25	C	38	D	32	C
7	Front Street and Nestles Road	TWSC	AM	7/26/06	14	B	23	C	14	B	14	B			19	B	17	B	20	B	21	C
			PM	7/26/06	23	C	***300***	***F***	16	B	26	C			22	C	24	C	42	D	42	D
8	Front Street and US 101 NB Ramps	AWSC	AM	7/26/06	9	A	9	A	20	C	10	B			11	B	20	C	10	A	12	B
			PM	7/26/06	12	B	***14***	***B***	20	B	25	C			23	C	19	B	25	C	23	C
9	Front Street and US 101 SB Ramps	TWSC	AM	7/26/06	9	A	11	B			13	B	7	A	7	A	11	B	7	A	7	A
			PM	7/26/06	15	B	19	C			**62**	**F**	8	A	8	A	21	C	12	B	13	B
10	Front Street and Morisoli Road	TWSC	AM	7/27/06	10	A	11	B			14	B			14	B	11	B	14	B	14	B
			PM	7/27/06	11	B	13	B			17	C			16	C	14	B	18	C	18	C
11	San Vicente Road and Market Street	TWSC	AM	7/26/06	11	B	15	B			**47**	**E**	7	A	12	B	14	B	8	A	11	B
			PM	7/26/06	11	B	16	C			**114**	**F**	8	A	15	B	34	D	10	B	11	B
12	West Street and Market Street	AWSC	AM	7/27/06	8	A	8	A			12	B	5	A	10	A	9	A	6	A	10	A
			PM	7/27/06	9	A	9	A			***15***	***C***	7	A	11	B	11	B	9	A	11	B
13	Main Street and Market Street	AWSC	AM	7/25/06	7	A	8	A			9	A			8	A	8	A	9	A	8	A
			PM	7/26/06	8	A	8	A			10	A			9	A	9	A	11	B	9	A
14	East Street and Market Street	AWSC	AM	7/27/06	8	A	10	B			25	C	5	A	5	A	11	B	5	A	5	A
			PM	7/27/06	9	A	16	C			***95***	***F***	6	A	6	A	34	D	9	A	8	A
15	East Street and North Street/Metz Road	AWSC	AM	7/27/06	8	A	11	B	13	B	16	B			14	B	13	B	16	B	14	B
			PM	7/27/06	9	A	***21***	***C***	15	B	15	B			15	B	15	B	16	B	16	B
16	San Vicente Road and Gabilan Drive	TWSC	AM	7/26/06	11	B	13	B			***375***	***F***	15	B	15	B	18	B	21	C	16	B
			PM	7/26/06	10	B	13	B			***395***	***F***	12	B	18	B	19	B	23	C	27	C
17	West Street and Gabilan Drive	AWSC	AM	7/27/06	9	A	10	B			***26***	***D***	26	C	29	C	11	B	27	C	30	C
			PM	7/27/06	9	A	11	B			***58***	***F***	37	D	37	D	13	B	39	D	38	D
18	Main Street and Gabilan Drive	AWSC	AM	7/27/06	8	A	9	A			10	A	12	B	11	B	9	A	12	B	10	A
			PM	7/27/06	8	A	9	A			***12***	***B***	16	B	13	B	10	B	16	B	15	B
19	Andalucia Drive and Gabilan Drive	TWSC	AM	7/27/06	10	A	14	B			15	B	20	B	20	B	12	B	20	B	20	B
			PM	7/27/06	10	B	16	C			***18***	***C***	23	C	22	C	16	C	23	C	23	C
20	Orchard Lane and Metz Road	TWSC	AM	N/A	6	B	15	C			***37***	***E***	14	B	18	B	17	C	36	D	18	B
			PM	N/A	4	A	9	B			***17***	***C***	24	C	18	B	11	C	32	C	20	B
21	Front Street and Oak Street	TWSC	AM	N/A	***33***	***D***	***134***	***F***	12	B	20	B	12	B	12	B	12	B	12	B	12	B
			PM	N/A	***473***	***F***	***1247***	***F***	14	B	**74**	**E**	12	B	12	B	26	C	13	B	12	B

Notes:
1. Intersection control based on existing conditions
   -TWSC = Two-way stop-controlled intersection
   -AWSC = Four-way stop-controlled intersection
2. Significant impacts are shown in BOLD and boxed.
3. *Italics and BOLD indicates signal warrant met.*

Intersection Level of Service

Figure 4.13-3

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Segment	Direction	# Of Lanes	Capacity (vph)	24-Hr Tot. Volume	AM Peak-Hr Volume	AM Peak-Hr V/C	AM Peak-Hr LOS	PM Peak-Hr Volume	PM Peak-Hr V/C	PM Peak-Hr LOS
Front St										
Moranda Rd and San Vicente Rd	EB	2	2,400	7,335	289	0.120	A	971	0.405	A
	WB	2	2,400	6,064	756	0.315	A	360	0.150	A
San Vicente Rd and West St	EB	2	2,400	4,981	211	0.088	A	635	0.265	A
	WB	2	2,400	4,183	436	0.182	A	278	0.116	A
West St and Main St	EB	1	1,200	3,888	197	0.164	A	476	0.397	A
	WB	1	1,200	3,428	195	0.163	A	283	0.236	A
Main St and East St	EB	1	1,200	3,767	237	0.198	A	408	0.340	A
	WB	1	1,200	3,664	260	0.217	A	352	0.293	A
East St and Nestles Rd	EB	1	1,200	6,686	470	0.392	A	495	0.413	A
	WB	1	1,200	6,151	393	0.328	A	568	0.473	A
Gabilan Dr										
San Vicente Rd and West St	EB	2	2,400	1,339	79	0.033	A	146	0.061	A
	WB	2	2,400	1,619	201	0.084	A	93	0.039	A
West St and Andalucia Dr	EB	2	2,400	2,308	146	0.061	A	231	0.096	A
	WB	2	2,400	2,479	261	0.109	A	196	0.082	A
San Vicente Rd										
Market St and Gabilan Dr	NB	1	1,200	2,698	109	0.091	A	341	0.284	A
	SB	1	1,200	2,904	355	0.296	A	165	0.138	A
North of Gabilan Dr	NB	1	1,200	1,189	61	0.051	A	134	0.112	A
	SB	1	1,200	1,121	127	0.106	A	77	0.064	A
West St										
Market St and Gabilan Dr	NB	2	2,400	2,168	101	0.042	A	253	0.105	A
	SB	2	2,400	2,034	215	0.090	A	125	0.052	A
North of Gabilan Dr	NB	2	2,400	1,834	151	0.063	A	200	0.083	A
	SB	2	2,400	1,788	205	0.085	A	134	0.056	A

Notes:
1. Capacity of roadways based on assumed capacity of 1,200 vphpl and existing lanes on roadways.
2. Volumes based on 24 hour tube counts collected in July 2006

Existing Roadway Segment Analysis

Figure 4.13.4

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Segment	Direction	# Of Lanes	Capacity (vph) /a/	24-Hr Tot. Volume /b/	AM Peak-Hr Volume /b/	AM Peak-Hr V/C	AM Peak-Hr LOS	PM Peak-Hr Volume /b/	PM Peak-Hr V/C	PM Peak-Hr LOS
US 101										
North Gonzales and Gonzales-5th Street	Both	4	9,600	40,500	4,400	0.458	B	4,400	0.458	B
	NB	2	4,800	20,250	2,640	0.550	C	1,760	0.367	B
	SB	2	4,800	20,250	1,760	0.367	B	2,640	0.550	C
Gonzales-5th Street and Gloria Road	Both	4	9,600	38,000	4,250	0.443	B	4,250	0.443	B
	NB	2	4,800	19,000	2,550	0.531	B	1,700	0.354	A
	SB	2	4,800	19,000	1,700	0.354	A	2,550	0.531	B
Gloria Road and Soledad Prison	Both	4	9,600	40,500	3,350	0.349	A	3,350	0.349	A
	NB	2	4,800	20,250	2,010	0.419	B	1,340	0.279	A
	SB	2	4,800	20,250	1,340	0.279	A	2,010	0.419	B
Soledad Prison and Camphora	Both	4	9,600	38,000	3,150	0.328	A	3,150	0.328	A
	NB	2	4,800	19,000	1,890	0.394	B	1,260	0.263	A
	SB	2	4,800	19,000	1,260	0.263	A	1,890	0.394	B
Camphora and North Soledad	Both	4	9,600	39,000	4,300	0.448	B	4,300	0.448	B
	NB	2	4,800	19,500	2,580	0.538	B	1,720	0.358	A
	SB	2	4,800	19,500	1,720	0.358	A	2,580	0.538	B
North Soledad and South Soledad	Both	4	9,600	34,000	3,800	0.396	B	3,800	0.396	B
	NB	2	4800	17,000	2,280	0.475	B	1,520	0.317	A
	SB	2	4,800	17,000	1,520	0.317	A	2,280	0.475	B
South Soledad and Arroyo Seco Road	Both	4	9,600	34,000	3,700	0.385	B	3,700	0.385	B
	NB	2	4,800	17,000	2,035	0.424	B	1,665	0.347	A
	SB	2	4,800	17,000	1,665	0.347	A	2,035	0.424	B
Arroyo Seco Road and North Greenfield	Both	4	9,600	33,000	3,550	0.370	B	3,550	0.370	B
	NB	2	4,800	16,500	1,953	0.407	B	1,598	0.333	A
	SB	2	4,800	16,500	1,598	0.333	A	1,953	0.407	B
North Greenfield and Walnut Avenue	Both	4	9,600	30,000	3,050	0.318	A	3,050	0.318	A
	NB	2	4,800	15,000	1,678	0.349	A	1,373	0.286	A
	SB	2	4,800	15,000	1,373	0.286	A	1,678	0.349	A
Walnut Avenue and Oak Avenue	Both	4	9,600	28,000	2,850	0.297	A	2,850	0.297	A
	NB	2	4,800	14,000	1,568	0.327	A	1,283	0.267	A
	SB	2	4,800	14,000	1,283	0.267	A	1,568	0.327	A
South Greenfield and Oak Avenue	Both	4	9,600	23,500	2,350	0.245	A	2,350	0.245	A
	NB	2	4,800	11,750	1,293	0.269	A	1,058	0.220	A
	SB	2	4,800	11,750	1,058	0.220	A	1,293	0.269	A

Notes:
/a/ Capacity of freeway lanes based on assumed capacity of 2,400 vphpl, as prescribed by the Highway Capacity Manual
/b/ Data provided by Caltrans Data System Unit 2005, Route 101 District 5.

Freeway Segment Analysis

Figure 4.13-5

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Freeway Ramp Analysis

Traffic volumes for the studied freeway ramps were obtained from the traffic counts collected at each of the interchange intersections. The collected counts were compared to historical Caltrans ramp counts and found to be greater than Caltrans counts. The freeway ramp analysis indicates that all freeway ramps analyzed currently operate at LOS B or better. Freeway ramp analysis is presented in Figure 4.13-6. Though LOS analysis does not indicate deficient operations on the ramps based on the ramps' capacities, there are existing operational deficiencies due to inadequate ramp configurations to serve existing traffic volumes. The ramps at both the Moranda Road and Front Street interchanges with US 101 were not designed to accommodate existing traffic volumes. The existing ramp alignments inadequately accommodate increasing ramp volumes onto the mainline.

Regulatory Environment

City of Soledad General Plan

The City of Soledad General Plan includes a Transportation and Circulation Element adopted in 2005 that provides goals and policies aimed at meeting the transportation needs of the City, including the provision and maintenance of transportation infrastructure. The Circulation Element identifies specific roadway deficiencies, as well as improvements necessary to achieve and maintain an acceptable level of service (LOS) on the transportation system through buildout of the City.

The following transportation and circulation policies apply to development within the project area.

Policy C/T-1 Level of Service "D" or better shall generally be maintained on all streets and intersections. Lower levels of service may be accepted during peak times or as a temporary condition, if improvements to address the problem are programmed to be developed. To identify potential impacts of new development on traffic service levels, the City shall require the preparation of traffic impact analyses generally at the sole expense of the developer for developments determined to be large enough to have potentially significant traffic impacts.

Policy C/T-2 Streets shall be dedicated, widened, extended and constructed in accordance with City standards. Dedication and improvements of full rights-of-way shall not be required in existing developed areas where the City determines such improvements are infeasible or undesirable. New development shall be responsible for improving a minimum one-half street along the outer-boundaries of each subdivision along subdivision property where street extensions are identified. Other deviations from these standards shall be permitted upon a determination by the City Engineer that safe and adequate public access and circulation are preserved by such deviations.

Policy C/T-4 On arterial roadways, intersection spacing shall be maximized. New driveways along collector and arterial roadways shall be minimized or prohibited completely.

Policy C/T-5 The street system in residential neighborhoods shall provide safe and logical connections to the existing street pattern, and connectivity to the range of complementary land uses within neighborhoods (housing, schools, parks, neighborhood shopping, etc.). The use of multiple collector streets shall be favored over the use of arterials in new residential subdivisions.

Interchange	Direction	# Of Lanes	Type	Capacity (vph)	Existing AM Peak-Hour Volume	AM Peak-Hour V/C	AM Peak-Hour LOS	Existing PM Peak-Hour Volume	PM Peak-Hour V/C	PM Peak-Hour LOS
US 101										
Camphora Road	SB to Camphora Road	1	Diagonal	1,500	24	0.016	A	30	0.020	A
	NB from Camphora Road	1	Diagonal	1,500	40	0.027	A	32	0.021	A
	SB from Camphora Road	1	Diagonal	1,500	76	0.051	A	95	0.063	A
	NB to Camphora Road	1	Diagonal	1,500	80	0.053	A	64	0.043	A
Moranda Road	SB to Moranda Road	1	Diagonal	1,500	224	0.149	A	824	0.549	B
	NB from Moranda Road	1	Loop	1,500	657	0.438	B	242	0.161	A
	SB from Moranda Road	1	Loop	1,500	52	0.035	A	42	0.028	A
	NB to Moranda Road	1	Loop	1,500	37	0.025	A	86	0.057	A
Front Street	SB to Front Street	1	Loop	1,500	107	0.071	A	170	0.113	A
	NB from Front Street	1	Loop	1,500	223	0.149	A	135	0.090	A
	SB from Front Street	1	Diagonal	1,500	189	0.126	A	283	0.189	A
	NB to Front Street	1	Diagonal	1,500	248	0.165	A	393	0.262	A
Arroyo Seco Road	SB to Arroyo Seco Road	1	Diagonal	1,500	70	0.047	A	88	0.059	A
	NB from Arroyo Seco Road	1	Diagonal	1,500	88	0.059	A	70	0.047	A

Notes:
1. Capacity for all ramps based on assumed capacity of 1,500 vphpl, as prescribed by the Highway Capacity Manual

Freeway Ramp Analysis

Figure 4.13-6

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Policy C/T-8 The City shall manage the street network so that the standards presented in policies C-1 and C-12 are not exceeded. The City will require new development to mitigate the traffic impacts it causes, or the City will limit development along streets where congestion levels are unacceptable.

Policy C/T-9 New local streets shall be developed consistent with the goals, policies and programs of the Land Use Element of the General Plan.

Policy C/T-10 Facilities that promote the use of alternate modes of transportation, including bicycle lanes, pedestrian and hiking trails, park-and-ride lots and facilities for public transit shall be incorporated into new development, and shall be encouraged in existing development.

Policy C/T-13 The City shall ensure through a combination of traffic impact fees and other funding mechanisms that new development pays its fair share of the costs of circulation improvements required by such development.

Policy C/T-14 The City shall prohibit the development of private streets in new residential projects, unless approved on a project specific basis where circumstances support such a use and the streets are privately maintained.

Policy C/T-15 New development shall continue the existing street pattern, where logical.

Policy C/T-17 The City shall require the provision of adequate off-street parking in conjunction with all new development. Parking shall be located convenient to new development and shall be easily accessible from the street. The adequacy and appropriateness of parking requirements in the Zoning Ordinance shall be periodically evaluated.

Policy C/T-25 New development shall provide bike lanes and paths, secure bicycle storage and parking facilities.

Policy C/T-28 New commercial development and development in Specific Plan areas shall provide sidewalks and pedestrian paths consistent with applicable State, federal and local plans, programs and standards.

Environmental Impact Report on the Soledad General Plan. The General Plan EIR evaluated potential circulation impacts associated with the adoption and implementation of the Soledad General Plan, including future development within the project area. This program-level EIR focused on general impacts associated with implementation of the General Plan, rather than project-specific impacts associated with individual development projects, such as the Miravale III Specific Plan project.

- Development of the various land uses contemplated in the General Plan would significantly increase traffic generation with a corresponding cumulative impact on the LOS of regional roadways, streets, and intersections serving the City. This impact was identified as significant and unavoidable.

- Buildout of the General Plan would adversely affect the operation and LOS of the two freeway interchanges serving the City. This impact was considered significant.

- Buildout of the General Plan could result in traffic hazards on city streets and intersections. This impact was not identified as significant.

- Buildout of the General Plan would increase demand for bicycle and pedestrian facilities in the City's planning area. This impact was not identified as significant.

- Buildout of the General Plan would contribute to the demand for public transit serving the City's planning area. This impact was not identified as significant.

Miravale III Specific Plan

Section 3.0 of the Miravale III Specific Plan identifies circulation goals and policies which establish the implementation framework for the Plan's Circulation Diagram (see Figure 4.13-7). The Plan's circulation system is designed to provide a functional and efficient transportation network for automobiles, bicyclists, and pedestrians. The street system is comprised of a network of arterial, collector, and local residential streets designed to accommodate traffic generated by Plan Area residents. All streets are public with the exception of the private driveways that serve hillside lots and some roads within Village Residential areas. The following summarizes the Plan's primary Circulation goal.

- Circulation Goal C-1 states that the project shall provide the necessary circulation system and infrastructure to create a safe and efficient circulation network for motor vehicle, pedestrian, and alternative forms of transportation with an emphasis on creating a pedestrian friendly, walkable community.

In addition to the Miravale III Specific Plan identifies specific policies and guidelines regarding the development of the Plan area's circulation system, including roadway design standards, traffic calming devices, village access, funding for ongoing maintenance, bus stop design standards, and bike facility and sidewalk requirements.

Traffic Impact Fees. The City's traffic impact fee (TIF) program was adopted in October 2007 by the City Council. The City TIF identifies fees per single-family unit and multi-family unit to be collected from proposed development and used towards identified improvements to the roadway system within and serving the City of Soledad.

Regional improvements cannot be completely funded by a single development. In lieu of one single project absorbing the total cost of freeway widening, a regional development impact fee program has been established for state highways and regional roads within Monterey County. The Transportation Agency for Monterey County (TAMC) implements the fee program based on the 2004 TAMC "Nexus Study for Regional Development Impact Fee." The TAMC fee is levied against new developments within local member jurisdictions of TAMC, including the City of Soledad. At this time, however, the City of Soledad has not committed to collecting the TAMC fee. In order to address regional improvement, the City of Soledad has incorporated local TAMC improvements projects into their adopted TIF program. Therefore, the collection of impact fees as part of the City's TIF program will include regional improvements and will be in-lieu of payment of an independent TAMC fees.



Legend

- **Primary Collector**
  (82' Wide Right-of-Way)
  * Portion of West Street
- **Collector Street**
  (70' Wide Right-of-Way)
  * Orchard Lane
  * Miravale Road
  * San Vicente Road
  * Portion of Crest Street
  * Portion of West Street
  * Portion of Hilltop Road
- **Local Street**
  (54'-60' Wide Right-of-Way)
- **Hillside Street**
  (34.5' Wide Right-of-Way)
- **Private Driveway**
  (Right-of-Way Varies)
- **Bicycle Circulation**
- **Park Connections**
  (45 Proposed)
- **Neighborhood Connectors**
  (32 Proposed)
- **Project Gateways**
- **Transit Stops**
  (Potential Locations)

Source: RRM Design Group, 2007

N

Proposed Circulation Plan

Figure 4.13-7

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Significance Criteria

Intersection and Roadway Capacity

The project has the potential to impact both the local (City of Soledad) and regional roadway network (California Department of Transportation (Caltrans). Each agency establishes acceptable level of service standards for roadway facilities within its jurisdiction. These standards are described below.

- The City of Soledad has established LOS D or better as the general threshold for acceptable overall traffic operations for both signalized and un-signalized intersections. Table 4.13-2 (below) shows the LOS criteria at signalized and un-signalized intersections in terms of vehicle delay.

- Levels of service for freeway segments were calculated based on a volume-to-capacity ratio (V/C). Caltrans level of service standard for freeway segments is LOS C. Table 4.13-3 shows the Caltrans LOS.

Table 4.13-2
Signalized Intersection Level of Service Definitions Based on Delay

Level of Service	Description	Average Control Delay Per Vehicle (seconds)
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	10.0 or less
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.1 to 20.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.1 to 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.1 to 80.0
F	Operation with delays unacceptable to most drivers occurring due to oversaturation, poor progression, or very long cycle lengths.	Greater than 80.0

Source: Transportation Research Board, Highway Capacity Manual 2000, Exhibit 16-2.

Table 4.13-3
Freeway Segment Levels of Service based on Volume to Capacity Ratio

Level of Service	Description	V/C Ratio
A	Primarily free-flow operations. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.	Less than 0.36
B	Reasonably free-flow conditions. The ability to maneuver within the traffic traffic stream is only slightly restricted.	0.36 - 0.54
C	Provides for stable operation, however flows approach the range in which small increases will cause a substantial deterioration in service. Freedom to maneuver within the traffic is noticeably restricted.	0.55 - 0.77
D	Borders on unstable flow. Small increases in flow cause substantial deterioration in service. Freedom to maneuver within the traffic stream is severely limited. Minor incidents can be expected to create substantial queuing, as the traffic stream has little space to absorb disruptions.	0.78 - 0.93
E	Operations are extremely unstable. Any incident can be expected to produce a serious breakdown with extensive queuing. Maneuverability within the traffic stream is extremely limited.	0.94 - 1.00
F	Forced or breakdown conditions. Such conditions generally exist within queues forming behind breakdown points.	Greater than 1.00

Source: 1985 Highway Capacity Manual for freeway sections with a 70 mph design speed.

The un-signalized study intersections are analyzed with the TRAFFIX LOS software, which uses the *Highway Capacity Manual* (HCM) 2000 methodology for un-signalized intersections. This method is applicable for both two-way stop-controlled (TWSC) and all-way stop-controlled (AWSC) intersections. Two-way stop-controlled intersections have stop signs on the minor street approaches and no control on the major street approaches. The TWSC intersection LOS is determined from average control delay for the most congested approach at the intersection. AWSC intersection LOS is determined from average control delay time for all approaches at the intersection.

Un-signalized intersections were also assessed for the need of signalization. This assessment is made on the basis of the Peak-hour Volume Signal Warrant, Warrant #11, described in the Caltrans *Traffic Manual*. This method makes no evaluation of intersection level of service, but simply provides an indication whether peak-hour traffic volumes are, or would be, sufficient to justify installation of a traffic signal.

When found that study intersections meet signal warrants and/or require signalization, the intersections were analyzed with standard signalized intersection methodology. Signalized intersection area analyzed using TRAFFIX, which is based on the *Highway Capacity Manual* (HCM) 2000 method for signalized intersections. TRAFFIX evaluates signalized intersection operations on the basis of average control delay time for all vehicles at the intersection.

Freeway Segment Analysis

Freeway segments that serve the Soledad area were also analyzed as part of the study. Similar to the selected study intersections, freeway segments were analyzed for the weekday AM and PM peak hours of

traffic. LOS for freeway segments were calculated based on a volume-to-capacity ratio (V/C). Table 3 shows Caltrans LOS standard for freeway segments is LOS C.

Parking

Parking impacts would be considered to be significant if project parking does not meet the minimum parking requirements set forth in the City of Soledad Municipal Code

Internal Site Circulation

Impacts regarding internal site circulation are considered significant if the project would significantly increase hazards due to a design feature or incompatible uses.

Emergency Access

Impacts regarding emergency access would occur if the project did not provide adequate space and/or access for emergency vehicles to serve the project.

Alternative Transportation

Impacts to alternative transportation would occur if the project would conflict with adopted policies, plans or programs supporting alternative transportation (i.e. bus routes, bicycle paths).

Consistency with Applicable Regulations

Impacts would occur if the project would conflict with the goals and polices in the City's adopted General Plan for the purposes of avoiding or mitigating an impact to the transportation system.

Background Conditions

Background conditions are defined as conditions just prior to the completion of the proposed development. Traffic volumes for background conditions are comprised of traffic volumes from existing traffic counts plus traffic generated by other approved developments in the vicinity of the site. For the purpose of this analysis, it is assumed in this analysis that the transportation network under background conditions would be the same as the existing transportation network.

Background peak-hour traffic volumes were estimated by adding to existing volumes the estimated traffic from approved, but not yet constructed, developments. City staff provided a list of five approved developments within the City of Soledad.

- *Miravale II* – 453 single-family homes and 323 Townhomes/Apartments, the site will be bound by Bryant Canyon Road , Orchard Lane, Santa Clara Street and Metz Road.

- *Gabilan Square* – 9,960 s.f. of commercial space and 183 Townhomes/Apartments, located south of Gabilan Drive at Orchard Lane.

- *Orchard Villas* – 172 single-family homes, located along the west side of Orchard Lane north of Metz Road.

- *Monterey Street Public Housing Facility* – 52 multi-family units, located along the north side of Monterey Street between First and Second Streets.

- *Benito Street Public Housing* – 143 units, located between West and Benito Streets, and Gabilan and North Street.

The added traffic associated with the approved projects was developed based on trip generation estimates and assignments produced by Hexagon Transportation Consultants, Inc.. The magnitude of traffic added to the roadway system by each of the approved developments is estimated by multiplying the applicable trip generation rates to the size of the development. The trip generation rates published in the Institute of Transportation Engineers (ITE) manual entitled *Trip Generation*, seventh edition, 2003, were used for this analysis. On the basis of these rates, it is estimated that the approved projects would generate a combined total of 10,774 daily trips, with 810 trips occurring during the AM peak hour and 1,051 occurring during the PM peak hour.

Background Intersection Operations

The traffic that will be generated by the approved projects was combined with existing traffic to provide background traffic volumes. LOS under background conditions at the study intersections can be found in Table 10 of the Transportation Impact Analysis. The results show that, measured against the City of Soledad LOS standards, five of the study intersections are projected to operate at an unacceptable LOS E or worse during at least one peak hour under background conditions. The impacted intersections are identified below.

2. Moranda Road and Front Street
3. San Vicente Road and Front Street
6. East Street and Front Street
7. Front Street and Nestles Road
21. Oak Street and Front Street

Peak-hour signal warrant checks were completed for all study intersections to determine whether signalization would be justified on the basis of background peak-hour volumes. A summary of the signal warrant checks are provided in the Transportation Impact Analysis. The analysis showed that the Caltrans peak-hour volume warrant is projected to be met during at least one peak hour at the following seven intersections under background conditions:

2. Moranda Road and Front Street
3. San Vicente Road and Front Street
6. East Street and Front Street
7. Front Street and Nestles Road
8. Front Street and US 101 NB Ramps
15. East Street and North Street/Metz Road
21. Oak Street and Front Street

Roadway Segment Operations

Traffic volumes for background conditions on each of the studied roadway segments were developed by adding to existing volumes the trips associated with each of the approved developments. The approved project trips were assigned to the roadway system in the same manner as with intersections. The roadway

segment analysis indicates that all studied roadway segments are projected to operate at LOS B or better during both peak hours under background conditions.

Freeway Segment Operations

Traffic volumes for background conditions on each of the studied freeway segments were developed by adding to existing volumes the trips associated with each of the approved developments. The approved project trips were assigned to the freeway system in the same manner as with intersections. The freeway segment analysis indicates that all freeway segments analyzed are projected to operate at LOS C or better under background conditions.

Freeway Ramp Operations

Traffic volumes for background conditions on each of the studied freeway ramps were developed by adding to existing volumes the trips associated with each of the approved developments. The approved project trips were assigned to the freeway ramps in the same manner as with intersections. The freeway ramp analysis indicates that all freeway ramps analyzed are projected to operate at LOS C or better under background conditions. As stated under existing conditions, the existing ramp configurations are inadequate to serve existing traffic volumes. The traffic associated with the approved projects will worsen conditions on each of the ramps.

Background Conditions Improvements

Based on the results of the background conditions analysis, necessary improvements to support approved traffic were determined for the study intersections projected to operate at LOS D or worse and/or that meet signal warrants. The background conditions with improvements identified below will serve as the basis for determining impacts attributable to the Miravale III development. Without the improvements in place, LOS conditions with the Miravale III development will not accurately reflect impacts due to project traffic, but rather show problem areas under background conditions compounded by the Miravale III project. Described below are the necessary improvements to improve background conditions LOS to acceptable levels.

2. *Moranda Road and Front Street:* Necessary Improvements: The intersection is projected to operate at LOS F during the PM peak hour and meet signal warrants under background conditions. The necessary improvements consist of the signalization of the intersection with protected left-turn phasing on Front Street and the addition of a second eastbound right-turn lane. Intersection operation levels would improve to LOS C with implementation of these improvements.

3. *San Vicente Road and Front Street:* Necessary Improvements: The intersection is projected to operate at LOS E during the PM peak hour and meet signal warrants under background conditions. The necessary improvements consist of the signalization of the intersection with protected left-turn phasing on Front Street. Intersection operation levels would improve to LOS B with implementation of these improvements.

6. *East Street and Front Street:* Necessary Improvements: The intersection is projected to operate at LOS F during the PM peak hour and meet signal warrants under background conditions. The necessary improvements consist of the signalization of the intersection with protected left-turn phasing on Front Street and the addition of a second southbound left-turn lane and exclusive

westbound right-turn lane. Intersection operation levels would improve to LOS C with implementation of these improvements.

7. *Front Street and Nestles Road:* Necessary Improvements: The intersection is projected to operate at LOS F during the PM peak hour and meet signal warrants under background conditions. The necessary improvements consist of the signalization of the intersection. Intersection operation levels would improve to LOS B with the installation of a signal.

8. *Front Street and US 101 NB Ramps:* Necessary Improvements: The intersection is projected to meet signal warrants under background conditions. The necessary improvements consist of the signalization of the intersection.

15. *East Street and North Street/Metz Road:* Necessary Improvements: The intersection is projected to meet signal warrants under background conditions. The necessary improvements consist of the signalization of the intersection with protected left-turn phasing on Metz Road.

21. *Oak Street and Front Street:* Necessary Improvements: The intersection is projected to operate at LOS F during the both peak hours and meet signal warrants under background conditions. The necessary improvements consist of the signalization of the intersection and the addition of a separate westbound right-turn lane. Intersection operation levels would improve to LOS B during both peak hours with implementation of these improvements.

Thresholds of Significance

In accordance with CEQA Guidelines, a project impact would be considered significant if the project would:

- cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections);
- exceed, either individually or cumulatively, a LOS standard established by the county congestion/management agency for designated roads or highways;
- result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;
- substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- result in inadequate emergency access;
- result in inadequate parking capacity; or
- conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

As per the City of Soledad LOS standards, the project is said to create a significant adverse impact on traffic conditions at an intersection if for either peak hour:

- The LOS at the intersection degrades from an acceptable LOS D or better under background conditions to an unacceptable LOS E or worse under project conditions. A significant intersection impact is said to be satisfactorily mitigated when measures are implemented that would restore intersection level of service to LOS D conditions or better.

Impacts and Mitigation

Project Conditions

Future traffic volumes with the project were estimated by adding to background traffic volumes the additional traffic generated by the project. Project conditions were evaluated relative to background conditions with improvements in order to determine potential project impacts. It is assumed in this analysis that the roadway network and intersection configurations under project conditions would be the same as described under background with improvements conditions.

The magnitude of traffic produced by a new development and the locations where that traffic would appear are estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In determining project trip generation, the magnitude of traffic entering and exiting the site is estimated for the AM and PM peak hours. As part of the project trip distribution, an estimate is made of the directions to and from which the project trips would travel. In the project trip assignment, the project trips are assigned to specific streets and intersections.

Project Trip Generation

The trip generation estimates for the project are shown in Figure 4.13-8, and are based on trip generation rates published in the Institute of Transportation Engineers (ITE) manual entitled *Trip Generation*, seventh edition, 2003.

The trip generation estimates do not include estimates for the proposed schools, parks, and golf course. Trip estimates for the proposed residential uses of the project account for trips made to schools and other types of complimentary land uses. Therefore, it is assumed that trips to the schools, parks, and golf course would originate from within the project area and the proposed residential units.

Similarly, the trip estimates for residential land uses associated with the project were reduced to account for internalization, or interaction, between the retail and residential land uses. The project is proposing up to 275,000 s.f. of retail space. A portion of the retail space will be located centrally within the project area and proposed residential units. The remaining retail space will be located in the southeastern portion of the project site. The retail land uses are intended to be neighborhood serving retail, not major retail establishments. As such, it is assumed that the majority of trips generated by the retail space will originate from within the project area. The residential uses of the project were reduced by a magnitude equal to 90 percent of the estimated trips for the centrally located retail space and 50 percent of the retail space located in the southeastern portion of the site. The difference in reduction percentages for the retail is due to the expectation that the southeastern retail space will attract some trips from outside the project area since it is located near existing neighborhoods and other land uses, while nearly all trips to the centrally located retail would originate from surrounding neighborhoods within the project area.

				AM Peak Hour						PM Peak Hour						
		Daily	Daily	Pk-Hr	Splits		Trips			Pk-Hr	Splits		Pass-By			
Land Use	Size	Trip Rates	Trips	Rate	In	Out	In	Out	Total	Rate	In	Out	Red. /e/	In	Out	Total
Proposed Uses																
Single-Family Homes/a/	1,470 Units	9.57	14,068	0.75	25%	75%	276	827	1,103	1.01	63%	37%		935	549	1,485
Multi-Family/b/	2,230 Units	6.72	14,986	0.51	20%	80%	227	910	1,137	0.62	65%	35%		899	484	1,383
Senior Housing/c/	500 Units	3.48	1,740	0.08	45%	55%	18	22	40	0.11	61%	39%		34	21	55
Hotel/d/	120 Units	8.92	1,070	0.67	58%	42%	47	34	80	0.70	49%	51%		41	43	84
			31,864				568	1,792	2,360					1,909	1,098	3,006
			-9,196				-157	-123	-280					-186	-236	-422
			22,668				411	1,669	2,080					1,723	861	2,585
Retail "A"/e/	175,000 s.f.	44.3	7,756	1.35	56%	44%	132	104	236	2.71	44%	56%	25%	157	199	356
Retail "B"/e/	100,000 s.f.	44.3	4,432	1.35	56%	44%	76	59	135	2.71	44%	56%	25%	89	114	203
			12,188				208	163	371					246	313	559
			34,856				**619**	**1,833**	**2,451**					**1,969**	**1,174**	**3,143**

Source:
ITE Trip Generation, 7th Edition

Notes:
/a/ Single-Family Detached Housing (210) average rates used for proposed single-family units
/b/ Apartment (220) average rates used for proposed multi-family units
/c/ Senior Adult Housing-Attached (252) average rates used for proposed senior housing units
/d/ Hotel (310) average rates used for proposed hotel units
/e/ Specialty Retail Center (814) average rates used for proposed retail space. No AM peak hour rates are available for Specialty Retail, therefore half of the PM peak hour rates were assumed for the AM peak hour.
/f/ A reduction of of residential trips equal to 90% of Retail "A" and 50% of Retail "B" was applied for internalization of retail/residential uses.
/e/ A reduction of 25% to account for pass-by trips was applied to retail use during the PM peak hour

Trip Generation Estimates

Figure
4.13-8

Based on the trip generation calculations, the project, at buildout, would generate 34,856 daily trips, with 2,451 trips occurring during the AM peak hour and 3,143 occurring during the PM peak hour. Using the specified inbound/outbound splits, the project would produce 619 inbound trips and 1,833 outbound trips during the AM peak hour and 1,969 inbound and 1,174 outbound trips during the PM peak hour.

Project Trip Distribution and Assignment

The trip distribution pattern and trip assignment for the proposed project was estimated based on existing travel patterns in the area and the locations of complementary land uses. Two separate trip distributions were used for the residential and non-residential land uses of the site. Generally, the non-residential trip distribution contains trips produced by the project within city limits. On the other hand, it is expected that the majority of residential trips will leave the City limits for employment zones north and south of Soledad.

Project Access and Circulation

Regional access to the project site is provided from US 101. Access to the site is provided via its interchanges with Moranda Road and Front Street within the City of Soledad. Local access to the project site would be provided via extensions of San Vicente Road, West Street, and Orchard Lane. Each of the roadways would be extended into the project area with connections to a completely new roadway system of collectors and local roads that would serve each of the residential and commercial areas of the project. Future access also would be provided by the extension of Miravale Road to Camphora/Gloria Road and the Orchard Lane extensions north and west of the project, eventually connecting via other planned routes to Camphora/Gloria Road when other development is completed.

All new streets would be designed to meet all applicable City of Soledad standards. In addition, as part of the planned golf course, there would be a need to provide golf cart crossings along project roadways. Due to large traffic volumes and vehicle speeds, at-grade golf cart crossings should not be proposed along streets classified as collectors or arterials.

Project Transit System – "Improvements"

The Miravale-III Specific Plan includes a policy to include bus stops in logical locations, providing for alternative modes of transportation. MST currently operates in Monterey County, with two routes servicing the City of Soledad. One route travels north-south from Salinas to King City. The other extends from King City to the southern tip of the Monterey Peninsula. The City of Soledad currently operates one local door-to-door transit service on an on-call basis that provides a flexible and alternative mode of transportation. It is anticipated that up to 3% of project trips could be made by transit.

Project Bicycle and Pedestrian Facilities

There are three types of bicycle facilities classified in the City of Soledad General Plan. Each type is described below:

- Bike path (Class I) - A completely separate right-of-way designed for the exclusive use of cyclists and pedestrians, with minimal crossings for motorists. These paths should have a minimum width of nine feet when two-way travel is required and six feet in width to accommodate one-way movement.

- Bike lane (Class II) - A lane on a regular roadway, separated from the motorized vehicle right-of-way by paint striping, designated for the exclusive or semi-exclusive use of bicycles. Bike lanes allow one-way bike travel. A minimum width of five feet should be provided and adjacent curbside parking avoided where feasible; where curbside parking is allowed adjoining a bike lane, the combined width of the parking and adjacent bike lane should be not less than 13 feet.

- Bike route (Class III) - Provides shared use of the roadway, designated by signs or permanent markings and shared with motorists.

The General Plan also specifies that pedestrian circulation is an important component of the transportation network because it helps reduce traffic and improve air quality. Specifically the General Plan requires that:

- Pedestrian circulation provides logical connections between residential neighborhoods and neighborhood-serving shopping centers.

- Pedestrian trails are used to connect open space/recreational areas with residential neighborhoods, motels and the downtown.

A primary goal of the Miravale-III Specific Plan is to provide the necessary infrastructure to create a safe and efficient circulation network with an emphasis on creating a pedestrian friendly, walkable community. As noted within the Specific Plan, pedestrian sidewalks provide excellent opportunities for leisure and recreation as well as an alternative means of transportation. Pedestrian sidewalks are proposed on all public streets. Plan area sidewalks consist of a 5 foot wide solid surface area separated by a 5 foot wide landscaped planting strip.

Class II Bike lanes are to be provided on all collector and arterial streets within the Plan Area. Bike lanes will be a minimum 4 feet wide and will be separated from the vehicle travel lane by a solid stripe. Signage may be provided throughout the Plan Area to guide bicyclists toward trails, parks, and other points of interest.

There are no existing bicycle facilities that can be extended into the project area. Existing and proposed residential uses will justify the need for a continuous bicycle facility system throughout the City of Soledad. The project will be subject to the City's Bike Plan which identifies future bicycle facilities. The plan was adopted in 2007. All pedestrian and bicycle lanes of the project should provide for future connection to existing sidewalks and streets.

Project Roadway Network

Projected daily volumes and the City's criteria for roadway designation were used to design each of the new major roadways. Projected volumes are based on the same trip generation estimates and assignment methodology described above. Traffic associated with other pending non-residential projects was also included in the projected volumes.

Traffic projections indicate that only West Street, between the project boundary and H Street, will meet the arterial criteria. San Vicente Road and Orchard Lane will meet collector road criteria. All other roadways will meet criteria for classification as local roadways. Figure 4.13-9 illustrates the project roadway classifications.

With implementation of the future roadways described above, several new intersections will be created. Peak hour signal warrant checks were completed for each of the new intersections. Results indicate that only the intersection of West Street and H Street will meet signal warrants. Projected peak hour volumes at all other intersections within the project area will not be large enough to require signalization.

Project Intersection Level of Service Analysis

The results of the intersection level of service analysis under project conditions are summarized in Figure 4.13-3. The results show that 11 of the study intersections would operate at an unacceptable LOS E or worse during at least one of the peak hours analyzed under project conditions:

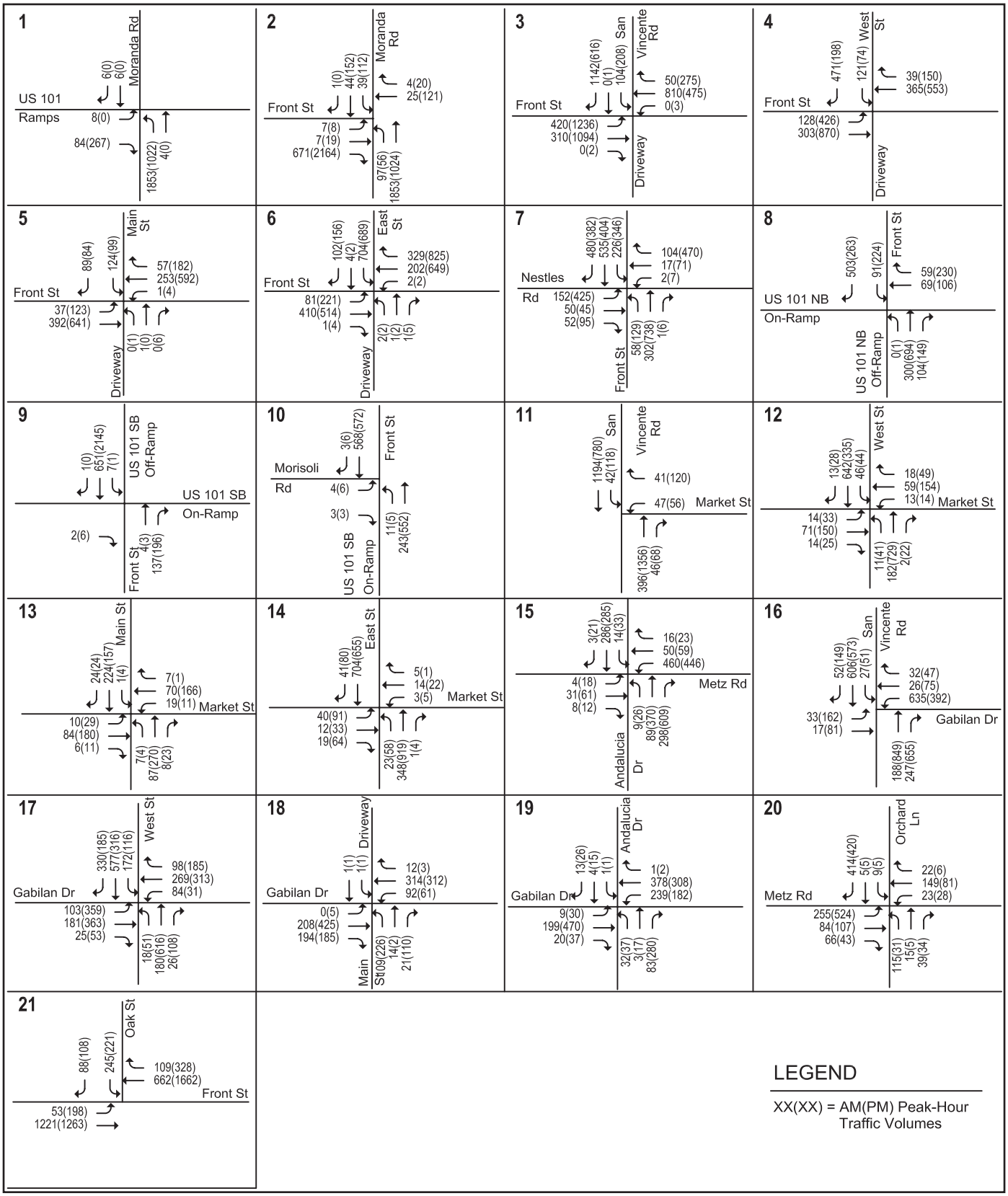
1 Moranda Road and US 101 Northbound Ramps
2 Moranda Road and Front Street
3 San Vicente Road and Front Street
4 West Street and Front Street
9 Front Street and US 101 Southbound Ramps
11 San Vicente Road and Market Street
14 East Street and Market Street
16 San Vicente Road and Gabilan Drive
17 West Street and Gabilan Drive
20 Orchard Lane and Metz Road
21 Oak Street and Front Street

Each of these intersections would be impacted by the project according to City of Soledad standards. The remaining 10 intersections would continue to operate at acceptable levels of service.

Project Intersection Signal Warrant Analysis

The peak-hour signal warrants were checked for the existing unsignalized intersections to determine whether signalization would be justified on the basis of peak-hour volumes. A summary of the signal warrant checks is shown in Figure 4.13-10. The analysis showed that the Caltrans peak-hour volume warrant would be satisfied at nine intersections under project conditions.

4 West Street and Front Street
5 Main Street and Front Street
12 West Street and Market Street
14 East Street and Market Street
16 San Vicente Road and Gabilan Drive
17 West Street and Gabilan Drive
18 Main Street and Gabilan Drive
19 Andalucia Drive and Gabilan Drive
20 Orchard Lane and Metz Road



Roadway Classification

Figure 4.13-9

Study Number	Intersection Name	Scenario: Existing Conditions AM	Existing Conditions PM	Background Conditions AM	Background Conditions PM	Project Conditions AM	Project Conditions PM	Cumulative Conditions AM	Cumulative Conditions PM
Existing Unsignalized Intersections									
1	Moranda Road & US 101 NB Ramps	No	No	No	No	No	No	**Yes**	**Yes**
2	Moranda Road & Front Street	No	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
3	San Vicente Road & Front Street	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
4	West Street & Front Street	No	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**
5	Main Street & Front Street	No	No	No	No	No	**Yes**	No	**Yes**
6	East Street & Front Street	No	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
7	Front Street & Nestles Road	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
8	Front Street & US 101 NB Ramps	No	No	No	**Yes**	No	**Yes**	No	**Yes**
9	Front Street & US 101 SB Ramps	No	No	No	No	No	No	No	No
10	Front Street & Morisoli Road	No	No	No	No	No	No	No	No
11	San Vicente Road & Market Street	No	No	No	No	No	No	No	**Yes**
12	West Street & Market Street	No	No	No	No	No	**Yes**	No	**Yes**
13	Main Street & Market Street	No	No	No	No	No	No	No	No
14	East Street & Market Street	No	No	No	No	No	**Yes**	No	**Yes**
15	East Street & North Street/Metz Road	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
16	San Vicente Road & Gabilan Drive	No	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**
17	West Street & Gabilan Drive	No	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**
18	Main Street & Gabilan Drive	No	No	No	No	No	**Yes**	No	**Yes**
19	Andalucia Drive & Gabilan Drive	No	No	No	No	No	**Yes**	No	**Yes**
20	Orchard Street & Metz Road	No	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**
21	Oak Street & Front Street	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**

Notes:
1. Signal warrant analysis based on Caltrans Peak Hour Signal Warrant #11.

Signal Warrant Checks

Figure 4.13-10

DENISE DUFFY & ASSOCIATES, INC.

Project Roadway Segment Analysis

Traffic volumes for project conditions on each of the studied roadway segments were developed by adding to background condition volumes the project trips. The project trips were assigned to the roadway system in the same manner as with intersections. The roadway segment analysis indicates that the addition of project traffic will cause three studied roadway segments to operate at LOS E or worse during at least one peak hour under project conditions.

Front Street, between Moranda Road and San Vicente Road (Eastbound PM)
Front Street, between East Street and Nestles Road (Eastbound AM/Westbound PM)
San Vicente Road, between Market Street and Gabilan Drive (Southbound AM/Northbound PM)

The degradation of roadway segment LOS indicates the need for roadway widening. Since there is no evaluation criterion for roadway segments, the roadway segment analysis is presented for informative purposes only. All other studied roadway segments will operate at LOS C or better conditions.

Project Freeway Segment Analysis

The results of the freeway segment analysis showed that four freeway segments are projected to operate at LOS D under project conditions.

US 101 – Northbound North of Gonzales-5th Street (AM Peak Hour)
US 101 – Northbound between Gonzales-5th Street to Gloria Road (AM Peak Hour)
US 101 – Northbound between Camphora Road and North Soledad (AM Peak Hour)
US 101 – Southbound between North Soledad and Camphora Road (PM Peak Hour)

The remaining segments are projected to operate at LOS C or better. The addition of project traffic would worsen conditions on each of the segments projected to operate at LOS D.

Project Freeway Ramp Analysis

Traffic volumes for project conditions on each of the studied freeway ramps were developed by adding to background condition volumes the project trips. The project trips were assigned to the freeway ramps in the same manner as with intersections. The freeway ramp analysis indicates that two of the studied freeway ramps are projected to operate at LOS F under project conditions.

Moranda Road Interchange – Southbound US 101 off-ramp to Moranda Road (PM Peak Hour)
Moranda Road Interchange – Northbound US 101 on-ramp from Moranda Road (AM Peak Hour)

As stated under existing conditions, the existing ramp configurations are inadequate to serve existing traffic volumes. The ramps at both the Moranda Road and Front Street interchanges with US 101 are not designed to accommodate existing traffic volumes. The existing ramp alignments are inadequate to feed the large ramp volumes onto the mainline that also has seen increased volumes. The project traffic would worsen conditions on each of the ramps.

Project Impacts and Mitigation Measures

Described below are the project impacts and recommended mitigation measures. Figure 4.13-3 shows the resulting LOS for project conditions with the recommended mitigation measures.

Several of the identified impacts involve significant physical improvements to not only intersection configurations, but also roadway widening. In some cases, the improvements identified below will be undesirable due to the need for right-of-way acquisition and/or create inconsistency with the City's General Plan. The evaluation of necessary mitigation measures revealed that several of the project impacts could be mitigated with the construction of an extension of Gabilan Drive that would provide an alternate route to US 101. The City's General Plan calls for the extension of Gabilan Drive to US 101 as a four-lane divided arterial. The Gabilan Drive extension would provide for a more direct route to the project area and alleviate identified impacts at several intersections. Figure 4.13.3 and Figure 4.13.11 show the change in level of service and travel patterns of the project that would result with the extension of Gabilan Drive. Project traffic would be significantly reduced through several of the intersections to be impacted. Therefore, it is recommended that rather than implementing undesirable roadway widening, the project contribute its fair-share towards the construction costs of the extension of Gabilan Drive to US 101 and widening of San Vicente Road from the project south to the Gabilan Drive extension.

The following analysis identifies potential project-induced transportation impacts and necessary mitigation measures to reduce project-related impacts to a less-than-significant level. When impacts cannot be reduced to a less-than-significant, feasible mitigation has been identified to reduce the extent of project impacts. Implementation of the following mitigation measures are necessary to minimize potential project impacts related to transportation/traffic.

Internal Site Circulation

Impact **Based on the significance criteria, the project has the potential to increase hazards due to a design feature or incompatible uses.** ***This significant impact would be reduced to a less-than-significant level with the following mitigation.***

4.13-1 Due to large traffic volumes and vehicle speeds, at-grade golf cart crossings shall not be permitted along streets classified as collectors or arterials. Prior to the issuance of any building and/or grading permit for development associated with the golf course facility, the project applicant shall submit detailed design-level plans demonstrating compliance with this measure, subject to the review and approval of the Director of Public Works. Improvements shall be constructed in accordance with this measure prior to the issuance of any certificate of occupancy or final permit for development associated with the golf course.

Local Intersection Impacts

Impact **Based on the significance criteria, the project will have a significant impact on eleven study intersections, five roadway segments, and signal warrants would be met on nine intersections under project conditions.** ***These significant impacts would be reduced to a less-than-significant level with the following mitigations.***

Mitigation

4.13-2 *Moranda Road and Front Street:* Widen NB Front Street to two lanes, add a second NB through lane, EB free-right-turn lane and widen Front Street between Moranda road and San Vicente Road. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance in order to mitigate the impact at this location. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad. Alternatively the project can

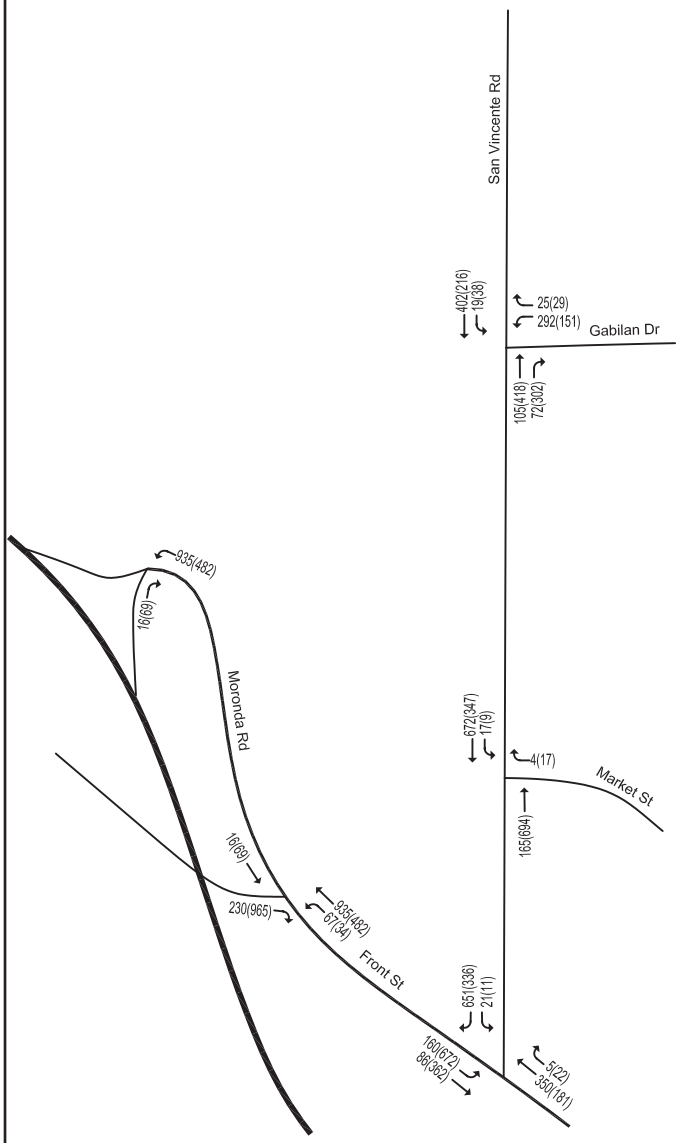
contribute its fair share towards the construction of the extension of Gabilan Drive to US 101. If this alternative is chosen local roadways shall be monitored annually to ensure that LOS levels are maintained in accordance with the City of Soledad's adopted standards until the extension is complete. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works.

4.13-3 *San Vicente Road and Front Street:* Widen NB Front Street to two lanes, NB San Vicente Road to three lanes, add two EB left-turn lands and a SB free-right-turn lane. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance in order to mitigate the impact at this location. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad. Alternatively the project can contribute its fair share towards the construction of the extension of Gabilan Drive to US 101. If this alternative is chosen local roadways shall be monitored annually to ensure that LOS levels are maintained in accordance with the City of Soledad's adopted standards until the extension is complete. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works.

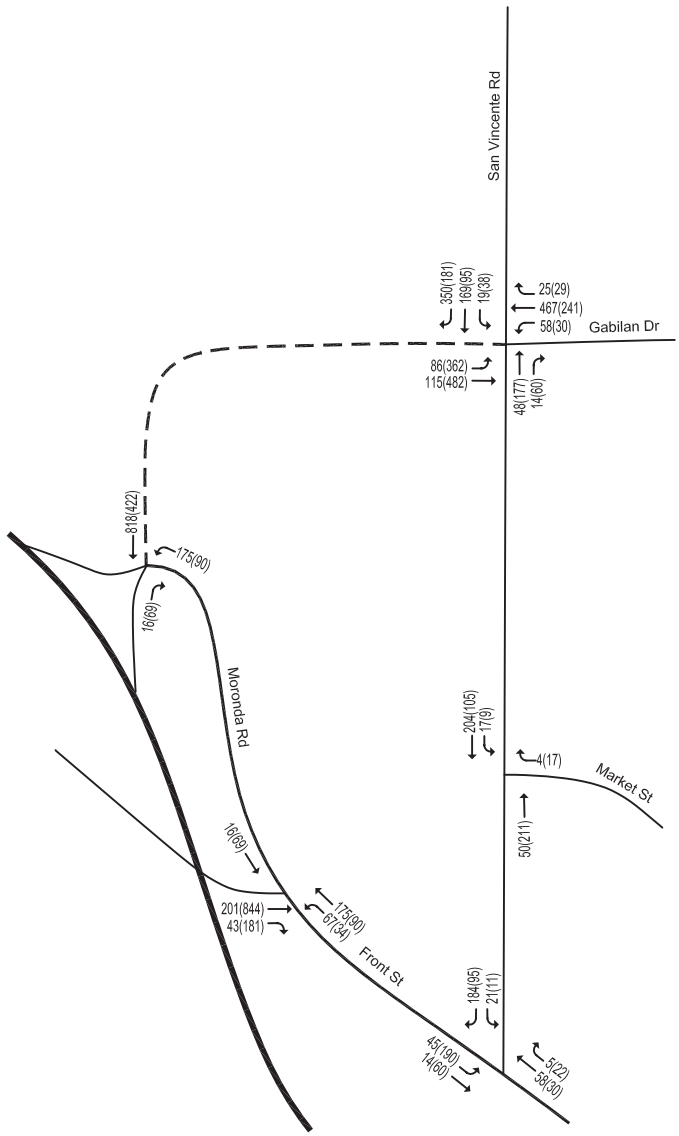
4.13-4 *San Vicente and Gabilan Drive:* Signalize this intersection and add a second westbound left-turn land, exclusive northbound right-turn lane, and southbound left-turn land. SB San Vicente Road will need to be widened to accommodate the dual left-turn lanes from Gabilan. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance in order to mitigate the impact at this location. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad. Alternatively the project can contribute its fair share towards the construction of the extension of Gabilan Drive to US 101. If this alternative is chosen local roadways shall be monitored annually to ensure that LOS levels are maintained in accordance with the City of Soledad's adopted standards until the extension is complete. If this alternative is selected the project applicant shall submit payment of the projects fair share towards the construction of this improvement in accordance with the traffic impact fee in effect at the time of building permit issuance for each phase of the project. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works.

4.13-5 *West Street and Gabilan Drive:* Signalize the intersection and add exclusive left-turn lanes with protected phasing on all approaches. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance in order to mitigate the impact at this location. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works.

Without Gabilan Extension



With Gabilan Extension



LEGEND

XX(XX) = AM(PM) Traffic Volumes

Source: Hexagon Transportation Consultants, Inc., 2007

N

Change of Travel Patterns with Extension of Gabilan

Figure 4.13-11

4.13-6 *Main Street and Gabilan Dive:* Signalize the intersection with protected left-turn phasing along Gabilan Drive. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance in order to mitigate the impact at this location No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad. Alternatively the project can contribute its fair share towards the construction of the extension of Gabilan Drive to US 101. If this alternative is chosen local roadways shall be monitored annually to ensure that LOS levels are maintained in accordance with the City of Soledad's adopted standards until the extension is complete. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works.

4.13-7 *Andalucia Drive and Gabilan Drive:* Signalize this intersection with protected left-turn phasing along Gabilan Drive. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance in order to mitigate the impact at this location. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad.

4.13-8 *Orchard Land and Metz Road:* Signalize this intersection with protected left-turn phasing on Metz Road and split phasing on Orchard Lane. The project applicant shall submit payment of the City of Soledad traffic impact fee in effect that the time of building permit issuance in order to mitigate the impact at this location. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad.

4.13-9 *Oak Street and Front Street:* Widen Front Street to four lanes between Nestles Road and Oak Street and add a second EB left-turn lane at the intersection of Nestles Road and Oak Street. Alternatively, the construction of the US 101/SR 146 bypass would alleviate impacts at this intersection. The project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance. All fees shall be paid prior to the issuance of any building permits for each phase of development and shall be subject to the approval of the Director of Public Works. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad.

Traffic Mitigation Triggers and Impact Fees

The large size of the proposed project would require that construction of the project be phased over the next ten years. As such, mitigation costs/fees must be phased along with the development of the project in

order to ensure the financial feasibility of the initial development activities. The two major roadway improvements, Gabilan Extension and reconstruction of the US 101/Moranda Road interchange, proposed as mitigation measures for the proposed project would require substantial funding that cannot be provided at the initial stages of this development nor by the proposed development alone. Therefore, triggers were determined as part of the traffic analysis for the two major roadway improvement projects. Traffic monitoring is included in the mitigation to assure that improvements are phased with development. The traffic monitoring shall be established and maintained by the city and funded by the developer.

Gabilan Extension Development Level Trigger

Analysis was conducted at intersections and roadway segments along San Vicente Road to determine at what development level the extension of Gabilan Drive needed to be implemented to support project traffic. The traffic analysis indicated that the most critical point of constraint is the intersection of San Vicente Road and Front Street. The capacity of the eastbound left-turn movement, Front Street to San Vicente, during the PM peak hour is the critical movement at the intersection. Under background conditions, the intersection was shown to meet traffic signal warrants. Analysis indicates that with the installation of a signal at the intersection, LOS D will be maintained at the intersection with up to 50 percent of the project development traffic.[2]

Based on roadway segment analysis conducted along San Vicente Road, LOS D operations along the roadway can be maintained with up to 75 percent of the project traffic added to the roadway system. However, as previously discussed, the intersection of San Vicente Road and Front Street would be unable to serve this level of development and would create spill over onto adjacent streets, such as West Street, that provide an alternate access to San Vicente Road.

US 101 and Moranda Road Interchange Improvement Development Level Trigger

As described previously, the existing freeway ramps at Moranda Road and US 101 are not designed to accommodate existing traffic volumes. The addition of project traffic, as well as background traffic, would compound the need for improvement of the ramps. The US 101 southbound off-ramp to Moranda Road will be the constraint on any further development. Analysis of ramp capacities indicate that LOS D operations can be maintained on the ramps with up to 25 percent of the project traffic added to the roadway system.

Intersection LOS analysis indicates that with signalization of the ramp termini intersections, up to 50 percent of the project development traffic can be accommodated; however, even with the signalization of the intersections, the ramps would be inadequate to serve this level of development.

Traffic Impact Fees

Funding for the mitigation measures, will be obtained via traffic impact fees imposed upon the project by both the City of Soledad and The Transportation Agency for Monterey County (TAMC). Mitigation of the project impacts would be in the form of payment of traffic impact fees estimated for the project.

[2] It should be noted, that though intersection LOS may be acceptable, the number of left-turning vehicles under background conditions (545 during the PM peak hour) indicates the need for a second left-turn lane and subsequent widening of San Vicente Road to receive the two left-turn lanes. With 50 percent of the project development traffic added to the roadway system, an additional 350 trips would be added to the left-turn movement during the PM peak hour.

Local Intersection Impacts

The above significant impacts will be reduced to a less-than-significant level through the implementation of one or more of the following actions:

a. The applicant shall construct circulation improvements as specified by the city and outlined above;

b. The applicant shall pay traffic impact fees per the city traffic impact fee ordinance in effect at the time the applicant requests building permits;

c. For any improvement that will not be constructed by the applicant or mitigated through payment of impact fees per city impact fee ordinance, the applicant shall pay a fair share of the improvement.

The City's traffic impact fee (TIF) program mentioned in item b above was adopted in October 2007. The City TIF identifies a fee per single-family unit and multi-family unit to be collected from proposed development and used towards identified improvements to the roadway system within and serving the City of Soledad. Mitigation of the project impacts would be in the form of payment of City of Soledad's traffic impact fees estimated for the project.

Regional Transportation Impacts

The identified freeway segment and interchange ramp improvements described below cannot be completely funded by a single development. In lieu of one single project absorbing the total cost of freeway widening, a regional development impact fee program has been established for state highways and regional roads within Monterey County. The Transportation Agency for Monterey County (TAMC) implements the fee program based on the 2004 TAMC "Nexus Study for Regional Development Impact Fee." The payment of fees is considered mitigation for impacts to freeway facilities. At this time, however, the City of Soledad has not committed to collecting the TAMC fee. In order to address regional improvement, the City of Soledad has incorporated local regional improvement projects into their adopted TIF program. Therefore, the collection of impact fees as part of the City's TIF program will include regional improvements and will be in-lieu of payment of an independent TAMC fees. Should the widening of the freeway and improvement of interchanges be deemed infeasible or not part of the fee program, the impact would be considered significant and unavoidable.

Regional Impacts

Impact **Based on the significance impact criteria, the project will have a significant impact on two freeway ramps and four freeway segments. Therefore, the project will have a significant impact on regional roadways.** ***With implementation of the mitigation identified below these significant impacts will be reduced to a less-than-significant level. However, should the proposed improvements be deemed infeasible or not part of the TAMC fee program, the impacts will be considered significant and unavoidable.***

Mitigation

4.13-10 *Moranda Road and US 101 NB Ramps:* Signalize the intersection and widen the NB US 101 on ramp to add a second NB left-turn lane. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic

impact fee in effect at the time of building permit issuance in order to mitigate the impact at this location. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the City of Soledad. Alternatively the project can contribute its fair share towards the construction of the extension of Gabilan Drive to US 101. If this alternative is chosen local roadways shall be monitored to ensure that LOS levels are maintained in accordance with the City of Soledad's adopted standards until the extension is complete. In addition the US 101 interchange at Moranda Road/Front Street will require reconfiguration/reconstruction to provide more efficient access to the project site and north Soledad in general. As this is a regional improvement, funding of at least part of the mitigation should be the responsibility of TAMC, and TAMC should include the improvement within its traffic impact fee. In this case, the project's payment of the City's adopted TIF fee, which includes regional improvements, would mitigate the project's regional impact at this location. However, should the widening of the freeway and improvement of interchanges be deemed infeasible or not part of the fee program, the impact should be considered significant and unavoidable. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works.

4.13-11 *Front Street and US 101 SB Ramps:* Signalize this intersection, widen southbound Front Street to two lanes and add a second lane on the off-ramp. In addition, the volume of vehicles exiting southbound US 101 at Front Street indicate the need for widening of Front Street, between US 101 and Moranda Road, to two lanes southbound and/or reconfiguration/reconstruction of the US 101 interchange at Moranda Road/Front Street to provide more efficient access to the project site and north Soledad in general. As this is a regional improvement, funding of at least part of the mitigation should be the responsibility of TAMC, and TAMC should include the improvement within its traffic impact fee. In this case, the project's payment of the City's adopted TIF fee would mitigate the project's impact at this location. However, should the widening of the freeway and improvement of interchanges be deemed infeasible or not part of the fee program, the impact should be considered significant and unavoidable. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance in order to mitigate the impact at this location. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works.

4.13-12 The project applicant shall be required to pay towards the City's TIF program, which includes regional improvements. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance in order to mitigate the impact at this location. The payment of fees is considered mitigation for project impacts to freeway facilities. All fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works. Should the widening of the freeway and improvement of interchanges be deemed infeasible or not part of the fee program, the impact should be considered significant and unavoidable.

Impacts from Mitigation Measures

The environmental impacts from implementation of intersection improvements directly associated with construction of the project are included within the analysis in this EIR. Intersection, roadway, and freeway improvements identified as mitigation that are not the direct responsibility of the project could result in environmental impacts beyond those presented herein. The evaluation of environmental impacts for these improvements is the responsibility of the agency and/or individual with jurisdiction over these

facilities. All transportation improvements would be subject to environmental review in accordance with CEQA at the time that design plans for these improvements are developed.

Cumulative Impacts

This section describes the results of the traffic analysis under cumulative conditions. The traffic analysis evaluated two cumulative conditions: 1) baseline cumulative conditions without the project, and 2) cumulative conditions with the project. A 2030 cumulative condition is included in the Cumulative section of this EIR.

Cumulative Trip Generation

Cumulative traffic volumes include trips associated with three pending developments located within the City of Soledad. City staff provided the list of cumulative developments. The projects are described below.

- *The Village at Soledad* – 139,730 s.f. shopping center, an 84-room hotel, and 1,329 seat cinema located along the eastside of Nestles Road south of Los Coches Drive.

- *Soledad Plaza* – 415,000 s.f. shopping center, located along the west side of San Vicente Road between Moranda Road and Gabilan Road.

- *263Front Street* – 12,200 s.f. retail center and 152 apartments/condominiums, located along the north side of Front Street between West Street and Benito Street.

Traffic volumes for cumulative conditions were estimated by adding traffic associated with pending developments to background traffic volumes for the cumulative without project scenario and the proposed project for the cumulative with project scenario. The added traffic associated with the pending projects was developed based on trip generation estimates and assignments produced by Hexagon. The magnitude of traffic added to the roadway system by each of the pending developments is estimated by multiplying the applicable trip generation rates to the size of the development. The trip generation rates published in the Institute of Transportation Engineers (ITE) manual entitled *Trip Generation*, seventh edition, 2003, were used for this analysis. On the basis of these rates, it is estimated that the pending projects would generate a combined total of 25,938 daily trips, with 702 trips occurring during the AM peak hour and 2,348 occurring during the PM peak hour. The type of land use, size, and trip estimates of each development is presented in Table 4.13-4. Cumulative Growth traffic volumes with the project are shown on Figure 4.13-12.

Cumulative Roadway Network

It is assumed in this analysis that the roadway network and intersection configurations under cumulative no project conditions would be the same as described under background conditions with improvements, also known as "cumulative baseline conditions" with the exception of the following two intersections:

Moranda Road and Front Street - The improvement consists of the addition of an east leg to the intersection to serve the Soledad Plaza project site.

San Vicente Road and Gabilan Drive - The necessary improvement consists of the addition of a west leg to the intersection to serve the Soledad Plaza project site.

It is assumed that the project mitigation measures described above are included under the cumulative with project conditions analysis. The cumulative with project analysis includes evaluation of intersection levels of service with and without the extension of Gabilan Drive to US 101 as described above.

Cumulative Intersection Levels of Service Operations

The results of the intersection LOS analysis under cumulative conditions are summarized in Figure 4.13-12. The results show that all of the study intersections would operate at an acceptable LOS D or better under cumulative conditions with and without the project.

Cumulative Signal Warrant Operations

The peak-hour signal warrant analysis for cumulative conditions showed that the Caltrans peak-hour volume warrant would not be satisfied at any further study intersections than those identified under project conditions. The results of the signal warrant analysis can be found in the Transportation Impact Analysis contained in Technical Appendix T-8 in Volume II of this EIR.

Cumulative Roadway Segment Analysis

Traffic volumes for cumulative conditions on each of the studied roadway segments were developed by adding to background condition volumes the trips associated with each of the pending projects and proposed project. The roadway segment analysis indicates that all but one of the studied roadway segments are projected to operate at LOS D or better during both peak hours under cumulative no project conditions at:

Front Street - between East St and Nestles Rd (westbound)

The roadway segment analysis indicates that the addition of project traffic would cause four additional studied roadway segments to deteriorate to LOS E or worse during at least one peak hour under cumulative with project conditions at:

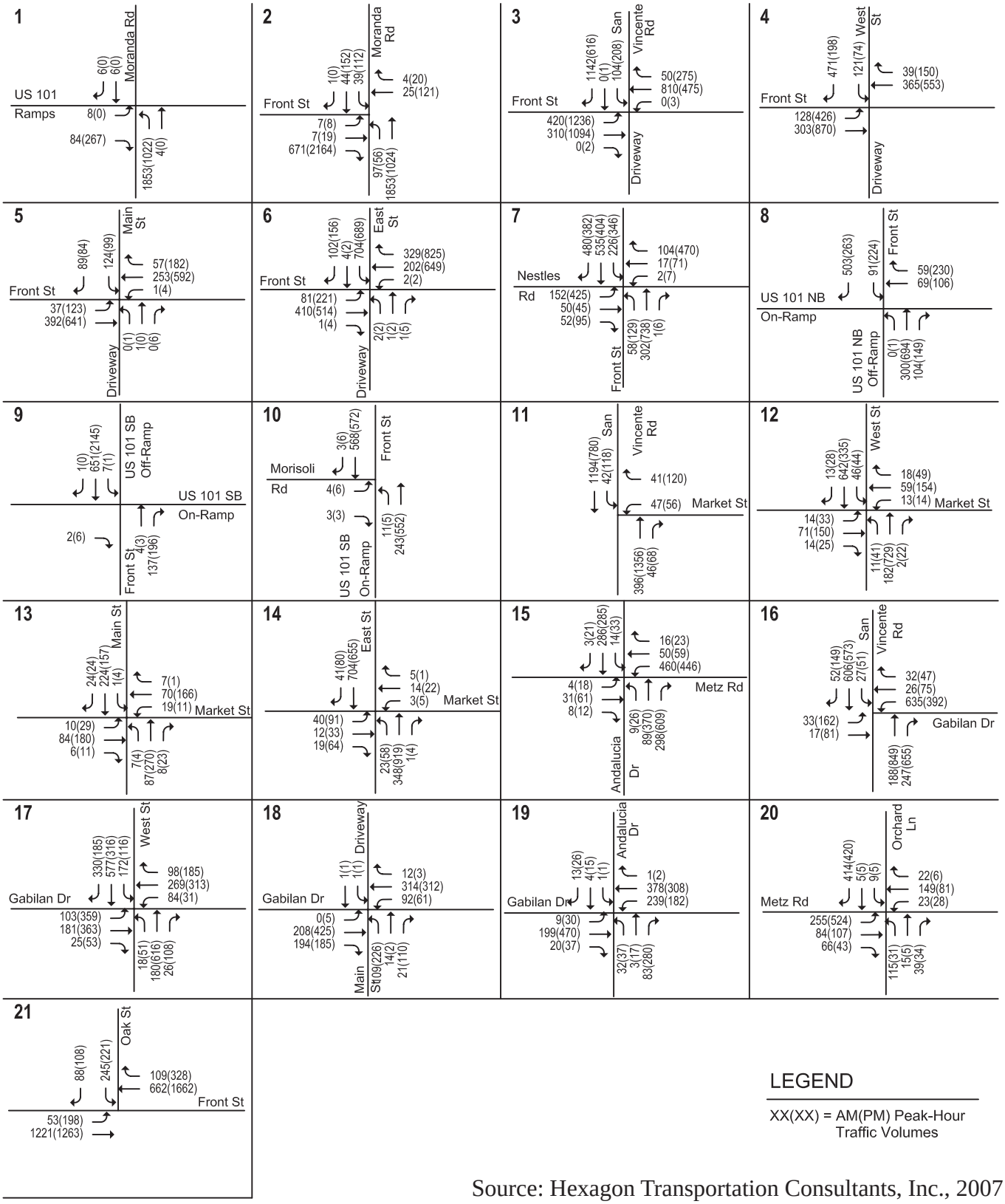
Front Street - between Moranda Rd and San Vicente Rd (eastbound)
Front Street - between East St and Nestles Rd (eastbound)
San Vicente -between Market St. and Gabilan Dr. (northbound & southbound)

The degradation of roadway segment levels of service indicates the need for roadway widening.

Cumulative Freeway Segment Analysis

Traffic volumes for cumulative conditions on each of the studied freeway segments were developed by adding to background condition volumes the trips associated with each of the pending projects and proposed project. The pending project trips were assigned to the freeway system in the same manner as with the proposed project. The freeway segment analysis indicates that all but one of the studied roadway segments are projected to operate at LOS C or better during both peak hours under cumulative no project conditions. The freeway segment analysis indicates that one additional study segment than those identified under project conditions would deteriorate to LOS D or worse during at least one peak hour under cumulative with project conditions. Freeway segment analysis is presented in Tables 28 and 29 of the Transportation Impact Analysis.

US 101 –Northbound between Gloria Road and Soledad Prison (AM Peak Hour)



Source: Hexagon Transportation Consultants, Inc., 2007

Cumulative Growth Traffic Volumes

Figure 4.13-12

Table 4.13-4
Cumulative Project Trip Generation Estimates

			Daily		AM Peak Hour				PM Peak Hour			
Land Use	Size		Rate /a/	Trips	Rate /a/	In	Out	Total	Rate /a/	In	Out	Total
The Village at Soledad												
Shopping Center /d/	139,730	s.f.	42.94	6,000	1.03	88	56	144	3.75	252	272	524
Hotel /e/	84	Rooms	8.17	686	0.56	29	18	47	0.59	26	23	50
Cinema	1,329	seats							0.08	38	68	106
Totals				6,686		116	74	191		316	364	680
Soledad Plaza												
Shopping Center /d/	415,000	s.f.	42.94	17,820	1.03	261	167	427	3.75	747	809	1556
263 Front Street												
Specialty Retail Center /c/	12,200	s.f.	44.32	541		8	9	16	2.71	15	19	33
Residential /b/	152	units	5.86	891		11	56	67	0.52	53	26	79
Totals				1,431		19	64	83		68	45	112
Total All Approved Projects				**25,938**		**397**	**305**	**702**		**1,131**	**1,218**	**2,348**

Notes:
/a/ Rates expressed in trips per dwelling units.
/b/ Trip Generation rates for residential condominium/townhouse (ITE Land Use #230) used for this project.
/c/ Trip Generation rates for specialty retail center (ITE Land Use #814) used for this project.

/d/ Trip Generation rates for shopping center (ITE Land Use #820) used for this project.
/e/ Trip Generation rates for hotel (ITE Land Use #310) used for this project.

Source for rates: ITE Trip Generation, Seventh Edition.

Cumulative Freeway Ramp Analysis

Traffic volumes for cumulative conditions on each of the studied freeway ramps were developed by adding to background condition volumes the trips associated with each of the pending projects and proposed project. The pending project trips were assigned to the freeway ramps in the same manner as with the proposed project. The freeway ramp analysis indicates that no further study ramps than those identified under project conditions would deteriorate in levels of service under cumulative no project and with project conditions. Freeway ramp analysis is presented in Tables 30 and 31 of the Transportation Impact Analysis.

Cumulative Impacts and Mitigation Measures

Impact **Based on the significance impact criteria, the project together with the cumulative developments will have a significant impact on two intersections.** ***The traffic impacts would be reduced to a less-than-significant level with implementation of mitigation identified below.***

Mitigation

4.13-13 *Moranda Road and Front Street:* Addition of an east leg to the intersection to serve the Soledad Plaza project site. In order to mitigate potential impacts at this intersection, the project applicant shall submit payment of the City's adopted traffic impact fee in effect at the time of building permit issuance for each phase of development, subject to the review and approval of the City of Soledad Director of Public Works. All fees shall be paid prior to the issuance of any building permit for each phase of development.

4.13-14 *San Vicente Road and Gabilan Drive:* Addition of a west leg to the intersection to serve the Soledad Plaza project site. In order to mitigate potential impacts at this intersection, the project applicant shall submit payment of the City's adopted traffic impact fee in effect at the time of building permit issuance for each phase of development, subject to the review and approval of the City of Soledad Director of Public Works. All fees shall be paid prior to the issuance of any building permit for each phase of development.

4.14 UTILITIES AND SERVICE SYSTEMS

Introduction

This section evaluates the impacts of the project on water distribution systems and facilities, wastewater collection, treatment and disposal systems and facilities, solid waste disposal facilities, and energy (specifically electricity) supply and infrastructure. Impacts related to the quality of water supply and stormwater/drainage infrastructure are addressed in **Section 4.8 Hydrology and Water Quality.**

To obtain information from public utility providers, DD&A contacted the sewer, water, and landfill operators. Additionally, a Water Supply Assessment and Written Verification of Supply (WSA) was prepared for this project by Byron Buck & Associates. A copy of the WSA is contained in Appendix K and the following section was prepared using information contained in that report. Further, information received from public providers is used to evaluate existing capacity, projected capacity, and existing and projected future use of that capacity.

Setting

Water Supply

The municipal water purveyor for the proposed project is the City of Soledad, which currently operates a series of wells, tanks, and distribution lines within the City's boundaries. As an urban water supplier of more than 3,000 customers, the City is required, under the Urban Water Management Planning Act, as amended, to prepare and periodically update an urban water management plan that describes and projects estimated past, present, and future water sources, supply and demand for at least 20 years into the future. The City's most recent urban water management plan (UWMP) was adopted in December 2005. A portion of the projected water demand associated with the project was included in the UWMP. Under Water Code § 10910(c)(2), and Public Resources Code § 21151.9, when an individual land use project's water demand was accounted for in the most recently adopted urban water management plan, the urban water management plan's information and analysis may be incorporated in the water supply and demand assessment. Accordingly, the information and analysis in the UWMP, including the overall water planning projections and supply projections, is incorporated into this EIR.

The water supply analysis in this section is based on a number of sources in addition to the UWMP, including the following: the June 2001 EIR/EIS for the Salinas Valley Water Project, information developed by the City, the City's 2005 Water Supply Assessment and Written Verification of Supply (WSA) prepared for this project by Byron Buck & Associates, and the City's 2005 Water Master Plan prepared by Schaaf & Wheeler.

As identified in the above referenced documents, the City's sole source of water is groundwater from the Salinas Valley Groundwater Basin (herein referred to as "Basin"), which follows the Salinas River throughout Monterey County. Due to significant groundwater overdraft, the Basin, which consists of four subareas (East Side, Pressure, Forebay, and Upper Valley), has historically experienced saltwater intrusion of varying magnitude along its northern terminus. More specifically, overdraft has caused saltwater intrusion in areas closer to the coast. The City of Soledad, however, is located within the Forebay Subarea, which has a total surface area of 94,000 acres. Soledad draws its water from the unconfined shallow aquifer zone, and overdraft has not historically been a problem in the Forebay Subarea.

Existing groundwater production is shown in Table 4.14-1. According to the 2005 UWMP, the City anticipates pumping up to 8,458 acre feet per year (AFY). This projection, however, is considered

conservative as it does not represent all new demands on the Basin, as existing agricultural uses will gradually be retired, mitigating much of the impacts on the Basin. Table 4.14-2 depicts projected water demand in comparison with available water supply.

Table 4.14-1
City of Soledad's Groundwater Production (AFY)
2000 – 2004

Year	City of Soledad Service Area
2000	1,716
2001	1,749
2002	1,878
2003	2,322
2004	2,363

Source: City of Soledad Urban Water Management Plan, Harris & Associates, December 2005.

Table 4.14-2
City of Soledad Water Supply Demand & Supply Comparisons (AFY)

Year	Available Supply	Projected Demand	Proportion of Available Supply
2005	1,500,000	2,337	0.16%
2010	1,500,000	5,592	0.37%
2015	1,500,000	6,531	0.43%
2020	1,500,000	7,506	0.50%
2025	1,500,000	8,458	0.56%

Source: City of Soledad Urban Water Management Plan, Harris & Associates, December 2005.

Infiltration in the Salinas River channel is the principal source of groundwater for the Basin. Flows from the Salinas River channel and its tributaries percolate through alluvial materials and porous geological structures, recharging the local aquifers. While seawater intrusion does not directly affect the City of Soledad, it is an issue for the Monterey County Water Resources Agency (MCWRA), which manages water resources throughout the County. MCWRA is currently in the process of implementing a long-term program to address and ultimately eliminate overdraft and seawater intrusion in the basin known as the Salinas Valley Water Project (SVWP). The objectives of the SVWP, as delineated in the June 2001 EIR/EIS (SVWP EIR) for the project, include halting seawater intrusion, continuing conservation of winter flows for recharge of the Salinas Valley basin through summer releases, improving long-term hydrologic balance between recharge and withdrawal, and providing a sufficient water supply to meet water needs through the year 2030.

According to the 2005 UWMP and the City's WSA for the proposed project, sufficient water exists to meet the anticipated demands generated by the proposed project. Additionally, the project site is located in Zone 2C of the SVWP and would subsequently benefit from the implementation of the measures previously identified above. Furthermore, projected water supplies are sufficient to meet the projected annual water demands of existing and previously approved uses and the proposed Miravale III project during normal, single dry and multiple dry years" (Water Supply Assessment and Written Verification of Supply).

Water System

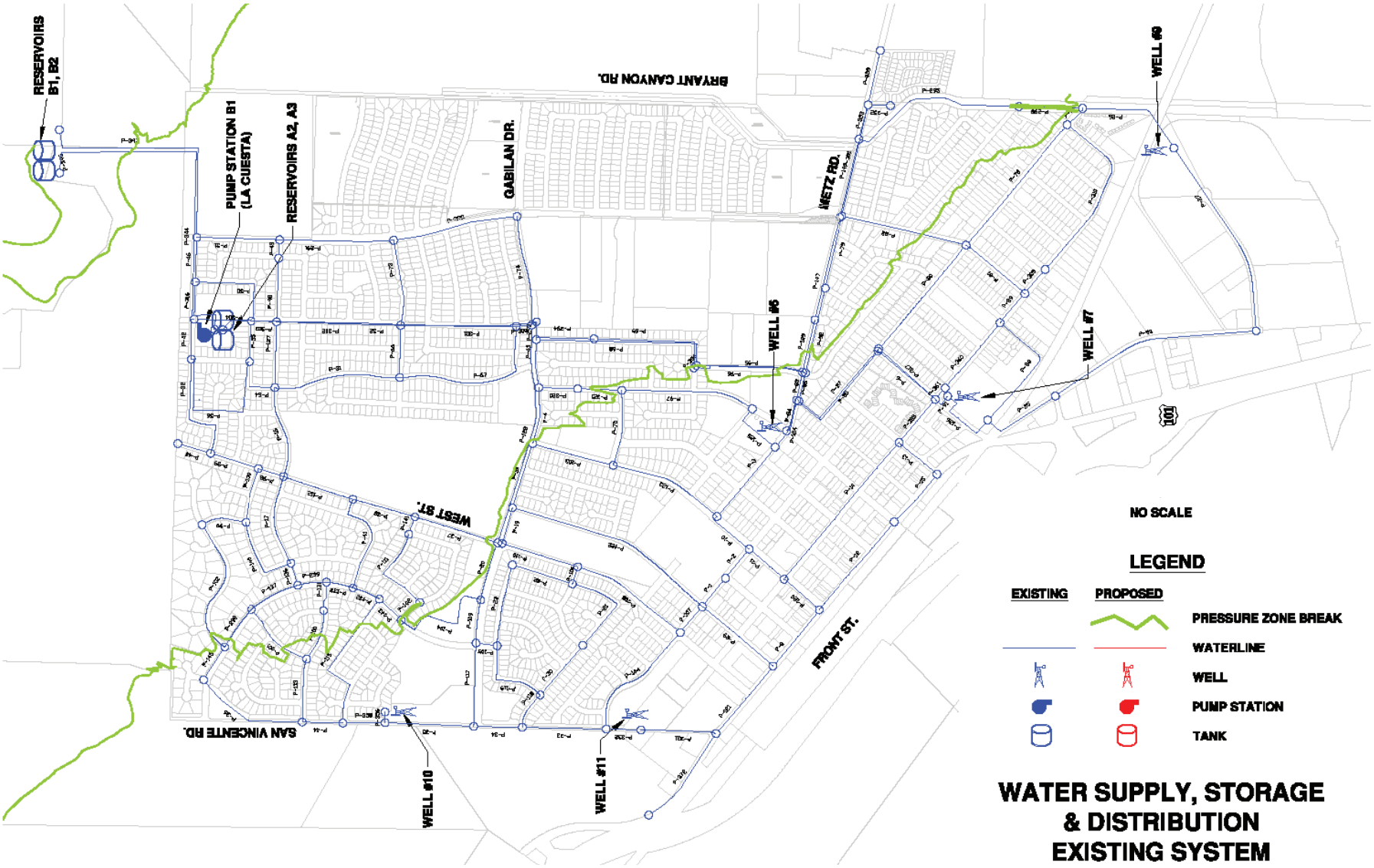
According to the 2005 Soledad Water Master Plan prepared by Schaaf & Wheeler, the existing City operated system consists of production wells, storage tanks, one booster pump station, and approximately 40 miles of water distribution pipelines ranging in size between 2" to 16" in diameter. The existing system provides approximately 3,900 metered connections and is classified as a large water system according to the State of California Department of Health Services. Figure 4.14-1 provides a graphical representation of the City's water distribution system. The following section provides an overview of the City's existing water distribution system as described in the 2005 Soledad Water Master Plan.

The existing system, which is defined as two pressure zones, Zone A and Zone B, five production supply wells, four reservoirs (i.e. storage tanks), and one booster pump. Due to elevation changes, the City has been defined as two pressure zones in order to ensure that adequate pressure and services are provided to area residents. More specifically, the service elevation for Zone A ranges between 180 and 215 feet above sea level and Zone B ranges between 215 and 340 feet above sea level. There are two existing storage tanks, including a 100,000 gallon tank located in Vosti Park, and a one million gallon tank located near the La Cuesta Views subdivision, in Zone A. All the production wells are also located within Zone A. After water has been pumped from the wells it is subsequently treated with a Chlorine solution to provide for residual disinfection. Two of the existing wells are emergency/standby production wells that have historically tested high for nitrates and low levels of bromobenzene. These wells have not been used and they will be abandoned as new wells are added to the system. Two additional one million gallon storage tanks are located in Zone B. Since all the production wells are currently located within Zone A, a booster pump station, consisting of three pumps, is located at the La Cuesta site and provides water from Zone A to the storage facilities in Zone B. The total storage capacity for the entire system is approximately 3.1 million gallons or approximately 9.5 acre-feet (AF). Existing supply capacity from the five groundwater wells is estimated at 7.5 million gallons per day (MGD) or approximately 8,400 acre-feet per year (AFY).

As identified in the Soledad Water Master Plan, a number of Capital Improvement Program (CIP) projects have been identified as requiring immediate attention in order to address system deficiencies. These projects include the provision of permits and land acquisition for additional supply wells, installing an additional reservoir at the La Cuesta location, and discontinuing the use of the Vosti Park tank. In summary, the existing systems requires infrastructure upgrades in order to meet existing demands and further upgrades are warranted to accommodate both "Near Future Development," which includes the proposed project, and ultimate buildout of the City as envisioned in the General Plan.

Wastewater

In 2005, the City of Soledad, due to the urgent need for wastewater infrastructure to accommodate planned growth, undertook the preparation of a comprehensive Long Term Wastewater Management Plan (LTWMP) for upgrading, operating, maintaining, and expanding the City's sewer system. In May 2006, the City Council adopted Resolution No. 3783 adopting the LTWMP prepared by Black & Veatch. The following discussion provides an overview of the City's wastewater system as described in the Black & Veatch report.



Source: Shcaaf and Wheeler, 2007

◀ N

Existing Water Distribution System

Figure 14.4-1

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As identified in the LTWMP, wastewater and sanitary sewer services are provided by the City of Soledad. The City operates two wastewater treatment plants, including a plant owned by the California Department of Corrections and Rehabilitation (CDCR), located southwest of the City. The City Plant is owned by the City, and the Prison Plant is leased from CDCR. Currently, the City is in process of purchasing the Prison Plant from the State. The two plants treat wastewater from the City, two prison facilities (CDCR's Salinas State Prison and Correctional Training Facility), and several industrial dischargers.

In November 2001, due to capacity concerns, Carollo Engineers conducted a capacity evaluation and re-rated the capacity of the City Plant at 3.6 million gallons per day (mgd). This re-rating allowed the City to continue approving new development while planning for plant expansion. In 2004, however, the City council adopted Urgency Ordinance No. 612 "Establishing a Moratorium on the Issuance of Building Permits Requiring Sewer Connections and Making Findings Related Thereto" due to treatment capacity concerns. More specifically, in September of 2004 flow rates were measured at 2.9 mgd, exceeding percolation pond capacity. As a result, the City determined that the only viable alternative was to prohibit additional inflow until such time that additional capacity could be provided. Subsequently, the council also adopted Resolution No. 3557 "Declaring an Emergency Pursuant to Section 20168 of the Public Contract Code and Authorizing Contracting Without Compliance With Mandatory Contract Bidding Procedures" in order to expedite design and construction efforts necessary to resolve the treatment and disposal emergency created by the conditions at the facility.

The City's existing wastewater collection system includes more than 100,000 feet of gravity wastewater pipelines, ranging in diameter from 6 to 15 inches, and one small temporary sewage pump station. Currently, the City Plant utilizes both biological and physical treatments, which consist of headworks, aeration ponds, secondary ponds, and effluent disposal. See Figure 4.14-2. After disposal, additional biological and physical treatment occurs within the soil column, but is limited due to high groundwater conditions. The City, however, has committed to phasing in tertiary treatment by 2010 in order to mitigate groundwater quality concerns and allow for the future use of recycled water.

The 2006 LTWMP, which provides for funding, upgrading, operating, maintaining, and expanding the City's wastewater infrastructure, has an emphasis on use of recycled water. The recommended improvements include process improvements and capacity expansion (5.5 MGD) to the City's Wastewater Treatment Plant and implementation of a 1.3 MGD Scalping Plant within the City's collection system. This scalping plant would provide Title 22 water for irrigation of golf courses, parks and other landscape areas. The estimated cost of the capital improvements required to meet the City's projected growth at the year 2028 is approximately $42.8 million. Currently, the City is in the process of soliciting proposals for the expansion of plant capacity. These upgrades are scheduled to be in service by 2010.

Solid Waste

The project area is within the jurisdiction of the Salinas Valley Solid Waste Authority (SVSWA), which provides solid waste services to the cities of Gonzales, Greenfield, King City, Salinas, Soledad, and the unincorporated areas of Monterey County in the Salinas Valley Region. Currently, the SVSWA owns three landfills and a transfer station, and oversees the contract operation of these facilities. The SVSWA is also responsible for overseeing future landfill siting or expansion to meet the area's long-term solid waste disposal needs. Solid waste collection is provided by Tri-Cities, a private hauler.



Existing Wastewater Distribution System

Figure 4.14-2

DENISE DUFFY & ASSOCIATES, INC.

In 1999, the SVSWA developed a Regional Plan to provide the Salinas Valley with additional landfill capacity. As a result of this process, the SVSWA Board of Directors adopted a program that provided for the expansion of Crazy Horse, Johnson Canyon and Jolon Road Landfills, as well as a good faith effort to find a new landfill site to supplement the capacity of the existing landfills in the Salinas Valley for at least 35 years. In 2002, the SVSWA undertook the preparation of an EIR for the Regional Solid Waste Facilities Project in order to procure additional landfill capacity for the SVSWA's member jurisdictions. On November 14, 2002, the SVSWA Board of Directors adopted the Regional Solid Waste Facilities Project, which would maximize the capacity of existing facilities within the SVSWA's jurisdiction.

In addition to disposing of waste at the above referenced landfills, the SVSWA also disposes of waste at Foothill Sanitary Landfill and the Monterey Regional Waste Management District Marina Landfill. As identified in the City of Soledad General Plan EIR, solid waste is primarily disposed of at the Johnson Canyon facility. According to the California Integrated Waste Management Board, the Johnson Canyon facility has an estimated capacity of approximately 6,601,100 cubic yards. Approximately 5,936,250 cubic yards of capacity is available for disposal.

Energy

Pacific Gas & Electric Co. (PG&E) provides gas and electric service to the project site. Natural gas is measured in British thermal units (Btu), which is the quantity of heat necessary to raise the temperature of one pound of water one degree Fahrenheit. Electricity is measured in kilowatt hours (kwh). A kilowatt (kw) is a measure of power produced through sources of generation at 3,413 Btu/kw-hour. Most electricity is produced by converting other primary energy sources into electricity. PG&E operates a grid distribution system that transmits electricity with a vast network of transmission and distribution lines throughout the service area to the users. Most of the electricity that PG&E distributes throughout Monterey County is obtained from the Duke Energy Moss Landing Plant. The Moss Landing Plant generates over 1,500 megawatts, which is adequate to supply the Monterey region (Jose Rios, PG&E, personal communication, August 2007).

Regulatory Environment

City of Soledad General Plan

The City of Soledad General Plan provides policies for adequate utilities and service systems. Please refer to Table 4.9-2 of the Land Use section for a detailed analysis of the project's consistency with the relevant utilities and service systems provisions of the Soledad General Plan. The following policies address utilities and service systems relevant to the proposed project.

Policy S-1 The City shall ensure through the development review process that adequate public facilities and services are available to serve new development. New development shall not be allowed until adequate public services and facilities to serve such development are provided. Where existing facilities are inadequate, new development may only be approved when the following conditions are met:

a. The development and/or City can demonstrate that all necessary public facilities will be adequately finance and installed in time (through fees or other means); and
b. The facilities improvements are consistent with applicable facility plans approved by the City or other agencies in which the City is a participant.

Policy S-2 The City shall plan for the expansion of needed water and sewer infrastructure including, but not limited to, the expansion of water production, storage and distribution facilities,

the expansion of wastewater collection and treatment capacity, and storm drainage facility expansion.

Policy S-3 Public facilities, such as wells, pumps, tanks, and yards shall be located and designed so that noise, light, odors, and appearances do not adversely affect nearby land uses.

Policy S-4 Where new development requires the construction of new public facilities, the new development shall pay its fair share of the construction. Where necessary, the City shall require the dedication of land within newly developing areas for public facilities.

Policy S-5 The City shall require that new development pay its fair share of the cost of all existing facilities it uses based on the demand for these facilities attributable to the new development; exceptions may be made when new development provides alternative sources of funding or equipment to offset any shortfall in revenues.

Policy S-8 The City shall promote the efficient use of water and reduce water demand by:
a. Requiring water-conserving design and equipment in new construction;
b. Encouraging water-conserving landscaping and other conservation measures;
c. Encouraging the retrofitting of existing fixtures with water-conserving fixtures.

Policy S-10 The City will manage the increase in water demand from new development to help insure groundwater resources are not overdrafted. The City will work with Monterey County and public and private water entities to plan for the efficient, long term management of groundwater resources.

Policy S-11 Gravity flow for sewer and water service shall be employed wherever feasible.

Policy S-12 The City shall encourage the use of natural drainage systems where feasible to preserve and enhance natural features.

Policy S-15 The City shall require new development to adequately mitigate increases in stormwater peak flows and/or volume. Mitigation measures shall take into consideration impacts on adjoining properties and impacts on groundwater recharge related to existing and proposed water wells.

Policy S-16 The City shall encourage project designs that minimize drainage concentrations and impervious coverage and maintain, to the extent feasible, natural site drainage conditions. Drainage onto adjacent properties shall be restricted to pre-project levels minus any runoff from the area to be developed.

Policy S-17 The City shall require projects to allocate land as necessary for the purpose of retaining flows and/or for the incorporation of mitigation measures for water quality and supply impacts related to urban runoff.

Policy S-19 Engineered drainage plans shall be required for all development projects. Engineered drainage plans shall incorporate a collection and treatment system for stormwater runoff consistent with applicable federal and state laws.

Environmental Impact Report on the Soledad General Plan. The General Plan EIR evaluated potential utilities and service systems impacts associated with the adoption and implementation of the Soledad General Plan, including future development within the project area. This program-level EIR

focused on general impacts associated with implementation of the General Plan, rather than project-specific impacts associated with individual development projects, such as the Miravale III Specific Plan project. According to the General Plan EIR, the following utilities and service systems impacts were identified:

- Buildout of the General Plan would require considerable expansion of wastewater infrastructure capacity for collection, treatment, and disposal. This impact was identified as significant unless mitigated.

- Buildout of the General Plan would significantly increase the amount of biosolids generated by the wastewater treatment plan, which would impact the capacity of licensed disposal facilities. This impact was identified as adverse, but not significant.

- Buildout would increase additional solid waste generation, which will adversely impact the capacity of landfills serving the City. This impact was considered significant unless mitigated.

- Development accommodated under the General Plan would increase the demand for electricity and therefore additional distribution facilities. This was considered significant unavoidable impact.

Soledad Municipal Code.

The following discussion provides a general overview of applicable provisions of the City of Soledad Municipal Code, in addition to associated Ordinances and City Council Resolutions, as they pertain to the construction of recycled water infrastructure and development impact fees for various public facilities. This information is intended to provide a contextual background of various City requirements pertaining to the payment of public facilities impact fees, as well as infrastructure requirements identified in the City's Municipal Code. Moreover, as discussed below, the City of Soledad annually updates the various development impact fees to reflect the percentage change in the construction index for San Francisco. As a result, the proposed project would be subject to the requirements of the adopted impact fee in effect at the time of building permit issuance.

Chapter 13.11 – Recycled Water Service

On June 6, 2007 the City Council adopted Ordinance No. 645, which amended the City of Soledad Municipal Code to include a new chapter, Chapter 13.11, governing the use of recycled water within the City's service area. More specifically, as identified in Section 13.11.010, the general purpose of Ordinance No. 645 is to "establish procedures, specifications, and limitations for the safe use and operation of recycled water facilities and systems within the City's service area, and adopt rules and regulations controlling such use" in order to achieve conservation of potable water supplies. Development of all recycled water components associated with the proposed project would be required to adhere to the requirements set forth in this Ordinance in order to ensure that project infrastructure adheres to the standards and specifications of the City of Soledad.

Ordinance No. 642

On January 17, 2007 the City Council adopted Ordinance No. 642, which amended Chapter 14.06 of Title 14 of the Soledad Municipal Code to incorporate Water Development Impact Fees (see Section 14.06.111). The general purpose of Ordinance No. 640 was to identify impact fees to mitigate impacts to public facilities associated with new developments. Pursuant to Section 14.06.111, the water development impact fees are required to be annually adjusted to reflect the annual percentage change in

the construction index for San Francisco as reported in the Engineering News-Record. In order to mitigate potential project-induced impacts to water facilities, the project applicant would be required to submit payment of impact fees consistent with the requirements of Ordinance No. 642 and the corresponding impact fee in effect at the time of building permit issuance. Since the proposed project is scheduled to be constructed over a duration of 20 years, the project would be subject to all impacts fees as amended that are in effect at the time of building permit issuance.

Ordinance No. 640

On December 6, 2006 the City Council adopted Ordinance No. 640, which amended Chapter 14.06 to Title 14 of the Soledad Municipal Code to incorporate Wastewater Development Impact Fees (see Section 14.06.110). The general purpose of Ordinance No. 640 was to identify wastewater impact fees to mitigate impacts to public facilities associated with new developments. Pursuant to Section 14.06.110, the wastewater development impact fees are required to be annually adjusted to reflect the annual percentage change in the construction index for San Francisco as reported in the Engineering News-Record. In order to mitigate potential project-induced impacts to wastewater facilities, the project applicant would be required to submit payment of impact fees consistent with the requirements of Ordinance No. 640 and the corresponding impact fee in effect at the time of building permit issuance.

Miravale III Specific Plan

Sections 5.0 of the Miravale III Specific Plan identify goals and policies to ensure the adequate provision of public services. Applicable goals are summarized as follows:

- Public Services and Facilities Goal PSF-1 states that project development should provide an efficient, self sustaining system of public facilities that accommodate the needs of project build-out.

- Goal PSF- 2 further states that project development should provide adequate and reliable services and utilities to area residents and business while ensuring that adequate maintenance of these facilities is provided.

Relevant Project Characteristics

The Miravale III Specific Plan and Vesting Tentative Map would result in the introduction of approximately 15,201 persons within the Specific Plan area, in addition to commercial uses, open space, and public facilities. Project infrastructure, including storm drainage mains, sanitary sewer lines, and water lines, would also be constructed to provide services to the project site.

Thresholds of Significance

In accordance with CEQA Guidelines, a project impact would be considered significant if the project would:

- Have insufficient water supplies available to serve the project from existing entitlements and resources, or require new or expanded entitlements.

- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction or which could cause significant environmental effects.

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

- Result in a determination by the wastewater treatment provider, which serves or may serve the project, that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

- Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

- Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.

- Not comply with federal, state, and local statutes and regulations related to solid waste.

Impacts and Mitigation

Water Supply

Potable Water Supply and Distribution System

The City of Soledad would provide domestic water service to the Miravale III project. The 2005 UWMP, which includes a portion of the anticipated land uses for the proposed project, states that the City has sufficient water supply to accommodate the development of the proposed project, in addition to, full buildout of the City as envisioned under the 2005 General Plan.

Senate Bills 610 (Water Code Section 10910 *et seq.*) and 221 (Government Code Section 66473.7), require the preparation of a water supply assessment in conjunction with project review under CEQA. The intent of SB 221 and 610 is to assure that certain new developments are provided with a reliable supply of water, and inform decision making regarding water supply implications of development. A Water Supply Assessment (WSA) has been prepared for this project by the City of Soledad and Byron Buck & Associates (August 2007). This EIR section supports the City's fulfillment of its obligation to independently assess and publicly disclose potential water-supply-related impacts of the project under CEQA Guidelines Section 15083.5, Water Code Section 10911(c), and Government Code Section 66473.7. The factual analysis in this EIR draws upon and discusses a range of water supply related information, including information developed by the City, the City of Soledad's 2005 UWMP, and the WSA for this project. The WSA for the project is included as part of this EIR (as required by SB 610) and is attached as Appendix K.

Table 4.14-3 shows the projected average annual water demand from the proposed project as determined in the WSA. This assessment applied accepted water use factors and assumed the use of low flow plumbing devices and other water conservation measures. As identified in Table 4.14-3, project development would result in an annual water demand of approximately 2,521.21 AFY. Net consumptive demand after factoring the use of recycled water is estimated as approximately 1,566.3 AFY. Taking into account historical land uses (i.e. agricultural) on the project site, development of the proposed project would result in an overall net reduction in groundwater extraction by 501.2 AFY. Actual water demands, however, would vary depending on the ultimate mix of specific uses, water use behavior, and landscape development/maintenance practices. In any given year, consumption is expected to vary depending on weather and precipitation. However, as identified in the WSA, the City of Soledad has sufficient water available to accommodate project generated demand during normal, single dry and multiple dry years. Payment of water impact fees as required by the City further insure that project-related impacts are considered less-than-significant. **Therefore, the project would result in a less-than-significant impact on water supply and services.**

Table 4.14-3 Miravale III Annual Water Demand			
Residential Uses	**No. Units**	**Annual Water Demand Factor AF/Y Unit**	**Demand AF/YR**
Large Lot Single Family	80	0.9	72.0
Standard Lot Single Family	1390	0.6	834.0
Duplex, small lots	116	0.25	29.0
Townhome/Apt. and Senior Units	2614	0.25	653.5
total	4200	**subtotal**	**1588.50**
Non-Residential	**No. Acres**	**Annual Water Demand (AF/Acre)**	
Village and Gateway Commercial	33.22	2.91	96.67
Institutional (4)	9.71	2.95	28.64
Elementary Schools	20	3.87	77.40
Middle School	19	4.0	76.00
Hotel, 120 Rooms		(.0.27 AF/Unit)	32.4
		subtotal	**311.11**
Open Spaces			
Golf Course(1)	144.87	3.75	543.26
Practice Driving Range (1)	12.62	3.75	47.33
Golf Pond	3.13	3.0	9.39
Developed Park(1)(2)	1.61	3.75	5.13
Upland Park (6)	75.77	2.5	18.94
Agricultural	1	3.85	1.54
Urban Reserve (7)	84.8	0.00	0.00
		subtotal	**625.59**
		Total Annual Gross Demands AF/Yr	**2525.21**
Wastewater Produced for Recycling in AF/Yr			
Residential Return Flows			865.17
Non-Residential Return Flows			93.33
		subtotal	**958.50**
Recycled Water Demands			
SF Home Front Yard Irrigation		15% gross demand	135.90
Golf Course		90% gross demand	488.94
Golf Course Driving Range		90% gross demand	42.59
Golf Course Pond (100% recycled)		100% gross demand	8.45
Developed Park		90% gross demand	5.13
Upland Park		100% gross demand	18.94
Elementary School Playfields		8 acres	30.00
Middle School Playfields		7 acres	26.25
Ag Buffer		1 acre	3.75
Roadway landscaping		10% of 122 acres of	30.53

Table 4.14-3 Miravale III Annual Water Demand			
Residential Uses	**No. Units**	**Annual Water Demand Factor AF/Y Unit**	**Demand AF/YR**
		roadways	
		subtotal	**756.20**
Net Recycled Water Available Due to Project			
			202.30
Net Consumptive Demand on Groundwater			
			1566.70
Historical Irrigated Agricultural Uses (746 out of 922 acres)			
Row Crops Annual Groundwater Demand (3)			**2067.9**
Net Demand Change (reduction) on Aquifer			**(501.2)**
(1) 3.0 ETO @80% efficiency			
(2) 85% irrigated, 15% hardscape			
(3) 10% unirrigated roads, access; net of deep percolation and 20% annual fallowing at 3.85 ETO			
(4) Police/Fire, golf maint., recycled water plant and church site			
(5) 40% landscape			
(6) 10% buffer area irrigated only, drought tolerant landscape			
(7) no change in land use			

Source: Byron Buck & Associates, WSA and Written Verification of Supply, August 2007

Recycled Water Distribution and Storage

As identified in the WSA prepared for the project, in addition to the City's Urban Water Master Plan, a substantial portion of recycled water would be used to provide irrigation of the golf course and driving range, parks, landscaped parkways, trail areas, front yards, and other landscaped areas within the project site. The recycled water system for the project site would be distributed through a system of 12-inch "purple" pipes (as required for recycled water under Title 22). Mains would be extended to enable access to recycled water at most areas of the site where it can be used for irrigation of the public open space/parks.

The use of recycled water for irrigation purposes would substantially lessen the extent of water demand associated with project development. Installation of project infrastructure would not result in any additional environmental impacts beyond those identified in other sections of this EIR. **This represents a less-than-significant impact.**

Water System

According to the City of Soledad Water Master Plan prepared by Schaaf and Wheeler, the existing City operated water distribution system requires a number of improvements to address current system deficiencies. These improvements have been identified as necessary in order to meet existing system demands. Moreover, buildout of "Near Future Development," which was identified as Miravale III, would necessitate a number of infrastructure improvements to ensure that project generated demands were accommodated. In addition to requiring current improvements, the existing system would need to be extended to provide water services to the project area. As such, additional on-site infrastructure improvements would be warranted. Moreover, development of the proposed project would result in the

introduction of new residences and commercial uses outside of the two existing pressure zones previously described above. In order to accommodate the Miravale III project a new pressure zone, Zone C, would be necessary to accommodate development outside of the existing pressure zones.

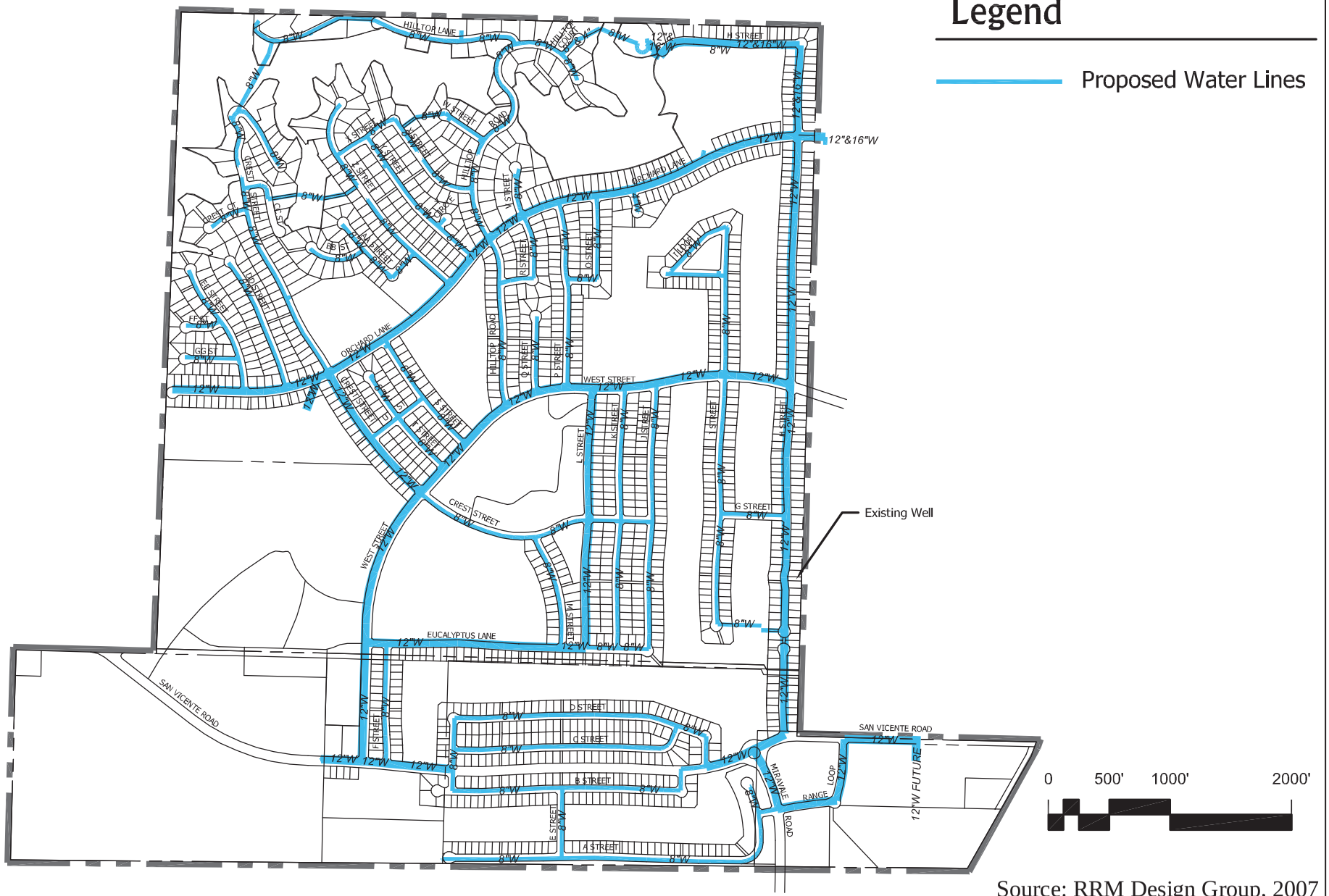
As proposed, the project would allow the development of 4,200 units, in addition to, commercial and public uses. Based on the assumed buildout of 3,000 units, the Soledad Water Master Plan determined that the existing water distribution system would be insufficient to meet maximum day demand and at least two additional wells would need to be drilled, permitted, and connected to the existing system. Additionally, new and/or upgraded booster pump stations would also be warranted in Zone B and the new pressure zone, "Zone C." Additional storage tanks would also be necessary to accommodate project development. Preliminary estimates identified in the Soledad Water Master Plan determined that a 1.2 million gallon tank in Zone B would be necessary. A conceptual water distribution map is presented in Figure 4.14-3.

The final design, sizing, and location of system infrastructure would be determined by the City in order to ensure that adequate infrastructure would be provided to meet project demand. Project development would, therefore, require the construction of a number of improvements to expand City services to the project area. The installation of project infrastructure would not result in any new environmental impacts beyond those identified in other sections of this EIR. Furthermore, the City requires applicants to pay all costs associated with extending water mains to provide water service and fire fighting flows to and through the project site. In addition, the applicant would be required to pay impact fees. Implementation of the following mitigation measures would not result in any new environmental impact beyond those identified elsewhere in this EIR.

Impact **Development of the proposed project would require or result in the construction of new water and recycled water facilities and the expansion of existing facilities. Project development would also require the construction of additional distribution and storage systems, transmission mains and improvements. Potential significant environmental effects could be realized through construction of the facilities if not planned and constructed consistent with Citywide infrastructure improvement plans. *This would represent a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation measures.***

4.14-1 Design and construct the water supply and distribution system for the project that is integrated with the City's water distribution system and consistent with the Urban Water Management Plan and the City's 2005 Water Master Plan. Prior to the issuance of any building permit, the project applicant shall submit detailed design-level infrastructure plans in accordance with this measure, subject to the review and approval of the City of Soledad Director of Public Works.

4.14-2 All water and recycled water facilities and infrastructure shall be designed with sufficient capacity to accommodate the project and be required to adhere to all applicable City standards in terms of infrastructure sizing, design and construction. Prior to the issuance of any building permit, the project applicant shall submit detailed design-level infrastructure plans in accordance with this measure, subject to the approval of the Director of Public Works.



Source: RRM Design Group, 2007

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Conceptual Water Distribution System

Figure 4.14-3

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4.14-3 All water and recycled water pipelines shall be placed underground and in the utilities right-of-way and constructed to comply with all applicable state and local standards. Prior to the issuance of any building permit, the project applicant shall submit detailed design-level infrastructure plans in accordance with this measure, subject to the review and approval of the City of Soledad Director of Public Works.

4.14-4 The project shall be required to construct new infrastructure that is of adequate capacity to serve the project's projected water and fire flow demand in addition to the provider's existing commitments. Prior to the issuance of any building permit, the project applicant shall submit detailed design-level infrastructure plans in accordance with this measure, subject to the approval of the Director of Public Works.

Provided that the applicant makes all water system capacity improvements as required by the City's Public Works Department, project impacts on the City's water system would be mitigated. The proposed project would not result in any potentially significant impacts that cannot be mitigated to a less-than-significant level through implementation of standard conditions of approval and mitigation measures identified above. No additional mitigation measures are required. **This represents a less-than-significant impact.**

Wastewater

The City of Soledad would be responsible for providing sanitary sewer services within the project area and the existing collection system would be extended to provide services to the project site. New wastewater infrastructure (i.e. distribution lines, treatment facility, etc.) would need to be constructed in order to provide services to the project area. According to the City's Long-Term Wastewater Management Plan, the City's total permitted wastewater treatment and disposal capacity is 4.1 mgd and the existing infrastructure would need to be expanded in order to support projected growth. Currently, the City is in the process of expanding its existing treatment capacity to 5.5. mgd with a 4.3 mgd disposal capacity (Clifton Price, personal communication, August 2007). In other words, the City's existing treatment capacity would be expanded to 6,160 AFY with approximately 4,816 AFY of disposal capacity.

Based on the anticipated population of the proposed project and using a wastewater generation rate of 67.5 gpd per person, the proposed project would generate a total of 1.02 mgd of domestic wastewater with an additional 0.08 mgd of commercial flow or a total of approximately 1,232 AFY of residential and non-residential wastewater. Preliminary estimates by the City indicate that projected wastewater generation may be as high as 1.5 mgd or 1,680 AFY. The wastewater generation for the Specific Plan area is greater than that projected in the City's LTWMP due to the difference between the assumed land uses in the LTWMP and the proposed land uses associated with the Miravale III Specific Plan. More specifically, it was originally assumed that buildout of the project site would result in the construction of 2,890 residential units and commercial uses with a projected wastewater flow of 1.0 mgd or 1,120 AFY. Due to an increase in the number of units, projected wastewater flow is now approximately 1.5 mgd or 1,680 AFY.

Based on the preceding analysis, existing treatment capacity is inadequate to accommodate project generated wastewater. Therefore, project buildout would result in an increased generation of wastewater that would cause a need for additional wastewater collection and treatment capacity, including new or expanded facilities. This represents a potentially significant impact. In order to accommodate projected wastewater, a recycled water facility is being planned in the southwest corner of the Specific Plan area as part of the proposed project. All project generated wastewater would be treated at this facility and subsequently used as recycled water for irrigation purposes. According to the City of Soledad, initial

treatment capacity at this facility would be able to accommodate an estimated 1.0 mgd or 1,120 AFY. Full buildout of the project site would, however, exceed the initial treatment capacity at this facility. While the initial capacity is inadequate to support full buildout of the project site, the City has indicated that the facility would be expanded to accommodate a total treatment capacity of over 2.0 mgd or 2,240 AFY. Project impacts can be further reduced to a less-than-significant impact through the incorporation of the following mitigation measures identified below. Implementation of the following mitigation measures would not result in any new environmental impact beyond those identified elsewhere in this EIR.

Impact **Development of the proposed project would potentially exceed existing and planned wastewater treatment capacity.** ***This would represent a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation measures.***

Mitigation

4.14-5 In order to ensure that the proposed wastewater treatment system is consistent with the applicable requirements of the Soledad Urban Water Management Plan, Long-Term Wastewater Management Plan, and Chapter 13.11 Recycled Water Service, the project applicant shall submit detailed design-level plans in accordance with these requirements, prior to the issuance of any building and/or grading permit, subject to the review and approval of the City of Soledad Public Works Director.

4.14-6 Prior to the approval of the first final map within the Specific Plan area, all required permits for the on-site recycled water facility, including, but not limited to, a Waste Discharge Permit from the Regional Water Quality Control Board and approval of the system design, shall be obtained. The project applicant shall submit written evidence to the City of Soledad documenting compliance with this measure.

4.14-7 In order to ensure that adequate wastewater treatment is available to accommodate each phase of project development, the treatment capacity for the on-site recycled water facility shall be increased to accommodate each phase of the project prior to the final approval of the first building permit or occupancy permit for each of the respective project phases as appropriate. Subject to the review and approval of the Director of Public Works, excess treatment capacity shall be added to the plant and disposal facilities, as needed, for each phase of the project, to accommodate future increases in wastewater flow rates, based on estimates of future development. In addition, flows shall be metered and records of the flows shall be provided to the RWQCB for review and approval. No building permits shall be issuance unless sufficient capacity exists to accommodate additional phases of development.

4.14-8 Prior to the issuance of any building permit, the applicant/developer shall submit payment of the current City Development Impact Fee for each type of development in accordance with the adjusted impact fee in effect at the time of building permit issuance. Additionally, the applicant/developer shall submit payment of all fees necessary to fund the construction of the expansion of the treatment plant located within the project site, as required by the City of Soledad. All fees shall be subject to the review and approval of the Director of Public Works.

The Miravale III Specific Plan and Vesting Tentative Map have developed a preliminary onsite sanitary sewer plan that addresses the development of the Specific Plan area, as well as its relationship to the existing sewer system. This plan analyzes the sewer system for the Plan area and establishes policies that will help to facilitate the design and construction of a system that would meet the needs of the public. Sanitary sewer lines will be located within the proposed street right-of-ways, and connect to the existing

sanitary sewer lines that serve the City. A conceptual layout of the wastewater plan is presented in Figure 4.14-4.

The City Public Works Director has stated that all wastewater mains must be designed consistent with the requirements set forth by City. All wastewater pipelines would be placed underground and in the utilities right-of-way. The project would be required to construct new infrastructure that is of adequate capacity to serve the project's projected demand in addition to the wastewater provider's existing commitments (Cliff Price, City of Soledad, personal communication, July 2007). Implementation of the following mitigation measures would not result in any new environmental impact beyond those identified elsewhere in this EIR.

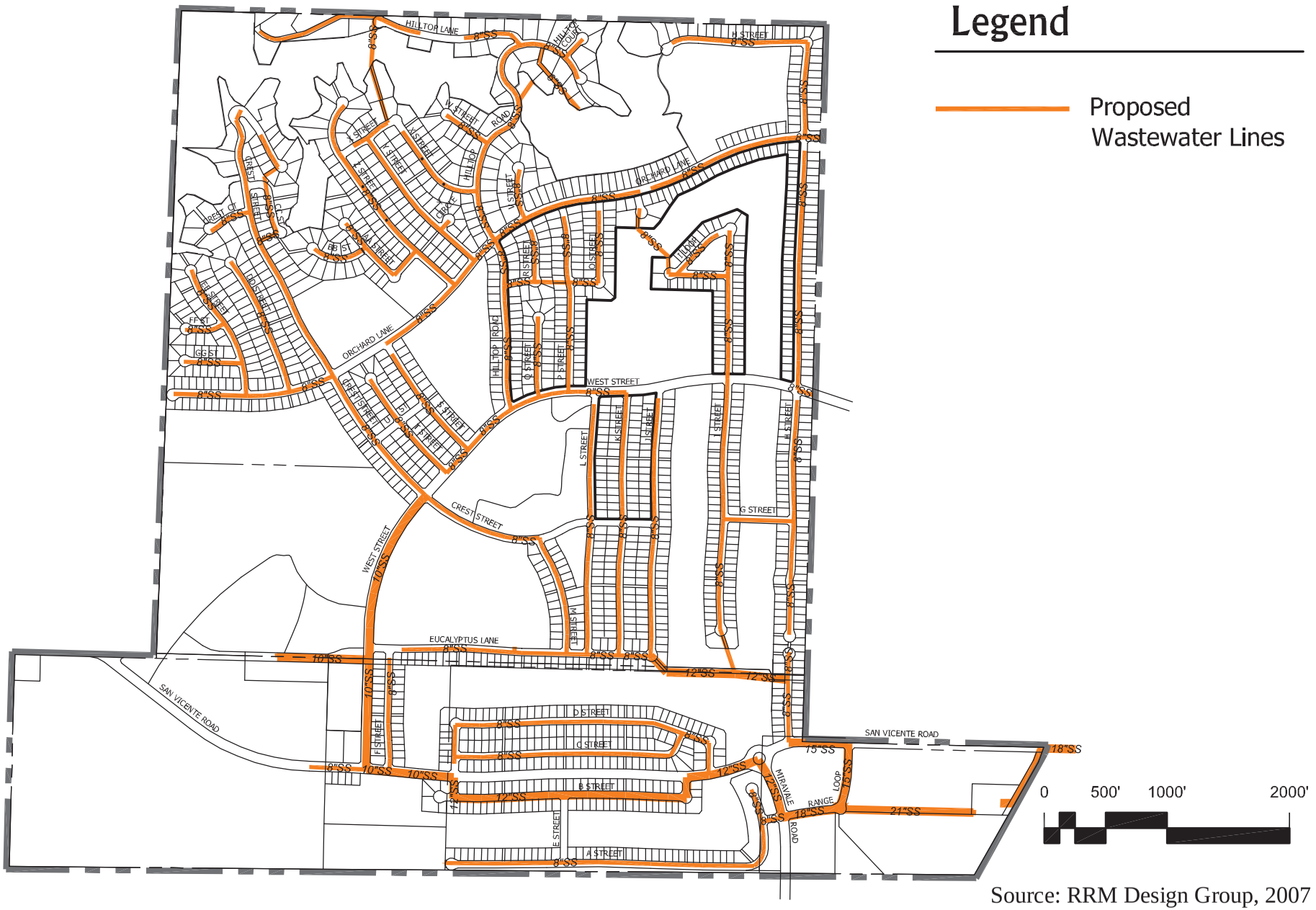
Impact **Development of the proposed project would require or result in the construction of new water or wastewater treatment facilities and expansion of existing facilities, including the construction of water and wastewater facilities, transmission mains and improvements which could cause significant environmental effects through construction of the facilities if not planned and constructed consistent with Citywide infrastructure improvement plans.** ***This would represent a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation measures.***

4.14-9 All water and wastewater infrastructure shall be designed with sufficient capacity to accommodate the project and be required to adhere to all applicable City standards in terms of infrastructure sizing, design and construction. Prior to the issuance of any building and/or grading plan, the project applicant shall submit detailed evidence, including but not limited to design-level infrastructure plans, consistent with the requirements of this mitigation, subject to the approval of the Director of Public Works.

4.14-10 All wastewater pipelines shall be placed underground and in the utilities right-of-way. Prior to the issuance of any building permit, the project applicant shall submit detailed design-level infrastructure plans in accordance with this measure, subject to the review and approval of the City of Soledad Director of Public Works.

4.14-11 The project would be required to construct new infrastructure that is of adequate capacity to serve the project's projected demand in addition to the wastewater provider's existing commitments. Prior to the issuance of any building permit, the project applicant shall submit detailed design-level documentation, in addition to written documentation from the City of Soledad, documenting that design-level plans are in accordance with City standards, as well as documenting that the City has sufficient capacity to accommodate project demands in addition to existing commitments, subject to the approval of the Director of Public Works.

Construction of wastewater infrastructure has the potential to result in physical environmental impacts such as noise dust, water quality, and potential biological impacts. These issues are addressed within their respective section of this EIR. The proposed project would not result in potentially significant impacts that cannot be mitigated to a less-than-significant level through implementation of standard conditions of approval and mitigation identified elsewhere in this EIR. No additional mitigation measures are required. **This would represent a less-than-significant impact.**



Source: RRM Design Group, 2007

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Conceptual Wastewater Distribution System

Figure 4.14-4

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Solid Waste

Change in solid waste streams generally results from population growth, successful diversion efforts, and substantial fluctuations in demolition and construction activities. The project would result in a population increase as well as new construction activities. As a result, it would increase solid waste generation that could adversely affect local facilities that process or store solid waste.

The project would generate solid waste related to project operations. The solid waste generation rate of 5.4 pounds per person per day is a target rate mandated by the Waste Management Act of 1989 (AB 939) and assumes that solid waste reduction and recycling program would be implemented. According to the Salinas Valley Solid Waste Authority (SVSWA), solid waste generation for each of the six jurisdictions averages approximately 5.0 pounds per capita per resident per day (Jorge Gamboa, SVSWA, personal communication, August 2007). Based on a solid waste generation rate of 5.0 pounds per person per day, upon buildout, the project would generate about 76,005 pounds of solid waste per day, or 13,870 tons per year. According to SVSWA, project generated solid waste would be disposed of primarily at the Johnson Canyon facility, which is permitted to receive 300 tons of solid waste per day. In 2000, the facility received an average of 132 tons of solid waste per day from six jurisdictions. Development of the proposed project would contribute an additional 38 tons of solid waste per day.

The Johnson Canyon landfill has adequate capacity to serve its present service area, including the development of the proposed project site. Moreover, the SVSWA is currently in the process of expanding the capacity of several of its existing facilities, including the Johnson Canyon landfill, which would provide adequate disposal capacity for 70 years. The project's solid waste generation of 13,870 tons per year represents an incremental increase in the yearly receipt of solid waste by the Johnson Canyon facility that can be accommodated by existing landfill facilities (Jose Gamboa, SVSWA, personal communication, August 2007). Further, current efforts to expand capacity would ensure that solid waste generated by the proposed development would be accommodated within existing facilities. As such, no new facilities would need to be constructed in order to accommodate project generated solid waste. Although project-generated solid waste would be accommodated in an existing disposal facility with adequate capacity, project construction would result in significant construction-generated waste. The SVSWA has identified the following mitigation measure as necessary, in order to reduce project construction impacts. Implementation of the following mitigation measure would not result in any new environmental impact beyond those identified elsewhere in this EIR.

Impact **Project construction would result in significant construction-generated waste. The following mitigation has been identified by the Salinas Valley Solid Waste Authority to ensure that all construction-generated waste is recycled to the greatest extent feasible in order to minimize impacts to existing facilities within their jurisdiction.** ***This would represent a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation measures.***

Mitigation

4.14-12 Prior to the commencement of construction related activities, the applicant/developer shall prepare and submit a Construction and Demolition Diversion Plan consistent with the requirements of the City's adopted Diversion Plan Ordinance, subject to the review and approval of the Salinas Valley Solid Waste Authority and the City of Soledad. This plan shall identify on-going implementation measures for the diversion and separation of construction waste to ensure that all construction-generated solid waste is recycled to the greatest extent possible.

Energy

The project site would be constructed with a variety of commercial, residential, and hospitality-oriented uses that would increase demands on electricity and natural gas supplies. In addition, the proposed project also entails the development of a number of public facilities, including several school sites, a police/fire substation, as well as various parks. Development of the proposed project would result in both direct and indirect energy consumption. Indirect energy consumption includes 1) energy consumed by construction vehicles and energy used for construction materials, such as asphalt, steel, concrete, pipes and manufactured or processed materials such as lumber and metal, and 2) energy consumption related to project land uses (i.e. vehicular traffic). At this time information regarding the type and quantity of building materials is not known. Therefore, only direct energy consumption associated with project operation is considered for this analysis. Anticipated operational energy demand is presented in Table 4.13-4 and 4.13-5 below. Please note that energy and natural gas estimations do not include estimates for institutional uses, such as schools and other public facilities, due to the fact the size of these facilities is currently unknown. Nevertheless, potential energy demands associated with these facilities would not result in the wasteful, inefficient and unnecessary consumption of energy. Although development of the proposed project would result in indirect energy consumption as a result of project construction and operation, these additional demands are not anticipated to result in the need for new facilities such that an adverse environmental impact would occur. PG&E is currently in the process of updating an existing substation and has indicated that this facility, upon completion of the upgrades, would have sufficient capacity to meet project generated demands.

Table 4.13-4 Anticipated Annual Energy Demand

Use	Proposed Dwelling Units	Proposed Floor Area (sq. ft.)	Demand Factor (kiloWatt hour per du/sq)[1]	Approximate Energy Demand (kiloWatt hour/year)
Commercial/Retail/Restaurant	N/A	275,000	13.55	3,726,250
Single Family Residential	1,470	N/A	6,081	8,939,070
Residential - Multifamily	2,230	N/A	6,081	13,560,630
Senior Unit	500	N/A	6,081	3,040,500
Hotel	120	N/A	6,081	729,720
Golf Clubhouse	N/A	15,000	13.55	203,250
			Total:	**30,199,420 kWh**

Source Estimations: Please note that these are rough estimates. Actual energy demand will likely vary depending on commercial uses and other factors. Estimates obtained from Energy Information Administration, California Energy Commission, and SCAQMD CEQA Air Quality Handbook, 1993.
1). Estimates obtained from the Energy Information Administration. Demand factors are provided according to the type of use. Each demand factor either corresponds with total square footage or dwelling units.

According to the California Energy Commission (CEC), total energy consumption in California in 2005 was approximately 272,464 M kWh.[1] Monterey County's average energy consumption in 2005 was

[1] Please note that "M" refers to the International System of Units prefix representing "mega," which denotes one million units or 10^6.

approximately 2,539 M kWh. As identified in Table 4.13-4, development of the proposed project would generate additional demands for energy consumption on the project-site beyond pre-project conditions. Specifically, the proposed project would demand approximately 30.2M kWh. (Note: the figures contained in Table 4.13-4 were converted from kWh to M kWh for consistency.) The additional demands associated with the operation of the proposed project would result in an incremental, albeit insignificant, increase in the demand for electricity consumption. Although the incremental increase in energy demand is relatively insignificant in comparison to energy usage within Monterey County, additional infrastructure would be necessary to provide services to the project site. As identified by PG&E, the capacity of an existing substation would need to be expanded to serve projected demands associated with the proposed project. PG&E has indicated that these improvements would be able to accommodate project demands.

Table 4.13-5 Anticipated Annual Natural Gas Demand

Use	Proposed Dwelling Units	Proposed Floor Area (sq. ft.)	Demand Factor (kBtu/unit of measurement per du/sq. ft.) [1]	Gas Demand (kBtu/unit measurement /year)
Commercial/Retail/Restaurant	N/A	275,000	5.17	1,421,750
Single Family Residential	1,470	N/A	45,900	67,473,000
Residential - Multifamily	2,230	N/A	45,900	1,023,57,000
Senior Unit	500	N/A	45,900	22,950,000
Hotel	120	N/A	45,900	5,508,000
Golf Clubhouse	N/A	15,000	5.17	77,550
			Total:	**97,430,300 kBtu**

Source Estimations: Estimates obtained from the Energy Information Administration & US Environmental Protection Agency. Please note that these are rough estimates of potential natural gas demand associated with the proposed project. Actual demand will likely vary depending on commercial uses and other factors.
1). Demand factors are provided according to the type of use. Each demand factor either corresponds with total square footage or dwelling units.

According to the CEC, total natural gas consumption in California in 2005 was approximately 2,092 T Btu per year.[2] At the time of report preparation, data regarding Monterey County's average natural gas consumption was not readily available. As identified in Table 4.13-5 below project demands would be approximately 0.000094 T Btu per year. (Note: the projected natural gas demand figures contained in Table 4.13-6 were converted from K Btu to T Btu for consistency.) The additional demands associated with the operation of the proposed project would result in an incremental increase in the demand for natural gas. Although project generated demands would result in an insignificant increase in natural gas consumption, services would need to be extended to the project site in order to meet project demands.

As identified above, the project site would be constructed with a variety of residential and commercial uses, increasing demands on electricity and natural gas supplies. It is anticipated that PG&E would extend their services to the project area under a franchise agreement with the City. According to PG&E, the project would not result in any adverse effects on their services, and PG&E has the capacity to provide electric service to the project (Jose Rios, PG&E, personal communication, August 2007).

[2] Please note that "T" refers to the International System of Units prefix representing "tera," which represents one trillion units or 10^{12}.

Existing PG&E-operated gas mains and electrical distribution systems would be extended and new distribution mains installed in a new joint trench adjacent to roadways. In addition, the expansion of existing gas and electrical transmission facilities outside of the project site may be required. The need for these improvements will be determined by PG&E. More specifically, PG&E has indicated that they are currently in the process of upgrading an existing substation within the northern portion of Soledad to ensure that adequate facilities are provided to meet project generated demands, in addition to, full buildout of the General Plan (Jose Rios, PG&E, personal communication, August 2007). As a result, the project would be adequately served by PG&E.

CEQA Guidelines Section 15126.4(a)(1)(c) identifies that energy conservation measures, in addition to mitigation measures intended on reducing energy consumption, should be identified within the context of an EIR. In order to ensure that project impacts related to increased energy consumption are minimized to the extent feasible, the Specific Plan contains policies to reduce energy consumption. In addition, the City of Soledad implements Title 24 requirements as part of their building code to ensure that energy conservation measures are incorporated into project design. While adherence to existing City requirements related to Title 24 compliance would generally reduce project-induced impacts, the increased energy consumption, albeit relatively insignificant from a regional perspective, would still result in the permanent commitment of a non-renewable resource. Development of the proposed project, however, would not result in the wasteful, inefficient and unnecessary consumption of energy. Policies are incorporated into the Specific Plan to minimize the wasteful use of energy and ensure that planning and building efforts are coordinated to maximize energy conservation. In addition, the implementation of additional project-specific mitigation would also ensure that energy use is minimized to the greatest extent feasible and thereby ensure that project-impacts would be considered less-than-significant.

Increased demand for energy and natural gas would also result in additional greenhouse gas emissions as identified in sections **4.3 Air Quality** and **5.0 CEQA Considerations**. While project-induced impacts associated with greenhouse gas emissions are addressed elsewhere in this EIR, it is important to acknowledge the relationship between energy consumption and greenhouse gas emissions. According to the CEC, approximately 20% of greenhouse gas emissions are associated with the energy sector in California. As a result, increased energy demands associated with the construction and operation of the proposed project would contribute towards climate change. In order to ensure project impacts are minimized to the greatest extent feasible, mitigation is warranted. The following mitigation measure is necessary to reduce project demands for electricity and natural gas and is in addition to other mitigation measures identified elsewhere in this EIR to reduce energy consumption and thereby greenhouse gas emissions. Implementation of the following mitigation measure would not result in any new environmental impact beyond those previously identified in this EIR.

Impact **Development of the proposed project would increase demands for electricity and natural gas consumption.** ***This would represent a potentially significant impact that can be reduced to a less-than-significant level with the implementation of the following mitigation measure.***

4.13-1 In order to prevent the wasteful use of energy, all new residential, commercial, and hospitality oriented structures shall incorporate the principles of passive solar design to the maximum extent feasible. Typical passive solar design principles may include the following; 1) large south-facing windows; 2) tile, brick, or other thermal mass material used in flooring or walls to absorb natural heat; 3) improved insulation; 4) building orientation that takes advantage of the sun, shade, and wind; and 5) energy efficient building materials. For new structures that are unable to incorporate these principles, the project applicant shall submit detailed evidence, such as site plans, landscape plans, and similar, to the City of Soledad Public Works Director demonstrating that there are no viable design alternatives to accommodate these principles. Prior to the issuance of each

individual building permit for new structures, the project applicant shall submit evidence, including but not limited to, site plans, proposed building materials, and landscape plans, to the City of Soledad Public Works Director for review and approval.

5.0 CEQA CONSIDERATIONS

5.1 GROWTH INDUCEMENT

CEQA (Section 15126 (d)) requires that any growth inducing aspect of a project be addressed in an EIR. This discussion includes consideration of ways in which the project could directly or indirectly foster economic or population growth, or the construction of additional housing, in the surrounding area. Projects that would remove obstacles to population growth, such as a major public service or utility expansions, are also considered in this discussion.

Under CEQA, growth inducement is not considered necessarily detrimental, beneficial, or of little significance to the environment. Typically, the growth-inducing potential of a project would be considered significant if it encourages growth or a concentration of population in excess of what is assumed in appropriate master plans, land use plans, or in projections made by regional planning agencies such as the Association of Monterey Bay Area Governments (AMBAG). Significant growth impacts could also occur if the project provides infrastructure or service capacity to accommodate growth beyond the levels currently permitted by local or regional plans and policies. In general, growth inducement by a project is considered a significant impact if it directly or indirectly affects the ability of agencies to provide needed public services, or if it can be demonstrated that the potential growth significantly affects the physical environment in some other way, such as through an increase in traffic congestion or deterioration of air quality. In addition, the removal of constraints to growth, such as the extension of services or infrastructure into an area, can be considered growth-inducing.

Soledad's existing population (2007) is 28,361. The project would increase population in the area through the development of 1,470 single family units and 2,730 multi-family units for a total of 4,200 residential units. Based on assumptions for persons per housing type identified in **Section 4.11 Population and Housing**, the 4,200 new units proposed by the project could result in an additional 15,201 people. This additional population represents about 54 percent of Soledad's existing (2007) population. This growth in population would increase demands on existing community facilities, requiring construction of new facilities. The project site is located outside City limits, within an area planned for City expansion. The project would provide new infrastructure to the area, including extensions of water and sanitary sewer lines, as well as roadway improvements.

Based on the above discussion, the project would result in a significant growth-inducing impact.

5.2 CUMULATIVE IMPACTS

Section 15130 of the State CEQA Guidelines requires an EIR to generate impacts that may be individually limited, but could be significant when taken together with other similar projects in the area (cumulative impacts). As defined by Section 15355 of the State CEQA Guidelines, a cumulative impact is an impact that is created as a result of the combination of the proposed project and related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

Approach

This EIR uses the general plan approach and the project list approach for determining potential cumulative impacts. The geographic area considered in this general plan analysis includes the area within

the City of Soledad incorporated limits and general plan area, as defined in the City General Plan. The General Plan and General Plan EIR are incorporated by reference and available for review at the offices of the City of Soledad. The area covered by the General Plan is referred to herein as the City's planning area and includes the incorporated limits as well as "...any land outside its boundaries which in the planning agency's judgment bears a relation to its planning" (Government Code Section 65300). The City's planning area is shown on Figure 4-9.1 and covers an area generally defined by the ridegline of the Gabilan Range to the east and the foothills of the coast range to the west, extending north past the Soledad prison, and to the south about mid-way between Soledad and Greenfield.

City of Soledad General Plan and EIR. The cumulative and growth inducing impacts of continued development of the City of Soledad including the project site were evaluated by the City of Soledad General Plan EIR. As noted in Table 5.2-1, below, the EIR concluded that buildout of the Plan area in forty or more years will have unavoidable adverse impacts related to the permanent loss of prime agricultural land, regional traffic, cumulative air quality, visual resources, biological resources, energy consumption, and water supply. However, potentially significant adverse impacts related to infrastructure, traffic, noise, and others, will be avoided by implementing the policies and programs recommended by the adopted General Plan. Additionally, the following impacts were found to be less-than-significant by the General Plan EIR.

- ✓ Fire protection for industrial development
- ✓ Energy consumption related to motor vehicle fuel
- ✓ Traffic hazards
- ✓ Demand for public transit
- ✓ Increase of population in relation to consistency with the Clean Air Plan
- ✓ Air quality impacts relative to CO hotspots
- ✓ Impacts related to stationary noise sources and agricultural operations
- ✓ Impacts to groundwater recharge
- ✓ Impacts to the beneficial use of groundwater resources
- ✓ Groundwater quality
- ✓ Impacts relating to the movement of animal species across the Valley floor
- ✓ Urbanization impacts (light, glare, and noise) on animal populations
- ✓ The potential for urban development to hasten the cancellation of Land Conservation Act contracts
- ✓ Visual impacts of construction storage
- ✓ Jobs housing balance

Section 15130 of the State CEQA Guidelines requires an EIR to generate impacts that may be individually limited, but could be significant when taken together with other similar projects in the area (cumulative impacts). This EIR addresses the cumulative considerations of this development with the buildout considered in the Soledad General Plan DEIR.

Table 5.2-1
Summary Of Impacts in the 2005 City General Plan EIR

Environmental Issue	Impact	Policy Response/ Mitigation Measures	Residual EFFECT
Class I Impacts -- Significant and unavoidable impacts.			
Public Services	Impact PS-1: Water demand associated with buildout of the draft Plan will contribute to the cumulative demand for water for domestic use from the Salinas Groundwater Basin.	Policies S-1 though S-40, HZ-9 through H-11, Programs 5.11, 7.1 through 7.9, 9.4 through 9.7, 4.1 and 4.2	Significant and adverse.
Energy	Impact PS-14: Development accommodated by the draft will increase the demand for electricity within the Plan area and the need for distribution facilities.	Policy H-11, Program 5.11	Significant and adverse.
Traffic and Circulation	Impact T-1: Buildout of the land uses recommended by the Draft General Plan will significantly increase traffic generation with a corresponding cumulative impact on the level of service of regional roadways, streets and intersections serving the City.	Policies T-1 through T-37, Programs 5.1 through 5.24	Significant and adverse.
Air Quality	Impact AQ-2: Motor vehicle trips associated with buildout of the draft Plan will contribute to a cumulative adverse impact on regional air quality.	Policies T-1 through T-37, C/OS-13 through C/OS – 16 Programs 5.2 through 5.11, Programs 5.15, 8.1 through 8.4	Significant and adverse.
Biological Resources	Impact BIO-4: Development accommodated by the draft Plan will increase groundwater withdrawals, which has the potential to diminish in-stream flow along the Salinas River.	Policies C/OS-7 through C/OS-12; Policies C/OS-17 through C/OS-21 Programs 8.7 and 8.8	Significant and adverse.
	Impact BIO-7: The permanent loss of 3,500 acres of foraging area for special status animal species would contribute to the cumulative loss of such areas within the Salinas Valley.		Significant and adverse.
Agricultural Resources	Impact A-1: Development of land designated for urban development by the draft Plan, and the development of additional disposal ponds for the wastewater treatment plant, will result in the permanent conversion of about 3,500 acres of land classified Prime and Farmland of Statewide Importance.	Policies C/OS-1 through C/OS-8 Programs 8.7 and 8.8	Significant and adverse.

Table 5.2-1
Summary Of Impacts in the 2005 City General Plan EIR

Environmental Issue	Impact	Policy Response/ Mitigation Measures	Residual EFFECT
	Impact A-2:Development of additional rapid infiltration basins as recommended by the draft Wastewater Treatment and Disposal Master Plan will result in the permanent conversion of about 469 acres of land classified Prime and Farmland of Statewide Importance. This is considered an unavoidable and adverse project-specific and cumulative impact (Class I).	Policies C/OS-1 through C/OS-8 Programs 8.7 and 8.8	Significant and adverse.
Visual Resources	Impact V-1 Development of the various land uses contemplated by the Draft Plan will alter the visual character and/or quality of the Plan area.	Policies L-3, L-42 through L-52; Policies C/OS-7 through C/OS-9, C/OS-18 Programs 8.7 through 8.9	Significant and adverse.
Class II Impacts -- Significant impacts that can be mitigated to a less-than-significant level by recommended mitigation measures.			
Public Services	Impact PS-3: Buildout of the area designated for urban development will require the expansion and extension of water storage and distribution infrastructure to accommodate the level of development anticipated.	Policies S-1 though S-40, HZ-9 through H-11, Programs 5.11, 7.1 through 7.9, 9.4 through 9.7, 4.1 and 4.2	Not significant
	Impact PS-4: The draft Plan designates some 2,750 acres for urban expansion beyond the area currently served by the City's wastewater collection and treatment systems. Serving this area will require considerable expansion of infrastructure capacity for collection, treatment and disposal.		Not significant.
	Impact PS-6: Buildout of the City as contemplated by the draft Plan will increase the need for fire fighting personnel and equipment.		Not significant
	Impacts PS-7: Buildout of the draft Plan will require additional fire protection facilities and equipment to maintain an acceptable response time.		Not significant
	Impact PS-9: Buildout of the City as contemplated by the draft Plan will increase the need for police protection personnel and equipment.		Not significant
	Impact PS-10: Buildout of the draft Plan will significantly increase the City's population and the demand for parkland.		Not significant

Table 5.2-1
Summary Of Impacts in the 2005 City General Plan EIR

Environmental Issue	Impact	Policy Response/ Mitigation Measures	Residual EFFECT
	Impact PS-12: Buildout of the draft Plan will accommodate about 11,539 additional dwelling units which in turn are expected to generate additional school aged children. The number of new households and associated students will significantly increase the demand for school facilities.		Not significant
	Impact PS-13: Buildout of the draft Plan will result in the generation of additional solid waste which will adversely impact the capacity of landfills serving the City and surrounding cities.		Not significant
Traffic	Impact T-2: Buildout of the land uses recommended by the Draft General Plan will adversely affect the operation and level of service of the two freeway interchanges serving the City.	Policies T-1 through T-37, Programs 5.1 through 5.24	Not significant
Noise	Impact N-1: Noise associated with construction activities may adversely impact nearby noise-sensitive uses.	Policies N-1 through N-5; Programs10.1 and 10.2	Not significant
	Impact N-2: Noise associated with motor vehicle traffic generated by the development of land uses accommodated by the draft Plan will increase, which may result in the exceedence of the standards described in Table V.4-1 adjacent to the roadway.		Not significant
Geologic Hazards	Impacts GEO-1: A major earthquake on the San Andreas faults could produce ground accelerations of 0.15g to 0.7g within the Plan area, resulting in damage to structures and a potential safety hazard to occupants of such structures.	Policies C/OS-7, C.OS-8, C/OS-9, HZ-5 through 8; S-12 through S-19; Program 9.2	Not significant
	Impact GEO-2: Portions of the Plan area may be subject to landslides and/or slope failure.		Not significant
	Impact GEO-3: Development activities associated with the various land uses contemplated by the draft Plan have the potential to result in soil erosion.		Not significant
	Impact GEO-4: Construction and renovation activities associated with the Wastewater Master plan could result in erosion and sedimentation.		Not significant
Flooding, Drainage and Water Quality	Impact W-1 Buildout of the land uses designated by the draft Plan will increase the amount of impervious surfaces within the City's Plan area, thereby increasing the volume and velocity of runoff, and the potential for erosion and sedimentation in the Salinas River and its tributaries.	Policies S-12 through S-19; HZ-1 through HZ-4; Programs 9.1 and 9.2	Not significant

Table 5.2-1
Summary Of Impacts in the 2005 City General Plan EIR

Environmental Issue	Impact	Policy Response/ Mitigation Measures	Residual EFFECT
	Impact W-2: Heavy metals and other hazardous materials washed from the surface of parking lots and roadways constructed within the Plan area could enter natural drainage courses such as the Salinas River during a rainstorm.		Not significant
	Impact W-3: Construction activities could result in the release of oil, engine fuel and other toxic substances into the Salinas River or its tributaries, adversely affecting water quality.		Not significant
	Impact W-4: Buildout of the land uses designated by the draft Plan may expose people and property to the periodic effects of flooding.		Not significant
Biological Resources	Impact BIO-1: Buildout of the Plan area with urban uses could result in the permanent conversion of 3,500 acres of agricultural land to urban use. This land may provide suitable foraging habitat for certain special status animal species, and uncultivated areas could contain sensitive plant species.	Policies C/OS-7 through C/OS-12; Policies C/OS-17 through C/OS-21 Programs 8.7 and 8.8	Not significant
	Impact BIO-2: Construction activities could result in a number of temporary impacts, including, but not limited to, disturbance of special status plant or animal species (nesting raptors, burrowing owls, etc.), increased erosion potential, and noise, particularly along the Salinas River and its tributaries, and the foothills.		Not significant
	Impact BIO-3: Urban development in the planning area could adversely impact riparian habitat by increasing impervious surfaces, accelerating erosion and input of sediments and pollutants.		Not significant
Agricultural Resources	Impact A-3: The expansion of urban uses contemplated by the draft Plan will increase the potential for incompatibility between urban uses and agricultural operations.	Policies C/OS-1 through C/OS-8 Programs 8.7 and 8.8	Not significant
Visual Resources	Impact V-3: Development of the various land uses accommodated by the draft Plan will result in additional sources of light and glare. These new sources will be visible from adjoining areas and from the 101 Freeway.	Policies C/OS-1 through C/OS-8 Programs 8.7 and 8.8	Not significant
	Impact V-4: New urban development could adversely affect the historic character of the City.		Not significant
Cultural Resources	Impact C-1: Development of the land uses contemplated by the draft Plan could unearth or disturb previously undiscovered resources of cultural or historic significance.	Policies L-49, L-52, C/OS-23, C/OS-24, Programs 8.5, 8.9, 8.10	Not significant

Table 5.2-1
Summary Of Impacts in the 2005 City General Plan EIR

Environmental Issue	Impact	Policy Response/ Mitigation Measures	Residual EFFECT
	Impact C-2: Development in accordance with the draft Plan could alter the historic character of the City.		Not significant
Class III Impacts -- Impacts that are adverse but not significant.			
Public Services	Impact PS-2: The increased demand on groundwater resources required to serve buildout of the City's Plan area could potentially reduce water levels in wells serving agricultural operations in the vicinity of the City.	Policies S-1 though S-40, HZ-9 through H-11, Programs 5.11, 7.1 through 7.9, 9.4 through 9.8, 4.1 and 4.2	Not significant
	Impact PS-5: Buildout of the draft Plan will significantly increase the amount of biosolids generated by the wastewater treatment plant which in turn will impact the capacity of licensed disposal facilities.		
	Impact PS-8: The additional industrial development accommodated by the draft Plan may necessitate specialized fire fighting and hazardous materials equipment to maintain an acceptable level of fire protection.		
	Impact PS-11: Buildout of the draft Plan will significantly increase the City's population and the demand for recreation programs.		Not significant
	Impacts PS-15: Development of the land uses contemplated by the draft Plan will increase motor vehicle use with a corresponding increase in the consumption of motor vehicle fuels.		Not significant
Traffic	Impact T-3: Buildout of the land uses recommended by the Draft General Plan could result in traffic hazards on city streets and intersections.	Policies T-1 through T-37, Programs 5.1 through 5.24	Not significant
	Impact T-4: Buildout of the land uses recommended by the Draft General Plan will significantly contribute to the demand for bicycle and pedestrian facilities in the City's planning area.		Not significant
	Impact T-5: Buildout of the land uses recommended by the Draft General Plan will contribute to the demand for public transit serving the City's planning area.		Not significant
Air Quality	Impact AQ-1: The draft Plan accommodates a considerable increase in the City's population over the next twenty or more years which may hamper efforts to achieve and maintain federal and state air quality standards.	Policies T-1 through T-37, C/OS-13 through C/OS – 16 Programs 5.2 through 5.11, Programs 5.15,	Not significant

Table 5.2-1
Summary Of Impacts in the 2005 City General Plan EIR

Environmental Issue	Impact	Policy Response/ Mitigation Measures	Residual EFFECT
	Impact AQ-3: Buildout of the draft Plan will degrade the operation of intersections within the City's Plan area which may lead to CO 'hotspots' where the state or federal standard may be violated.	8.1 through 8.4	Not significant
	Impact AQ-4: Expansion of the City's wastewater treatment and disposal capacity as contemplated by the draft Wastewater Treatment and Disposal Master Plan could result in the generation of nuisance odors.		Not significant
Noise	Impact N-3: Buildout of land uses accommodated by the draft Plan will increase the exposure of people to new and existing stationary sources of noise.	Policies N-1 through N-5; Programs10.1 and 10.2	Not significant
	Impact N-4: Noise from ongoing agricultural operations could periodically exceed the City's noise standards for adjacent residences.		Not significant
Flooding, Drainage and Water Quality	Impact W-5: The increase in impervious surfaces could adversely affect groundwater recharge.	Policies S-12 through S-19; HZ-1 through HZ-4; Programs 9.1 and 9.2	Not significant
	Impact W-6: Improvements contemplated by the draft Wastewater Treatment and Discharge Master Plan and resulting treatment plant expansions could impair groundwater beneficial uses or quality.		Not significant
	Impact W-7: The proposed change in land use at the project area could affect regional groundwater quality.		Not significant
	Impact W-8: Expanded infiltration basins could result in increased risk of surface water degradation to the Salinas River in the event of a spill.		Not significant
Biological Resources	Impact BIO-5: The conversion of agricultural land to urban uses within the Plan area may restrict the east-west movement of animals from the hills to the west across the Salinas Valley.	Policies C/OS-1 through C/OS-8 Programs 8.7 and 8.8	Not significant
	Impact BIO-6: Buildout of the Plan area with urban uses will result in long-term indirect impacts associated with increased urbanization, including light, noise, pets, traffic, and other effects of increased human presence.		Not significant
Agricultural Resources	Impact A-4: Development of land designated for urban development by the draft Plan may hasten the early cancellation of Land Conservation Act Contracts.	Policies C/OS-1 through C/OS-8 Programs 8.7 and 8.8	Not significant

Table 5.2-1
Summary Of Impacts in the 2005 City General Plan EIR

Environmental Issue	Impact	Policy Response/ Mitigation Measures	Residual EFFECT
	Impact A-5: Development of infiltration basins could hasten the cancellation of LCA contracts on properties surrounding the wastewater treatment plant.		Not significant
Visual Resources	Impact V-2: Grading and construction activities and the storage of construction materials may be visible from public vantage points.	Policies C/OS-1 through C/OS-8 Programs 8.7 and 8.8	Not significant
Housing and Population	Impacts PH-1: Continued development of the City as contemplated by the draft Plan will result in considerable additional housing and population growth which in turn could affect the supply of affordable housing and the relationship between jobs and housing.	Policies L-1 through L-20, L-43, H-1 through H-12, Programs 2.1 through 2.7; 4.1 through 4.23	Not significant

5.2A Viewshed

Setting: The viewshed surrounding the City consists largely of agricultural fields with a backdrop of mountain ranges to the east and west. The outward expansion of the City has established a firm visual edge between urban and rural uses. However, commercial and industrial businesses located along the Highway 101 right-of-way north of the City interrupt this established boundary. The scenic variety of the City's Plan area could hardly be considered 'distinctive' within the context of the Salinas Valley. The fairly uniform rows of crops with the mountain ranges behind is the predominant visual experience when traveling through the Salinas Valley.

When approaching the City from either the north or south on Highway 101, the most prominent view of the City is the commercial businesses along the east side of Front Street which form a nearly solid facade when viewed from the west. The freeway interchanges serving the City are important visual gateways that provide visitors with their first impressions of the form and character of the community and its largely-agricultural setting.

General Plan EIR: The General Plan EIR evaluated potential aesthetic impacts associated with the adoption and implementation of the Soledad General Plan, including future development within the project area. The General Plan EIR identified the following cumulative impacts:

- Development of the various land uses contemplated in the General Plan would alter the visual character and/or quality of the area. This impact was identified as significant and unavoidable.

- Temporary construction related impacts were identified due to buildout according to the General Plan. This impact was identified as adverse, but not significant.

- Buildout of the General Plan would result in additional sources of light and glare, which would be visible from adjoining areas and from Highway 101. This impact was considered significant, unless mitigated.

Cumulative Impact: Implementation of the project in conjunction with cumulative projects associated with General Plan buildout would introduce substantial new development, decreased views of open space, and potential reduction of views of the Gabilan Mountain Range foothills. The proposed Specific Plan adoption amends a key goal of the General Plan that will introduce substantial new development, including structures of various heights and densities, which would result in decreased views of open space, within that portion of the Gabilan Mountain Range foothills located within the project boundaries. Mitigation is presented in this EIR to reduce these impacts as much as feasible at the project level but this project impact remains significant and unavoidable. Similarly, the General Plan includes goals and policies intended to protect the visual character of the City and surrounding scenic resources. This EIR finds that the increased visibility and intensity of development would have a substantial adverse effect on a scenic vista. The cumulative loss of natural open space and introduction of urban development would result in a significant unavoidable impact to the scenic vista. **Based on the above discussion, the cumulative impacts associated with loss of viewshed materials would be cumulatively considerable.**

Cumulative Mitigation: Implementation of the policies and programs contained in the City General Plan (Table 5.2-1 above).

5.2B Agricultural Resources

Setting: Conversion of agricultural land to urban uses continues to be a public policy issue in California. The Farmland Mapping and Monitoring Program (FMMP) has determined that approximately 828,445 acres (approximately 1.8 percent of California's landmass) were converted to urban and built uses between 2000–2002. Of the total acres converted, 397,097 were formerly cropland and 172,857 were formerly grazing land.

Monterey County cities and residential communities continue to grow and in recent years, agricultural land has been converted to residential and other non-agricultural uses. The single most important factor in the decline of agricultural acreage in Monterey County has been the rapid spread of urban development. In the South Monterey County area, significant development pressures have resulted in the conversion of agricultural land to urban uses.

According to a study by the California Department of Conservation, conversions of farmland to urban uses adversely affect the efficiency of remaining farming operations in the area. For example, agricultural production decreases as a result of increased air pollution, livestock predation by pets, crop diseases resulting from inadequate care of off-farm ornamental plants, restriction on pesticide use and burning, and requirements to set aside on-farm buffer zones. Production costs increase because of rising land costs, water scarcity, theft and vandalism of farm equipment, crop pilferage, road congestion, and personal injury liability associated with farm trespass.

Based on data from the FMMP for the years 2000 to 2004 (Table 5.2. 1), it would appear that the majority of residential and commercial development has occurred on prime farmlands (prime and important lands, combined). However, the conversion of prime irrigated lands is not consistently related to the increases in urban land areas. As an example, Table 5.2.2 shows that between 2000 and 2002, approximately 12.5 percent of irrigated farmland loss was due to conversion to urban development. During this period total irrigated agricultural acreage increased by 1,596 acres. The additional prime land is largely attributable to the conversion of non-irrigated grazing and other lands.

Table 5.2.2 Change in Monterey County Prime and Important Farmland Acreage					
Category	**Years Inventoried**			**Net Change (%)**	
	1984	**2000**	**2004**	**1984-2000**	**2000-2004**
Prime Farmland	176,779	169,255	169,368	-4.3	0.1
Farmland of Statewide Importance	37,762	45,877	44,544	21.5	-2.9
Prime Farmland Subtotal	214,541	215,132	213,912	0.2	-0.6
			Acres	591	-1220
Grazing Land	1,081,510	1,060,663	1,066,539	-1.9	0.6
			Acres	-20,847	5876
Agricultural Land Subtotal	1,306,926	1,299,937	1,306,929	-0.5	0.5
			Acres	-6989	6992
Urban and Built-Up Land	42,374	52,486	54,293	23.9	3.4
			Acres	10,112	1807

Source: California Department of Conservation Farmland Mapping and Monitoring Program, 1994-2000

*Due to the incorporation of digital soil survey data (SSURGO) in 2000, acreages for farmland, grazing and other land categories may differ from those published in the 1998-2000 Farmland Conversion Report.

Table 5.2.3 Change in Monterey County Irrigated Farmland Acreage Between 2000 and 2002						
Land converted to irrigated			**Land converted from irrigated**			
Prime	**Statewide and Unique**	**Total**	**Urban**	**Grazing**	**Other**	**Total**
1295	2953	4248	331	1461	860	2652

The proposed project would incrementally contribute to this significant cumulative impact by converting approximately 760 acres of prime cropland to a non-agricultural use and is therefore considered significant and unavoidable.

The draft County General Plan includes a policy where "... impacts to productive farmlands resulting from urban development shall be mitigated through the implementation of agricultural land conservation programs. Mitigation shall be provided at a ratio of 1 acre conserved for each acre impacted. In lieu of conserving land through a conservation easement, another mitigation approach is payment of a fee based upon a one to one replacement for a farmland conservation easement or farmland deed restriction established by the Board of Supervisors by resolution or through an enforceable agreement with the developer. The in lieu fee option must be approved by the Board of Supervisors. The fee shall be equal to or greater than the value of a previous farmland conservation transaction in the planning area plus the estimated cost of legal, appraisal and other costs, including staff time, to acquire property for agricultural mitigation...".

General Plan EIR: The impact to agricultural lands due to the allowable development under the General Plan Land Use Element was identified as an unavoidable significant impact.

Cumulative Impact: Implementation of the project in conjunction with cumulative projects associated with General Plan buildout would introduce substantial new development, decreased agricultural lands and open space, and potential conversion and early cancellation of Williamson Act parcels in the planning area of the City. Due to the conversion of 3500 acres of state-identified prime agricultural land within the planning area of the City, the impacts from loss of agricultural lands due to development accommodated by the General Plan Land Use Element is considered an unavoidable significant impact.

Cumulative Mitigation: Currently there are no formal mitigation fee and/or conservation easement policies in place. There are grant programs provided by the State's Department of Conservation to assist in the acquisition of conservation easements and the Monterey County Agricultural and Historical Conservancy Inc. has successfully acquired easements in the Salinas Valley.

Impact after Mitigation - **No measures are available to fully mitigate the loss of prime agricultural land, therefore even after mitigation the impact will be significant and unavoidable.** This conclusion is consistent with the City of Soledad General Plan EIR, Agricultural Resources section for the eventual phased development of adjacent agricultural land.

5.2C Geologic Hazards

Setting: The City of Soledad is located on the eastern side of the Salinas Valley. The Valley is bordered by the Santa Lucia mountain range to the west, and the Gabilan range to the east and is underlain by alluvial fill to an estimated depth of between 800 and 1,000 feet. The composition of the fill is mainly unconsolidated or loosely consolidated sediments. These sediments were derived through weathering and subsequent movement of this material from upland areas to the valley floor. Most of the City of Soledad overlies recent alluvium although underlying geologic structure can vary considerably due to alternating layers of silt, sand, gravel, cobble, and occasional boulders that have been deposited over the alluvial fans in the valley. Clay layers occur at irregular intervals and depths throughout the area (Soledad General Plan, 2005). The City of Soledad is located in a seismically active region. The alluvial Salinas Valley is bordered both to the east and west by active or potentially active fault zones.

General Plan EIR: Potential geological and geotechnical hazards due to development accommodated by the Land Use Element were identified as potentially significant impacts which would be reduced to less-than-significant with implementation of policies and programs in the General Plan.

Cumulative Impact: The San Andreas Fault lies some thirteen miles east of the City and has produced some of the largest earthquakes in California history. A major seismic event associated with this fault could result in significant damage to structures and public infrastructure within the Plan area. The Plan area includes a portion of the foothills of the Gabilan Range which contain slopes of twenty percent and more. Portions of the Plan area may be subject to landslides and/or slope failure. Development activities associated with the various land uses under cumulative development of the General Plan construction activities will involve grading, excavation, and fill, all of which will expose soils to wind, water and other eroding elements.

Cumulative Mitigation: Implementation of the policies and programs contained in the City General Plan (Table 5.2-1 above) will reduce the potentially significant impacts to a less-than-significant level. **Based on the above, cumulative impacts associated with geologic hazards would be less-than-significant.**

5.2D Hydrology/Drainage

Setting: The project site is located north and northwest of the City of Soledad. The City is divided into nine drainage basins. Five of these lie entirely within the City limits, three are partially inside the City limits, and one lies entirely outside City boundaries. The Salinas River is located approximately 1.25 miles to the south of the site and is the primary surface drainage feature that affects the area. The City is located within the Salinas Valley groundwater Basin within the Forebay area. The Forebay area is characterized by gravels, sands, and clays of fluvial origin with minor, interfingering alluvial fan deposits occurring along the valley margins. These sediments constitute an unconfined aquifer over 800 feet thick, although local occurrence of clay layers may create partially confined conditions in some areas.

Recharge to groundwater occurs principally by 1) infiltration from the Salinas River, fed during the dry part of the year by water release from the Nacimiento and San Antonio reservoirs, 2) infiltration and underflow from tributary drainages around the basin and 3) return flows from agricultural irrigation and percolation of rainfall. Groundwater flow in the valley is to the northwest, towards the mouth of the Salinas Valley. However, pumping from large agricultural wells can have a significant local impact on groundwater gradient, and may locally induce cross valley groundwater flow.

Soledad General Plan EIR. The General Plan EIR evaluated potential hydrologic and drainage impacts associated with the buildout of the Soledad General Plan, including future development within the project area. According to the General Plan EIR, the following potentially significant impacts were identified:

- Buildout of the General Plan would increase the amount of impervious surfaces within the City's Plan area, thereby increasing the volume and velocity of runoff, and the potential for erosion and sedimentation in the Salinas River and its tributaries.

- Buildout of the General Plan would increase the amount of heavy metals and other hazardous materials washed from the surface of parking lots and roadways constructed within the Plan area that could enter natural drainage courses such as the Salinas River during a rainstorm.

- Development and associated construction activities could result in the release of oil, engine fuel and other toxic substances into the Salinas River or its tributaries, adversely affecting water quality.

- Buildout of the land uses designated by the General Plan have to potential to expose people and property to the periodic effects of flooding.

- The increase in impervious surfaces resulting from General Plan buildout could adversely affect groundwater recharge.

- Development and the proposed change in land use from buildout of the General Plan could affect regional groundwater quality.

Impacts to water quality were determined to be significant if project implementation would not comply with surface water quality objectives established by the Regional Water Quality Control Board (RWQCB) in Chapter 3 of the Water Quality Control Plan, Central Coast Region.

Additionally, the General Plan EIR concluded that water demand associated with buildout of the draft Plan will contribute to the cumulative demand for water for domestic use from the Salinas Groundwater Basin.

The remaining impacts were considered to be less-than-significant with mitigation proposed as part of the General Plan.

Cumulative Impact: Implementation of the project in conjunction with cumulative projects associated with General Plan buildout would introduce substantial new development. Cumulative development on undisturbed land within the watershed could increase the amount of impervious surfaces, thereby increasing runoff rates in the area. Future development of the project site as proposed by the Miravale III Specific Plan would include storm drain facilities not currently sized to be consistent with Storm Drain Master Plan requirements. However, with mitigation, the project's storm drain facilities will be in accordance with all local and state regulations, and would not result in significant impacts to hydrology or flooding conditions.

Cumulative development and increases in localized runoff could introduce urban pollutants into the drainage system and receiving water bodies, impacting water quality. The project proposes BMPs, as well as detention basins, to allow infiltration and remove heavy metals and other pollutants from storm water before it enters the groundwater. The onsite drainage system with proposed mitigation in this EIR and BMP measures would avoid offsite, cumulative water quality impacts.

The General Plan EIR concluded that water demand associated with buildout of the draft Plan will contribute to the cumulative demand for water for domestic use from the Salinas Groundwater Basin. The contribution of this project to incremental increase in demand is not considered cumulatively (as evidenced by the UWMP and WSA prepared for this project).

Cumulative Mitigation: Implementation of the policies and programs contained in the City General Plan (Table 5.2-1 above) and this EIR will reduce the potentially significant impacts to a less-than-significant level. The project would have a less-than-significant cumulative impact on hydrology and water quality.

Based on the above discussion, the cumulative impacts associated with hydrology and water quality would be less-than-significant.

5.2E Biological Resources

Setting: The majority of the lowland portion of the project site is currently in active agricultural production or fallow but typically dedicated to agricultural production. Active and fallow agricultural areas represent appropriate foraging and dispersal habitat for a variety of wildlife species and limited habitat for special-status plant species. The grassland portions of the site associated with the Gabilan foothills are relatively undeveloped and are not currently grazed; these areas provide valuable plant and wildlife habitat and habitat connectivity.

General Plan EIR: The General Plan EIR evaluated potential biological impacts associated with the adoption and implementation of the Soledad General Plan, including future development within the project area. According to the General Plan EIR, the following impacts were identified as unavoidable and adverse:

- Development accommodated by the draft Plan will increase groundwater withdrawals, which has the potential to diminish in-stream flow along the Salinas River.

- The permanent loss of 3,500 acres of foraging area for special status animal species would contribute to the cumulative loss of such areas within the Salinas Valley.

Additionally, these impacts were considered significant unless mitigated:

- Buildout of the Plan area with urban uses could result in the permanent conversion of 3,500 acres of agricultural land to urban use. This land may provide suitable foraging habitat for certain special status animal species, and uncultivated areas could contain sensitive plant species.

- Construction activities could result in a number of temporary impacts, including, but not limited to, disturbance of special status plant or animal species (nesting raptors, burrowing owls, etc.), increased erosion potential, and noise, particularly along the Salinas River and its tributaries, and the foothills.

- Urban development in the planning area could adversely impact riparian habitat by increasing impervious surfaces, accelerating erosion and input of sediments and pollutants.

Cumulative Impact: Buildout according to the General Plan in addition to other cumulative developments would potentially result in significant cumulative level impacts to biological resources as a result of habitat loss, fragmentation, and isolation. More specifically, as identified in **Section 4.4 Biological Resources,** the proposed project would result in several significant unavoidable impacts to a number of special status species, in addition to significant impacts due to habitat loss. Moreover, as identified in the General Plan EIR, the permanent loss of foraging habitat would result in a significant cumulative impact to biological resources. To the extent that mitigation has been incorporated into this EIR, project impacts, as well as cumulative impacts, would remain significant and unavoidable. **This represents a significant cumulative level impact.**

Mitigation: Mitigation as proposed in the EIR and General Plan Policies identified in Table 5.2-1 above.

5.2F Utilities/Public Services

General Plan EIR: The impacts to Utilities/Public Services due to development accommodated by the buildout of the General Plan was identified as a potentially significant impact but reduced to less-than-significant with mitigation and planned improvements.

Cumulative Impact: Buildout of the Plan area as contemplated by the General Plan will require the expansion and extension of public utilities and infrastructure. Accordingly, policies and programs of the Plan recommend preparation of capital improvement plans to identify these improvements and funding, and require adequate capacity for services to be in place concurrently or in advance of such new development.

> **Water**: Buildout of the Plan area with urban land uses as contemplated by the draft Plan will result in a net increase in water extracted from the Forebay Sub-basin. An estimate of future water demand under cumulative conditions for all land uses was prepared for the Soledad General Plan EIR. Applying assigned demand factors to buildout yielded the following estimate of future demand under cumulative conditions:

Table 5.2-4
Future Cumulative Water Demand

Future Non-Prison Population	Water Demand Factor	Water Demand At Buildout (AFY)[2]
57,273	128 gallons per day per capita[1]	8,233
Current Demand (Urban plus Ag.)		7,756
Increased Demand At Buildout		**477**

Notes:
1. Water demand from all land uses expressed as a per capita equivalent (Hanna and Brunetti *Water Impact Fee Study*, December, 1999);
2. Based on average daily demand
3. Assumes buildout of the General Plan, 2005 projections
4. Source: Table V.1-4: Future Water Demand At Buildout of the Draft Plan, GPEIR

As Table 5.2-4 suggests, total water demand from the City's Plan area will increase by about 477 AFY at buildout with the uses contemplated by the adopted General Plan. This will occur incrementally over time as more land is annexed to the City and converted from an agricultural to an urban use. It should be noted, however, that this estimate of future water demand makes no assumptions for savings associated with water conservation measures that will implemented in the future as required by State law. For example, new development will be required to incorporate water-conserving plumbing fixtures which will reduce future water use. According to the General Plan EIR, with other more aggressive measures, such as the retrofitting of older toilets and showerheads with more water efficient fixtures, would reduce future demand to near or below current water demand for the Plan area.

Table 5.2-5 from the 2005 General Plan compares present and future water demand with identified withdrawals from the Forebay Sub-basin. The General Plan EIR concluded that water demand associated with buildout of the draft Plan will contribute to the cumulative demand for water for domestic use from the Salinas Groundwater Basin. As identified in the General Plan EIR, withdrawals from the Forebay sub-basin attributable to buildout of the draft Plan will increase by about 0.3 percent over 2004 demand. **The contribution of this project to incremental increase in demand is not considered significant in comparison to withdrawal in the Forebay Sub-Basin.**

Table 5.2-5
Comparison of Present and Future Water Demand In Relation to 2004 Groundwater Withdrawals from the Forebay Sub-Basin

	AFY	Expressed as a Percentage of Total Withdrawals from Forebay Sub-Basin[2]
Current (2004) Demand[1]	7,756	4.8 %
Buildout Demand	8,233	5.1%
Increase	477	0.34%

Sources: CMCA and DWR Bulletin 118, February, 2004
Notes:
1. Urban and agricultural uses within the City's Plan area.
2. February, 2004 withdrawals are estimated at 160,000 AFY by DWR Bulletin 118.
3. Source: Table V.1-5 City of Soledad GPEIR

Both the Urban Water Management Plan and the WSA prepared for the project take into account the salt water intrusion and Salinas Valley Water Project issues; the EIR concludes that adequate water is available to serve the proposed project.

The Salinas Valley Groundwater Basin is experiencing overdraft, with seawater intrusion of about 9,000 acre-feet per year (AF/Y) at its coastal margins affecting portions of the 180-foot and 400-foot aquifer systems. The Monterey County Water Resources Agency (MCWRA) has been pursuing the Salinas Valley Water Project (SVWP) to address the saltwater intrusion in the coastal regions of the basin. Funding for the SVWP under a special property assessment in accordance with Proposition 218 was approved by a vote of property owners in a mailed ballot election in 2003, and the MCWRA has secured federal grants to fund analysis of the second phase of the project, which involves supplying a portion of the available surface water to coastal urban water agencies to further reduce pumping in the coastal areas. Additionally, the State Water Resources Control Board has been monitoring the MCWRA's ongoing efforts to halt seawater intrusion in the basin and has provided $1.4 million in funding to the MCWRA for development of this seawater intrusion solution. As discussed in the SVWP, after reviewing the technical documents analyzing the probable effects of the SVWP on seawater intrusion, the SWRCB concluded "that seawater intrusion can be stopped" (refer to SVWP EIR). However, given the lack of full understanding of the relationship between the Salinas Basin as a whole, and the Pressure Subarea in the vicinity of the former Fort Ord, it is uncertain whether this outcome will be achieved at currently expected levels of pumping increases in the coastal margins of the Pressure Subarea.

The reader is referred to detailed information regarding the background and history of the condition of the Salinas Valley Groundwater Basin, including the cause and extent of overdraft and seawater intrusion, current and future water needs and trends, and efficacy of alternative mitigation measures contained in the EIR/EIS for the Salinas Valley Water Project. (Please refer to http://www.mcwra.co.monterey.ca.us/SVWP/DEIR_EIS_2001/index.htm). The information and analysis in the Salinas Valley Water Project EIR/EIS is expressly incorporated into the Draft EIR. Under Public Resources Code Section 21061, information or data that is relevant to the environmental analysis and is a matter of public record or is generally available to the public need not be repeated in the EIR, but may be specifically cited as the source for conclusions stated in

the EIR. It is sufficient that such information or data is briefly described and that its relationship to the EIR is indicated. As set forth in Guideline Section 15150(a), where all or part of another document is incorporated by reference, the incorporated language is considered to be provided in full as part of the EIR text.

Fire and Police Services: The EIR analyzes the potential impacts of development on fire and police protection services, including the impacts of development within the five Expansion Areas. The EIR concludes that buildout of the City as contemplated by the Plan will increase the need for fire fighting and police protection personnel and equipment. The EIR further concludes that new development to the east and north of the City limits, including within the Expansion Areas, will require additional fire protection facilities to maintain an acceptable response time, and that implementation of mitigation measures will reduce these impacts to a less-than-significant level. Development of the project site and corresponding fire and police protection for such development is anticipated in the General Plan and EIR. Therefore, the proposed project does not create any new or more significant impacts with respect to fire or police protection services.

Wastewater: The General Plan designates some 2,750 acres for urban expansion to be served by the City's wastewater collection and treatment systems. Serving this area assumes expansion of infrastructure capacity for collection, treatment and disposal. This impact was considered significant unless mitigated in the General Plan EIR.

Services Conclusion: Buildout of the Plan area as contemplated by the draft Plan will require the expansion and extension of wastewater collection and treatment facilities, water supply infrastructure, as well as fire and police facilities and services. Accordingly, policies and programs of the Plan recommend preparation of capital improvement plans to identify these improvements and funding, and require adequate capacity for services to be in place concurrently or in advance of such new development. These improvement plans and programs are ongoing under the direction of the City. Thus, the contribution of the project to expansion of public services would not be cumulatively considerable.

Mitigation: Mitigation as proposed in this EIR and General Plan Policies identified in Table 5.2-1 above.

5.2G Air Quality

Regional Air Quality

Setting: The air pollutant emissions resulting from the Miravale III project would contribute to overall increases in regional emissions due to other cumulative development. A determination of consistency with the Air Quality Management Plan is used to define the cumulative impacts of a proposed project on regional air quality.

AMBAG is responsible for determining consistency of the Miravale III project with the Air Quality Management Plan for the Monterey Bay Region (AQMP). The 2008 Regional Population & Employment Forecast is the official population forecast of the AQMP and is the basis for AMBAG's consistency analysis. Consistency of the project with the AQMP was analyzed by comparing the total potential population growth facilitated by the project with the forecasted growth for Monterey County.

Specific plans are evaluated for cumulative impacts both determining the consistency of the proposed project with the applicable regional air quality plan the specific plan's individual impacts to air quality. The MBUAPCD *2008 Air Quality Management Plan for the Monterey Bay Region* (AQMP) addresses

attainment of the State ozone standard. MBUAPCD has included emissions related to population growth in the AQMP using projections adopted by the AMBAG. For this specific plan, consistency with population forecasts is determined by comparing plan build-out population at the year of project completion with the appropriate five-year forecast increment for the jurisdiction that the project is located (i.e. Soledad). Projects or plans that would not cause the estimated cumulative population to exceed forecasts are considered consistent with air quality planning efforts. According to the AMBAG, this project is consistent with the 2008 regional forecasts for Monterey County and the Air Quality Management Plan. A letter from AMBAG documenting the consistency determination is included in the Air Quality Report in Appendix E.

As described in the Air Quality Section of this EIR, individual projects developed could have significant air quality impacts with respect to direct and indirect emissions of ozone precursor pollutants. These impacts are typically identified at the time project-level analyses are conducted. Current modeling indicated the potential for projects to have VOC emissions in excess of the MBUAPCD thresholds. Therefore, this was identified as a potentially significant impact. Mitigation measures to reduce the impacts were suggested to apply to the plan. Because much of the emission from projects would be associated with use of consumer products that cannot be mitigated, the impact could be considered significant and unavoidable. This represents a potentially significant cumulative impact to air quality.

Cumulative Impact: The specific plan consists of mostly residential with commercial retail uses and schools that were found by AMBAG to be consistent with 2008 regional forecasts and the Air Quality Management Plan; therefore, it would not conflict with regional efforts to attain and maintain ambient air quality standards. Projects developed under the specific plan may have individually significant impacts that may not be mitigated to a less-than-significant level**. As a result, the specific plan may contribute significantly to a significant cumulative air quality impact.**

Mitigation: Implementation of the Air Quality mitigations in this EIR and programs and policies in the General Plan identified in Table 5.2-1 above.

Greenhouse Gas and Global Climate Change

Various gases in the Earth's atmosphere, classified as atmospheric greenhouse gases (GHGs), play a critical role in determining the Earth's surface temperature. Solar radiation enters Earth's atmosphere from space, and a portion of the radiation is absorbed by the Earth's surface. The Earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. Greenhouse gases, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect.

Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), ozone (O_3), water vapor, nitrous oxide (N_2O), and chlorofluorocarbons (CFCs). Human-caused emissions of these GHGs in excess of natural ambient concentrations are responsible for enhancing the greenhouse effect (Ahrens 2003). Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors (California Energy Commission 2006a). In California, the transportation sector is the largest emitter of GHGs, followed by electricity generation (California Energy Commission 2006a). A byproduct of fossil fuel combustion is CO_2. Methane, a highly potent GHG, results from off-gassing associated with agricultural practices and landfills. Processes that absorb and accumulate CO_2, often called CO_2 "sinks," include uptake by vegetation and dissolution into the ocean.

As the name implies, global climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern, respectively. California is the 12th to 16th largest emitter of CO_2 in the world and produced 492 million gross metric tons of carbon dioxide equivalents in 2004 (California Energy Commission 2006a). Carbon dioxide equivalents are a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential of a GHG, is also dependent on the lifetime, or persistence, of the gas molecule in the atmosphere.

Carbon dioxide, the primary man-made greenhouse gas of concern, would be generated by the project from mobile sources and other energy usage. The proposed Specific Plan incorporates the following measures to reduce motor vehicle and other energy use:

- Providing employment opportunities near housing to minimize off-site commuting.
- Linking a mix of land uses with alternative transportation facilities (e.g., bikeways, sidewalks, and trails).
- Promote the use of solar energy devices to encourage solar orientation of residential and business buildings to reduce the use of fossil fuels.

In addition, mitigation is identified in this EIR, including Transportation Demand Measures, to further reduce mobile source emissions.

Regulatory Framework

This section describes recent state regulations that specifically address greenhouse gas emissions and global climate change. At the time of writing, there are no regulations setting ambient air quality standards or emission limits for greenhouse gases.

Assembly Bill 1493. In 2002, then-Governor Gray Davis signed Assembly Bill (AB) 1493. AB 1493 requires that the California Air Resources Board (ARB) develop and adopt, by January 1, 2005, regulations that achieve "the maximum feasible reduction of greenhouse gases emitted by passenger vehicles and light-duty truck and other vehicles determined by the ARB to be vehicles whose primary use is noncommercial personal transportation in the state." For more information see http://www.leginfo.ca.gov/pub/01-02/bill/asm/ab_1451-1500/, http://www.arb.ca.gov/regact/grnhsgas/revfro.pdf and http://www.arb.ca.gov/regact/grnhsgas/revtp.pdf.

Assembly Bill 32, the California Climate Solutions Act of 2006. In September 2006, Governor Schwarzenegger signed AB 32, the California Climate Solutions Act of 2006. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by the year 2020. This reduction will be accomplished through an enforceable statewide cap on GHG emissions that will be phased in starting in 2012. To effectively implement the cap, AB 32 directs ARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then ARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32. AB 32 requires that ARB adopt a quantified cap on GHG emissions representing 1990 emissions levels and disclose how it arrives at the cap; institute a schedule to meet the emissions cap; and develop tracking, reporting, and enforcement mechanisms to ensure that the state achieves reductions in GHG emissions necessary to meet the cap. AB 32 also includes guidance to institute emissions reductions in an

economically efficient manner and conditions to ensure that businesses and consumers are not unfairly affected by the reductions. For more information see http://www.leginfo.ca.gov/pub/05-06/bill/asm/ab_0001-0050/ab_32_bill_20060927_chaptered.pdf

Senate Bill 1368. SB 1368 is the companion bill of AB 32 and was signed by Governor Schwarzenegger in September 2006. SB 1368 required the California Public Utilities Commission (PUC) to establish a greenhouse gas emission performance standard. Therefore, on January 25, 2007, the PUC adopted an interim GHG Emissions Performance Standard in an effort to help mitigate climate change. The Emissions Performance Standard is a facility-based emissions standard requiring that all new long-term commitments for baseload generation to serve California consumers be with power plants that have emissions no greater than a combined cycle gas turbine plant. That level is established at 1,100 pounds of CO_2 per megawatt-hour. "New long-term commitment" refers to new plant investments (new construction), new or renewal contracts with a term of five years or more, or major investments by the utility in its existing baseload power plants. In addition, the California Energy Commission (CEC) established a similar standard for local publicly owned utilities that cannot exceed the greenhouse gas emission rate from a baseload combined-cycle natural gas fired plant. On July 29, 2007, the Office of Administrative Law disapproved the Energy Commission's proposed Greenhouse Gases Emission Performance Standard rulemaking action and subsequently, the CEC revised the proposed regulations. Those regulations can be found at http://www.energy.ca.gov/ghgstandards/documents/index.html. SB 1368 further requires that all electricity provided to California, including imported electricity, must be generated from plants that meet the standards set by the PUC and CEC.

Executive Order S-3-05. signed by Governor Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change and declares that increased temperatures could reduce the Sierra's snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the Executive Order established total greenhouse gas emission targets. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80% below the 1990 level by 2050. The Executive Order directed the Secretary of the California Environmental Protection Agency (CalEPA) to coordinate a multi-agency effort to reduce greenhouse gas emissions to the target levels. The Secretary will also submit biannual reports to the governor and state legislature describing: (1) progress made toward reaching the emission targets; (2) impacts of global warming on California's resources; and (3) mitigation and adaptation plans to combat these impacts. To comply with the Executive Order, the Secretary of the CalEPA created a Climate Act Team (CAT) made up of members from various state agencies and commission. CAT released its first report in March 2006. The report proposed to achieve the targets by building on voluntary actions of California businesses, local government and community actions, as well as through state incentive and regulatory programs. For more information see http://gov.ca.gov/index.php?/executive-order/1861/.

In addition to S-3-05, the following executive orders deal with greenhouse gas reduction:

- Executive Order S-01-07 regarding low carbon standard for transportation fuels http://gov.ca.gov/index.php?/executive-order/5172/
- Executive Order S-20-06 regarding implementation of AB 32 http://gov.ca.gov/index.php?/executive-order/4484/
- Executive Order S-20-04 regarding energy conservation by state http://gov.ca.gov/index.php?/executive-order/3360/

The following documents have been recently released to assist state and local governments and agencies with compliance with the above legislation, including defining how to address the issue in CEQA documents, in particular development and planning projects such as Miravale III. The recommendations in these guidance documents provide tools for entities and agencies to implement to voluntarily reduce

their greenhouse gas emissions and their susceptibility to the risks of adverse effects of global climate change by addressing it in planning and site design of development projects:

- California Air Resources Board, June 2008. Climate Change Draft Scoping Plan: a framework for change.
- California Air Pollution Control Officers Association, January 2008. CEQA & Climate Change.
- California Office of Planning and Research, June 19, 2008. CEQA and Climate Change: Addressing Climate Change Through CEQA.

Greenhouse Gas Emissions/Global Climate Change Thresholds

No air districts have established significance thresholds for greenhouse gas (GHG) emissions or a methodology for analyzing air quality impacts related to greenhouse gas emissions. With the adoption of AB 32, the state has set a goal of reducing GHG emissions to 1990 levels by 2020. It has been acknowledged by previous EIRs addressing this issue that it may be considered speculative to determine if a project would be consistent with the AB 32 goals. CO_2 emissions do not directly create environmental effects; rather it is the cumulative increased concentration of CO_2 in the atmosphere that results in global climate change and associated consequences. While it is possible to estimate the project's CO_2 emissions, it is typically not possible to determine whether those emissions (however small) would manifest into significant environmental impacts. The complexity of global and regional-scale physical, chemical, atmospheric, terrestrial, and aquatic systems preclude a meaningful determination of whether the CO_2 emitted by a single project (or in this case adoption of a Specific Plan) would result in a measurable or even, non-negligible change in climate. A quantitative standard of significance is not used in this EIR because of the global nature of the analysis required, instead a project's contribution to the cumulative significant impact of global climate change would be considered significant if, due to the size or nature of the project, it would generate a substantial increase in GHG emissions relative to existing conditions. In addition, the discussion considers whether or not the project would result in greenhouse gas emissions that would hinder or delay the State's ability to meet the reduction targets contained in AB 32.

Analysis Methodology

GHG emissions associated with the Miravale III Project were estimated using CO_2 emissions as a proxy for all GHG emissions. Urbemis 2007 version 9.2.2 was used to calculate CO_2 from operational and on-site area source emissions. The CO_2 emissions from non-vehicular sources associated with the project were calculated based upon the statewide factor of 40.7% of emissions that are attributed to transportation sources (California Energy Commission 2006). This is consistent with the current reporting protocol of the California Climate Action Registry (CCAR). Calculations of GHG emissions typically focus on CO_2 because it is the most commonly produced GHG in terms of both number of sources and volume generated, and because it is among the easiest GHGs to measure. However, it is important to note that other GHGs have a higher global warming potential than CO_2. Emissions of other GHGs from the Miravale III Project (and from almost all GHG emissions sources) would be low relative to emissions of CO_2 and would not contribute significantly to the overall generation of GHGs from the project.

Although the CCAR provides a methodology for calculating GHG emissions, the process is designed to be applied to a single or limited number of entities or operations where detailed information on emissions sources is available (e.g., usage of electricity and natural gas, numbers and types of vehicles and equipment in a fleet, type and usage of heating and cooling systems, emissions from manufacturing processes). Information at this level of detail is not available for the Miravale III Project. Given the lack of detailed design and operational information available at this time for facilities in the Miravale III

Specific Plan area, the CCAR emissions inventory methodology is considered to be not appropriate for estimating GHG emissions from the project. In addition, this EIR does not address GHG emissions and associated impacts during construction because these would be considered negligible compared to total operational, cumulative regional, state, national, and global GHG emissions.

Calculations of GHG Emissions

As discussed in the Analysis Methodology section, above, CO_2 emissions are used in this Draft EIR as a proxy for all GHG emissions. Urbemis 2007 v 9.2.2 was used to estimate CO_2 emissions shown in Table 4.3-7 from project-generated vehicle trips and on-site area source emissions (fossil fuel combustion and wood burning). According to the Urbemis model run in Appendix C, operations (including mobile and on-site area sources) due to buildout of the Specific Plan would result in emissions of 293,809 pounds per day of CO_2 which includes vehicular sources emitting 236,630 lbs per day and area sources (natural gas burning on-site) emitting 57,179 lbs per day. This estimate does not include emissions due to off-site electricity generation needed for the project. Converting to tons/year, the Specific Plan would result in approximately 53,620 tons of CO_2 per year, with 43,185 tons per year due to vehicular sources. To include off-site electricity generation and other GHG emissions, the transportation sector has been estimated to account for 40.7% of total GHG emissions in California (California Energy Commission 2006). Therefore, the project's non-transportation sector CO_2 emissions are estimated to be 62,921 tons per year for a total CO_2 emission estimate of approximately 106,100 tons per year.

This estimate of CO_2 emissions due to project implementation is likely much greater than the net new CO_2 emission that will actually occur. At the time of project buildout (beyond 2025), overall CO_2 emissions attributable to the Miravale III project could be substantially less than current emissions assumptions might indicate. This is due to the following factors:

- Although this future CO2 emission factor does assume certain reductions in vehicle emissions due to future vehicle models operating more efficiently, it does not take into account additional vehicle emission reductions that might take place in response to AB 1493, if mobile source emission reductions are ultimately implemented through this legislation.

- The emissions calculations described above do not take into account reductions in GHG emissions resulting from implementation of AB 32. Stationary emissions sources on the project site and stationary sources that serve the project site (e.g., power plants) will be subject to emissions reductions requirements of AB 32. The extent of these reductions has not yet been quantified by ARB.

- If GHG emissions reductions for vehicles are enacted, through either the requirements of AB 1493 or AB 32 or a federal regulation, CO2 emissions from the Specific Plan project would be further reduced. If regulations proposed to comply with AB 1493 survive current legal challenges, by project buildout CO2 emissions from vehicles associated with the project could be 20% to 30% less than under current conditions. If AB 1493 is repealed, it is unclear what vehicle emissions limits might be adopted as part of AB 32.

- The Miravale III Project includes numerous policies aimed at reducing the burning of fossil fuels (including transportation demand management, encouraging pedestrian and bike modes of transport, sustainable development, and energy efficiency policies). These policies are listed above City of Soledad General Plan policies and Miravale III Specific Plan policies.

- New homes are generally more energy efficient than older homes and by building new homes, it is possible that older, less efficient homes would be razed. The occupants of those older homes would reduce their carbon footprint by living in newer more efficient homes.

- Potential in-migration to the County and/or the State may result due to increased housing stock. This may be argued to result in more people living in a more temperate climate and thereby using less energy for climate control.

Conclusions

As described above, the cumulative increase in GHG concentrations in the atmosphere has resulted in and will continue to result in increases in global average temperature and associated shifts in climatic and environmental conditions. Multiple adverse environmental effects are attributable to global climate change, such as sea level rise, increased incidence and intensity of severe weather events (e.g., heavy rainfall, more severe flood events, droughts), and extirpation or extinction of plant and wildlife species. Given the significant adverse environmental effects linked to global climate change induced by GHGs, the emission of GHGs is considered a significant cumulative impact. Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors (California Energy Commission 2006a). Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on Earth. Aside from the difficulty of assessing the actual GHG emissions of project buildout (as discussed above), it is even more difficult to determine the significance of an individual project's contribution to global GHG emissions and associated global climate change impacts. This would require determining whether a project's GHG emissions—which may be considered negligible relative to global emissions— would result in a cumulatively considerable incremental contribution to the significant cumulative climate change impact due to all global GHG emissions.

In 2003, global emissions of carbon (i.e., only the carbon atoms within CO_2 molecules) solely from fossil fuel burning total an estimated 7,303 million metric tons (Marlands et al. 2006). This translates to approximately 29,400 million tons of CO_2. This is only a portion of global CO_2 emission because it only includes fossil fuel burning and does not address burning of vegetation or other natural sources. Total estimated CO_2 emissions from all sources associated with the Miravale III Project (which is potentially high given the issues discussed above) would be less than 0.0004% of this partial global total. CO_2 emission in California totaled approximately 391 million tons in 2004 (California Energy Commission 2006). The project's CO_2 emissions at project buildout represent 0.03% of this 2004 statewide emission amount.

In addition to uncertainties regarding the project's net contribution of CO_2 emissions to global climate change; it is also uncertain how current regulations might affect CO_2 emissions attributable to other global sources. Also, it cannot be determined how CO_2 emissions associated with the project might or might not influence actual physical effects of global climate change. For these reasons, it is uncertain whether the project would generate a substantial increase in GHG emissions relative to existing conditions, and whether emissions from buildout of individual projects with the specific plan area would make a cumulatively considerable incremental contribution to the significant cumulative impact of global climate change.

As a primarily residential development project, Miravale III is not considered to be the type of project that would substantially hinder or delay the State's ability to meet the reduction targets contained in AB 32. However, the project would potentially result in new greenhouse gas emissions and does not propose pro-active measures to reduce transportation emissions of CO_2 or improve energy efficiencies of project

facilities beyond Title 24 requirements; therefore, it is possible that the project may hinder or delay GHG emission reductions.

Impact **Implementation of the Miravale III Project may increase global greenhouse gas (GHG) emissions resulting in a potentially cumulatively considerable incremental contribution to significant cumulative global climate change impacts and the project may hinder or delay the State's ability to meet GHG reduction targets in AB 32.** ***This is considered a significant and unavoidable cumulative impact that can be reduced by implementation of Mitigation Measures # 4.3-3 and 4.13-1, however, not to a less-than-significant level.***

Impacts of Global Climate Change on the Project

Global climate change is expected to affect water resources in California overall, and in particular, areas that rely upon the Sierra Nevada snowfall and snowpack. Because this project is in an area that does not rely on this source of water, it would experience less of an impact due to this phenomenon. In addition, global climate change is expected to influence many interconnected phenomena, which will in turn affect the rate of climate change itself. Besides effects on water supply for areas served by Sierra Nevada precipitation, the following are other global climate change issues that may significantly adversely impact the project:

- Water supplies available in surface reservoirs
- Water demand
- Surface water quality
- Groundwater quality or recharge characteristics
- Fisheries and aquatic resources
- Flooding/flood control
- Sudden temperature and other climatic changes

Details and evaluation of these issues and other related issues are described in various reference documents, including the following: *Progress of Incorporating Climate Change into Management of California's Water Resources, Technical Memorandum Report* (DWR 2006), *Climate Change 2001: The Scientific Basis. Contribution of Working Group 1 to the Third Assessment Report of the Intergovernmental Panel on Climate Change* (IPCC), (IPCC, 2001), *Water Planning and Management Under Climate Change* (Gleick, P.H., 1997), *Climate Change and California Resources: A Survey and Summary of the Literature. The California Water Plan, Volume 4* (Kiparsky M. and P.H. Gleick, 2003), *The Effects of Climate Change on Agricultrue, Land Resources, Water Resources and Biodiversity in the United States* (U.S. Climate Change Program, May 2008), and *Climate Warming and California's Water Future* (Lund, J.R., et al, 2003) among others.

It can be assumed that under a long-term cumulative condition, one or more of the above significant adverse impacts may occur. The above issues which are applicable to this project are addressed in the relevant sections of this Draft EIR to the extent that the impacts are known and are not simply speculative.

5.2H Noise

Setting: The major noise source in Soledad, as in most other communities, is traffic. Railroads, aircraft, farming activities, quarry activities, and industrial and food packaging facilities also contribute to local ambient noise levels.

General Plan EIR: The impact to the existing and future noise environment due to development accommodated by the buildout of the General Plan was identified as a potentially significant impact. The impact was shown to be mitigated to less-than-significant by applying the policies and programs recommended by the Noise Element.

Cumulative Impact: The project would contribute at least 1 decibel to the cumulative noise level increase expected throughout Soledad and would be "cumulatively considerable." Table 5.2-6 summarizes the roadway segments where the project would contribute a measurable increase and cumulative noise level increases resulting from the project and other planned developments would be substantial.

Table 5.2-6
Cumulative Traffic Noise Level Increases Above Existing Levels

Roadway	Segment	Cumulative Noise Level Increase (dBA, CNEL)
San Vincente Road	Market St. to Gabilan Dr.	+9
	Gabilan Dr. to Project Entrance	+10
West Street	Market St. to Gabilan Dr.	+6
	Gabilan Dr. to Project Entrance	+8
Main Street	Market St. to Gabilan Dr.	+7
Gabilan Dr.	San Vincente Rd. to West St.	+9
	West St. to Andalucia Dr.	+5
	East of Andalucia Dr.	+5
Andalucia Dr.	Metz Rd. to Gabilan Dr.	+4

Source: *Miravale III Specific Plan Environmental Noise Assessment*. Illingworth & Rodkin, Inc. 2007.

Traffic noise levels will increase with the development of the project area and other planned developments in Soledad. In some locations, these increases would be substantial, and the project would contribute to the overall cumulative noise impact. This is a potentially significant impact.

Mitigation: Implementation of the Traffic and Noise mitigations in this EIR and programs and policies in the General Plan identified in Table 5.2-1 above.

5.2I Traffic

This section describes the results of the traffic analysis prepared by Hexagon Associates and Omni-Means (for the City-wide 2030 analysis) under cumulative conditions under the assumption of 2030 buildout, as described below.

General Plan EIR According to the General Plan EIR, the following circulation impacts were identified for buildout of the Soledad General Plan (2005 EIR):

- Buildout of the land uses recommended by the Draft General Plan will significantly increase traffic generation with a corresponding cumulative impact on the level of service of regional roadways (Highway 101), streets and intersections serving the City. This impact was considered significant and unavoidable.

- Buildout of the land uses recommended by the Draft General Plan will adversely affect the operation and level of service of the two freeway interchanges serving the City. This impact was considered significant and adverse.

- Buildout of the land uses recommended by the Draft General Plan could result in traffic hazards on city streets and intersections. This impact was considered adverse but not significant.

- Buildout of the land uses recommended by the Draft General Plan will significantly contribute to the demand for bicycle and pedestrian facilities in the City's planning area. This impact was considered adverse but not significant.

Buildout of the land uses recommended by the Draft General Plan will contribute to the demand for public transit serving the City's planning area. This impact was considered adverse but not significant.

2030 Buildout Conditions This section describes the results of the traffic analysis prepared by Hexagon Associates and Omni-Means (for the City-wide 2030 analysis) under cumulative conditions under the assumption of 2030 buildout, as described below. The traffic analysis evaluated two cumulative conditions: 1) baseline cumulative conditions without the project, and 2) cumulative conditions with the project. The cumulative traffic condition is defined as traffic conditions roughly 25 years into the future, or 2030 and beyond.

This section describes the long-term traffic impacts on the transportation system associated with the proposed development as well as land use growth and transportation improvements within the entire City of Soledad. The purpose of this analysis is to evaluate the long-term traffic impacts on the transportation system associated with the proposed development.

Trip Generation: Year 2030 traffic volumes were developed by Omni Means Engineers & Planning Consultants. The traffic forecasts for Year 2030 were produced using the Association of Monterey Bay Area Governments (AMBAG) Regional Traffic Model. The 2030 model includes land use growth and transportation improvements associated with buildout of all General Plans within the AMBAG region and 30 year through-traffic growth on major regional facilities.

The recently adopted 2005 Soledad General Plan is not accounted for in the land use assumptions contained in the AMBAG model. Additionally, the proposed Miravale III land uses are of greater intensity than those assumed in the General Plan. Therefore, Omni Means and AMBAG adjusted the land uses contained in the model to include the adopted General Plan and Miravale III land uses. The roadway network contained in the AMBAG model for the City of Soledad was expanded to include the expansion of the street network to serve future land uses.

Though the Year 2030 forecasts reflect approximately 23 years of development growth, the forecasts do not show significant increases in traffic volumes on US 101 and its ramps within the City of Soledad. The lack of volume increases on the regional facilities is primarily due to significant changes in land uses within Soledad that are being represented in the model. There currently is very little land uses besides residential within Soledad. As such, existing traffic volumes on the regional facilities reflect the unbalanced land uses within Soledad where trips originate within Soledad due to its substantial residential development and have destinations outside of Soledad in areas that contain industrial/commercial (employment) land uses. The model reflects the future addition of a significant amount of industrial/commercial (employment) within Soledad thus creating a more balanced land use scenario within the City of Soledad. The future balance of land uses will internalize many trips in Soledad.

Additionally, several new roadways that will be constructed to serve future development will provide for enhanced connectivity to US 101, specifically the Gloria/Camphora interchange.

Peak hour project trips associated with the proposed Miravale project were also produced as part of the forecasts completed by Omni Means. The Year 2030 Miravale III project trips differ from those presented in the near term project trips calculations due to changes in land uses and the transportation system as described above. It is expected that the development of more balanced land uses (employment vs. housing) will internalize many of the project trips within Soledad. The near-term project trip assignment and analysis depicts the existing unbalanced land use scenario. The Year 2030 projections and project trip assignment assumes a more balanced land use with project trip destinations within Soledad and the utilization of new and enhanced connections to US 101.

Year 2030 Level of Service Analysis: Level of service analysis was conducted for all freeway segments and interchange ramps within the City of Soledad. The traffic model is intended to provide projections for interregional facilities, and may project future forecasts that are significantly different than existing and expected future traffic volumes on city-level roadways. Therefore, no intersection analysis is presented. The freeway and ramp analysis consists of an evaluation of volume-to-capacity of each of the facilities.

Freeway Segment Analysis: Year 2030 conditions freeway segment analysis indicates that all freeway segments within the City of Soledad are projected to operate at LOS D or better conditions. The Miravale project will add between 250 and 770 vehicles to the freeway segments during the AM peak and 200-770 vehicles during the PM peak.

Freeway Ramp Analysis: Year 2030 conditions interchange ramp analysis indicates that all freeway ramps ad are projected to operate at LOS D or better conditions. The Miravale project will add between 30 and 770 vehicles to the identified ramps during the peak hours.

Year 2030 Freeway Facility Impacts and Mitigation Measures: Long-term traffic analysis of the proposed development levels for the project as well as long-term land use growth and transportation improvements within the entire City of Soledad indicate that the development levels will not have adverse impacts on the major regional facilities serving Soledad. Nonetheless, the proposed project as well as other development projects within the City of Soledad will be required to contribute to the regional development impact fee program as described under near-term project conditions.

Mitigation in this EIR addresses cumulative impacts. Additionally, cumulative development will be required to contribute to the regional development impact fee program as described under near-term project conditions in the Traffic Section of this report.

Mitigations: Implementation of the Traffic mitigations in this EIR and programs and policies in the General Plan identified in Table 5.2-1 above.

Cumulative development will be required to contribute to the regional development impact fee program as described under near-term project conditions in the Traffic Section of this report. Even with cumulative contribution to traffic mitigations, buildout of the land uses recommended by the Draft General Plan will significantly increase traffic generation with a corresponding cumulative impact on the level of service of regional roadways, streets and intersections serving the City. **The General Plan EIR found this cumulative impact to be significant and unavoidable.**

5.2J Population and Housing

Setting: This growth in population in the expansion areas including the project site would increase population and demands on housing and existing community facilities. According to the adopted General Plan, the site is within an area of planned growth and expansion although outside of the current City limits and sphere of influence for the City. The City has identified holding capacities for individual major properties within these expansion areas. The proposed Specific Plan for Miravale III proposes an increase in the applied density for the project site, approximately 1,500 units above the estimated holding capacity for the Miravale III site.

General Plan EIR: General Plan policies L-2 to L-7 address policies to phase develop and plan for expansion of City service capacity, per the General Plan EIR:

L-2 Further annexations to the City may occur when a) a substantial portion of the development capacity within the existing city limits has been developed, b) a substantial public benefit can be realized through the annexation, such as the provision of public open space, additional parkland, or the protection of scenic vistas, or natural resources, or c) a special type of use is proposed that cannot be practically accommodated in the existing city limits, and d) the project can be found to provide a financial benefit to the City or to be fiscally neutral. The Planning Commission shall review the merits of a request for annexation based on these criteria, and make a recommendation to the City Council.

L-3 A specific plan shall be required for all annexations and development of properties designated *Expansion Area*. Specific plans shall be prepared in accordance with the standards provided in Appendix B of the General Plan.

L-4 The City shall promote patterns of development that allow for the efficient and timely extension of infrastructure and services.

L-5 New development shall not be allowed unless adequate public services are available to serve such new development, or that can be provided at the time of development.

L-6 New development shall pay its fair share of providing additional public services needed to accommodate such development.

L-7 Master plans for sewer, water, roads, drainage and other public improvements shall be required for new development on large undeveloped parcels and may be included in the specific plan required by policy L-3, and as determined by the City.

Cumulative Impact: The project would represent an incremental increase in overall holding capacity identified in the 2005 General Plan EIR for the Mirassou, San Vincente and Northwest Expansion Areas and could be considered growth inducing if annexations and development in the area exceed development potential addressed in the General Plan EIR. The additional population increase (15,201) associated with buildout of the project site over the projected 15-20 years of project development represents approximately 54 percent of Soledad's existing (2007) population. Depending upon the timing of project development, this additional population represents a major portion of the projected City wide population of 28,000 by year 2020. Buildout of the City density over and above the development anticipated in the 2005 General Plan could impact planned services and city wide infrastructure or be considered growth

inducing. **This would represent a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation measures.**

Cumulative Mitigation (Consistent with Project Mitigations Section 4-11)

4-11.1 Phase approval of development applications and annexations in the Mirassou, San Vincente and Northwest Expansion Areas to maintain holding capacity and population projections in Table 4.11-5 of the General Plan EIR. Monitor development approvals in these expansion areas to limit overall density and population growth to the holding capacity identified to ensure consistency with projections in approved City planning documents.

4-11.2 Implement General Plan policies L-2 to L-7 and other applicable policies for phased development and population growth in the project and expansion areas.

5.3 OTHER CUMULATIVE CONSIDERATIONS

Land Use

Future development of the project site as proposed by the Specific Plan would not significantly contribute to cumulative impacts associated with land use and planning. Land use effects would be localized and would not combine with similar effects in other locations. Further, there is no cumulative context to assess land use consistency and compatibility issues unless there is an environmental impact, whereby these impacts are discussed in the appropriate environmental discussion sections in this EIR. **The project would have a less-than-significant impact cumulative impact on land use.**

Hazardous Materials

The project, together with other cumulative development in the project area, could increase the use of hazardous materials. This could increase the occurrence of hazardous materials releases, resulting in potential health and safety risks. However, hazardous materials incidents, which usually involve inadvertent releases or accidental spills, are typically site-specific and occur on an isolated basis. Associated health and safety impacts are likewise normally limited to the persons using or working in the vicinity of the materials or to others in the immediate vicinity. Thus, the contribution of the project to risks from hazardous materials would not be cumulatively considerable. Any potential for such impacts would be minimized by implementation of federal, state, and local requirements regulating the use, storage, and transportation of hazardous materials. **Based on the above discussion, the cumulative impacts associated with hazards and hazardous materials would be less-than-significant.**

Cultural Resources

The project could significantly impact archaeological resources by disturbing buried resources. Mitigation is identified for the project to reduce impacts to cultural resources to a less-than-significant level. The project would not contribute to significant cumulative impacts to cultural resources. In addition, the incorporation of appropriate management measures to avoid or remove existing resources, protect resources, and/or document resources by cumulative development in the area, as required by the City and CEQA, would minimize impacts to cultural resources. **The project would have less-than-significant cumulative impacts on cultural resources.**

5.4 IRREVERSIBLE ENVIRONMENTAL CHANGES

Section 15126[f] of the State CEQA Guidelines requires EIRs to include a discussion of significant, irreversible environmental changes that would result from project implementation. This section is required for EIRs prepared for plans, policies and ordinances, and for actions involving LAFCO. The intent is to focus special attention on impacts that narrow the range of beneficial uses of the environment or pose long-term risks to health or safety. CEQA Section 15126.2(c) identifies irreversible environmental changes as those involving a large commitment of nonrenewable resources or irreversible damage resulting from environmental accidents.

The project would develop residential, commercial, office, and public facility uses on the site.

Development of the project will result in irreversible changes to the environment in the following areas:

- The permanent conversion of over 760 acres of prime farmland to urban and/or non-agricultural uses;
- The permanent loss of potential foraging habitat associated with the permanent conversion of open space and agricultural land to urban uses;
- The permanent loss of petroleum products and other materials used to produce energy during project operations;
- Permanent loss of nonrenewable resources during construction, including building materials;
- The permanent change of the visual character of the City and its environs from one consisting predominantly of agriculture and open space to a more suburban character. In addition, grading from the project would permanently alter the topography of the site.

Although the policies and programs of the draft Specific Plan are aimed at minimizing the effects of these changes on the environment, they will remain permanent and adverse when compared to current conditions.

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6.0 Alternatives

6.1 INTRODUCTION

CEQA Guidelines section 15126.6 requires the consideration of a range of reasonable alternatives to the proposed project that could feasibly attain the basic objectives of the proposed project. CEQA further requires that the discussion focus on alternatives capable of eliminating significant adverse impacts of the project, or reducing them to a less-than-significant level, even if the alternative would not fully attain the project objectives or would be more costly. According to CEQA, the range of alternatives discussed in an EIR is governed by the "rule of reason" that requires an EIR to evaluate only those alternatives necessary to allow a reasoned choice. An EIR need not consider an alternative where the effects cannot be reasonably ascertained, or and where implementation is remote and speculative.

Alternatives Not Analyzed in Detail

Alternative Location. CEQA Guidelines Section 15126.6(f)(2) provides guidelines regarding when it is appropriate to analyze an alternative location as part of the alternatives analysis. Specifically, Section 15126.6(f)(2)(a) states that alternative locations should be analyzed if the location would avoid or substantially lessen any of the significant effects of the project. Consistent with Section 15126.6(f)(2)(a), applicable case law indicates that an off-site alternative should be analyzed where significant impacts can be avoided by choosing another site. As previously identified, the project site is located within an area identified in the General Plan as a future expansion area and is located adjacent to existing residential development within the City of Soledad. This area is considered appropriate for urban expansion. Development within adjacent expansions areas would not necessarily result in the reduction of any significant environmental impacts. Furthermore, undeveloped privately owned parcels are not under the control of the project applicant. Since the selection of an alternative location would not substantially lessen project-related impacts and the applicant is unable to acquire feasible alternatives sites, an alternative location was not considered.

Alternatives Selected

The following section discusses the alternatives evaluated in this EIR and the comparative environmental effects of each. The alternatives considered in this analysis are as follows:

- *No Project Alternative – No Development*
- *Buildout Consistent with General Plan Alternative*
- *Reduced Project Alternative*
- *No Golf Course Alternative*
- *Alternative Design: Increased Senior Housing Alternative*

The alternatives chosen for this analysis, beyond those mandated by CEQA, were developed specifically to avoid or substantially reduce the significant impacts of the project. A comparison of the impacts for each alternative is presented in Table 6-1. A substantive discussion is provided for each issue area where a proposed alternative would lessen the significance of an impact. For an alternative that would result in approximately the same level of impact (i.e. less-than-significant, less-than-significant with mitigation) as the proposed project, a discussion of that issue area is not necessarily provided. It is important to note, however, that certain aspects of a given alternative may minimize the extent of impact, but may not necessarily affect the level of significance relative to the proposed project.

Table 6-1 Comparison of Impacts – Project Alternatives					
Impact	**No Project - No Build**	**Buildout Consistent w/ General Plan**	**Reduced Project**	**No Golf Course**	**Alternative Design: Increased Senior Housing**
Aesthetics/Visual	<	<	<	=	=
Agricultural Resources	<	<	<	<	=
Air Quality	<	<	<	=	=
Biological Resources	<	<	<	<	=
Cultural Resources	<	=	=	<	=
Geology/Soils/Mineral Resources	<	=	=	=	=
Hazards & Hazardous Materials	<	=	=	<	=
Hydrology & Water Quality	<	<	<	=	=
Land Use and Planning	<	<	<	=	=
Noise	<	<	<	=	=
Public Services	<	<	<	<	<
Utilities and Service Systems	<	<	<	=	=
Traffic	<	<	<	<	<
> Impact Greater than Project = Impact Comparable to Project < Impact Less than Project					

6.2 SUMMARY OF PROJECT OBJECTIVES AND SIGNIFICANT IMPACTS

Objectives

The following are the primary objectives of the project:

- Provide a range of moderate-income housing for the existing and future residents of Soledad.
- Provide a mixed-use development of housing, parks, schools and neighborhood commercial uses to serve the local area and provide a balance of uses.
- Reserve land for commercial development to allow for future economic growth within the City and assist in maintaining a local jobs/housing balance.
- Provide public park lands to serve the recreational needs of the proposed development and surrounding community.
- Support the local economy by increasing income on the site through permits, fees, property taxes, and job creation.

Another project objective of the Specific Plan and development project is to implement the goals of the City of Soledad 2005 General Plan and 2003 Housing Element. A summary of these plans' goals are included in pertinent sections of this EIR.

Significant Impacts

The project would result in significant impacts in the following categories, as described in this EIR: aesthetics, agricultural resources, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services, transportation/traffic, and utilities and service systems. All project impacts can be reduced to a less-than-significant level with implementation of mitigation identified in this EIR, with the exception of the following:

- Significant unavoidable project and cumulative impacts to a scenic vista and to the visual character of the project site.
- Significant unavoidable project and cumulative impacts due to the conversion of prime agricultural land and impacts to Williamson Act contracted lands.
- Significant unavoidable construction-related air quality impacts, as well as, significant and unavoidable project impacts due to the generation of regional emissions of an ozone precursor.
- Significant unavoidable biological impacts due to habitat loss, fragmentation, and impacts to federally listed species.
- Significant unavoidable noise impacts during construction, significant project/cumulative noise impacts from increases in traffic volumes, and impacts to existing and proposed noise-sensitive land uses.
- Significant and unavoidable growth-inducing impacts.
- Significant and unavoidable impacts due to conflicts with adopted land use policies intended to reduced and/or avoid environmental impacts.

6.3 NO PROJECT ALTERNATIVE

CEQA requires the discussion of the No Project alternative "to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project." The no development scenario represents baseline conditions and eliminates all development on the project site.

NO DEVELOPMENT SCENARIO

Description

The No Development scenario consists of leaving the site in its current undeveloped condition. The No Development alternative would avoid both the adverse and beneficial effects of the project. It would eliminate all of the significant environmental impacts of the project, but would fail to meet any of the project's objectives identified above.

Impacts

The No Development alternative would avoid the significant environmental impacts of the project in the following areas: aesthetics, air quality, biological resources, cultural resources, geology/soils/mineral resources, hazardous materials, land use and planning, noise, public services, traffic, and water quality. This alternative would also avoid construction-related impacts, including noise, dust, and water quality impacts; vegetation removal; and potential disturbance of buried archaeological resources. The No Development alternative would also avoid the all significant unavoidable impacts previously identified above.

Summary

The No Project – No Development alternative would avoid all of the environmental impacts of the project. However, this alternative would fail to meet any of the City and project objectives to provide an integrated mixed-use community within future expansion areas identified in the City of Soledad General Plan. This alternative would also fail to meet the primary objectives to provide a range of housing types for future Soledad Residents.

6.4 BUILDOUT CONSISTENT WITH GENERAL PLAN

Description

Development under this scenario would assume buildout of the project site consistent with existing policies contained within the General Plan. Under this scenario, a Specific Plan would be prepared, as required by the General Plan. Single family residential uses would be prohibited above the 400 foot elevation contour and the project would consist of the construction of approximately 2,680 units. Additional units identified in other expansion areas would not be applied to this alternative and no General Plan amendments would be required. This alternative would consist of an array of residential uses, including low, medium, and high density land uses, as well as commercial, and public uses.

Development under this alternative is assumed to result in approximately the same impacts in regard to cultural resources, geology and soils, and hazards and hazardous materials as the proposed project. Although development of the proposed alternative would substantially lessen the extent of project-related impacts, the proposed alternative would not reduce the overall level of significance (i.e. less-than-significant, less-than-significant with mitigation) for each of these respective issues. The following discussion addresses only those issues areas where significant project-related impacts would be minimized and/or avoided.

Impacts

Aesthetics. This alternative would result in less intensive urban development of the project site. More specifically, significant unavoidable impacts associated with development above the 400 foot elevation contour would be eliminated and the proposed alternative would not result in significant impacts to the existing Gabilan Range, which is considered a scenic vista. The area above the 400 foot contour would remain as open space, consistent with the requirements of the General Plan and views of the project site as perceived from adjacent public vantage points would be significantly lessened. Moreover, significant grading and changes in topography would not be necessary within the hillside portion of the project site as development would be eliminated within the visually sensitive areas on the Gabilan Range. Development of this alternative would still substantially alter the visual character of the project site by introducing urban development onto a previously undeveloped site. The effects from new light/glare sources would be comparable to the proposed project.

Agricultural Resources. Development of this alternative, while not changing the level of significance determination (i.e. significant unavoidable), would require less development of the project site and therefore less prime farmland would be converted to a non-agricultural use. Despite the reduction in units and the corresponding reduction in developable space, the project site would still be converted to a non-agricultural land use. Furthermore, the project area is identified in the General Plan as an area of future urban development.

Air Quality. Development of this alternative would reduce the level of emissions associated with buildout of the project site. More specifically, due to the reduction in units, project-generated traffic is anticipated to decline significantly in comparison to the proposed project. This reduction in traffic trips would reduce project emissions associated with the project. In addition, less area would be developed under this scenario, therefore, requiring less grading and project construction. While the duration of construction impacts are anticipated to be approximately the same as the proposed project, the amount of construction would be significantly less.

Biological Resources. Development of the proposed alternative would substantially lessen potential impacts to biological resources located within the project area. More specifically, as identified in the General Plan portions of the Gabilan Range are identified as Open Space. As development would not occur above the 400 foot elevation contour, these areas would remain as natural Open Space. As identified in the biological resources section of this EIR, impacts associated with the loss of Open Space was identified as a potentially significant impact that would affect a number of federally listed species. Although development of this scenario would still result in the introduction of urban features within the project site, the extent to which the site would be disturbed would be substantially less.

Hydrology/Water Quality. Development of this alternative would substantially reduce impervious surfaces due to the overall reduction of development. Although this alternative would reduce impervious surface areas, as well as off-site related impacts, this alternative would not reduce the overall level of significant (i.e. less-than-significant with mitigation) as compared to the proposed project. Moreover, development of this alternative would also be required to adhere to the requirements of the City of Soledad Storm Drainage Master Plan.

Land Use. As identified in this EIR, development of the proposed project would conflict with adopted General Plan policies that are intended to either avoid and/or mitigated a potential environmental impact. Development of this alternative would, however, be required to comply with existing General Plan policies, including the preservation of areas above the 400 foot elevation contour. The prohibition of development above this contour was identified as a mitigating factor for a number of issue areas. By complying with existing adopted General Plan policies this alternative would not result in any conflicts with policies intended to avoid and/or mitigate a potential adverse environmental impact. As such, this alternative would lessen the impact determination to a level considered less-than-significant.

Noise. Due to the overall reduction of units, the proposed project is anticipated to result in less project generated noise. Moreover, due to the reduction of units and the corresponding reduction in vehicular traffic associated with project development, the proposed alternative would also result in substantially less construction noise. Development would also be less intensive and therefore impacts to adjacent sensitive land uses could potentially be minimized and/or avoided through site planning and project design.

Population and Housing. This alternative would result in substantial growth-inducing impacts. As compared to the proposed project, however, this alternative would generate less population within the project area and would not require revisions to the General Plan in order to accommodate increased density. The alternative would be required to comply with the City's adopted Inclusionary Housing Ordinance and would provide a variety of residential land use types. As the project would result in less units, this alternative would also allow the City to maintain a jobs/housing ratio that is more balanced in nature.

Public Services. Although all project impacts can be reduced to a less-than-significant level through the incorporation of mitigation for public services, the proposed alternative would substantially lessen the demand for public services (i.e. fire, police, schools, parks, etc.). Moreover, preliminary estimates indicate that this alternative would generate approximately 550 high school aged children. The existing

high school would have sufficient capacity to accommodate the additional demands generated by this alternative. Future buildout of the General Plan, however, would still require that the City and School District identify a future high school site within the City. Additionally, as development would predominantly be located outside of the hillside areas, the proposed alternative would not be subject to potential wildland fires. This alternative would still require additional public services, including police and fire substations, but the demand for these services would be less due to the reduction in units and developable area. Development consistent with the General Plan would also provide additional parkland and open space as the hillside areas would be designated as Open Space areas.

Utilities and Service Systems. While the City of Soledad has adequate capacity to provide utilities to the project site, the proposed alternative would substantially lessen the demand for water and energy. Additionally, due to the reduction of units, the proposed alternative would generate less wastewater, solid waste, and water demand. As such, the overall demand for utilities would be reduced. While all project impacts would be mitigated to a less-than-significant level, the overall reduction of population associated with the proposed alternative would substantially lessen impacts to City services and infrastructure.

Traffic. Development of the proposed alternative is anticipated to significantly reduce the amount of project-generated traffic due to the overall reduction in the number of proposed units. While the level of significance (i.e. less-than-significant with mitigation) is not anticipated to change, this alternative would likely require less mitigation.

Summary

Buildout consistent with the City of Soledad's General Plan would substantially lessen potential impacts in terms of aesthetics, agricultural resources, air quality, biological resources, land use and planning, noise, population and housing, public services, utilities, and traffic. As identified in Table 6-1, development of this alternative would result in substantially the same impacts in regard to cultural resources, geology and soils, and hazards and hazardous materials. While this alternative would not change the level of significance determination for many of the impact areas, the proposed alternative, due to the reduction in project site, would lessen the extent to which the project would impact these resources.

6.5 REDUCED PROJECT

Description

This alternative consists of reducing development on the project site to avoid significant impacts. More specifically, development of this alternative would result in the reduction of residential uses on the project site by 50 percent. As a result, this alternative would result in the construction of 2,100 residential units. The Reduced Project alternative would also result in a 50% reduction of commercial uses on the project site as well. More specifically, this alternative would allow approximately 125,000 square feet of commercial space. All development under this scenario would occur within the predominantly level portions of the project site and no development would occur within the foothill areas. Development would primarily be concentrated adjacent to existing residential areas within the City of Soledad.

Development under this alternative is assumed to result in approximately the same impacts in regard to cultural resources, geology and soils, and hazards and hazardous materials as the proposed project. Development of the proposed alternative would substantially lessen the extent of project-related impacts; however, the proposed alternative would not reduce the overall level of significance (i.e. less-than-significant, less-than-significant with mitigation) for each of respective issue areas discussed below. The

following discussion addresses only the respective issues areas that would be minimized and/or avoided under the proposed alternative.

Impacts

Aesthetic. This alternative would result in less intensive urban development of the project site. Consistent with the General Plan Consistency Alternative, development of this alternative would eliminate potential impacts to the Gabilan Range, which is considered a scenic vista. Grading would no longer be necessary within the foothill areas and changes to topography would be minimal. Additionally, due to the overall reduction of units, this alternative would also reduce the extent of visual impacts associated with development of this alternative. More specifically, the development of 2,100 residential units would be less visible from adjacent public vantage points due to the reduction in developable area. Additionally, less commercial area would be developed and potential aesthetic impacts associated with the development of commercial uses adjacent to residential areas would also be minimized. To the extent that the project would reduce the amount of units, the proposed alternative would still result in the conversion of a previously undeveloped site into urban uses and would therefore transform the visual character of the site permanently.

Agricultural Resources. Development of this alternative, while not changing the level of significance determination (i.e. significant unavoidable), would require less development of the project site and therefore less prime farmland would be converted to a non-agricultural use. Regardless, this alternative would require the conversion of significant prime farmland into an urban use.

Air Quality. Air quality impacts associated with this alternative would be substantially less than the proposed project due to the reduction in commercial and residential land uses. Similar short-term construction activities would occur under this alternative. However, long-term emissions associated with vehicle trips and stationary sources (i.e., non-residential uses) would be incrementally decreased under this alternative. In the long-term, at project buildout, the Miravale III Project would exceed criteria pollutant emission thresholds (e.g., PM10, CO, NOx) resulting in a significant and unavoidable impact to air quality. A decrease in development intensity by 50 percent under the Reduced Project Alternative would reduce air quality impacts. Despite the reduction in units, the Reduced Project Alternative would not reduce project impacts to a level considered less-than-significant. However, since the Reduced Project Alternative would generate less air quality emissions, this alternative is considered to have less effect on air quality in relation to the proposed project.

Biological Resources. Development of the proposed alternative would substantially lessen potential impacts to biological resources located within the project area. By eliminating development within the foothill portions of the project site, the proposed project would not result in the loss of an area of significant biological value. This area would remain as Open Space consistent with the City's General Plan and would retain its natural features. As identified in the biological resources section of this EIR, impacts associated with the loss of Open Space was identified as a potentially significant impact that would affect a number of federally listed species. The proposed alternative would eliminate potential impacts to badgers, borrowing owl, Salinas pocket mouse, kit fox, and other species identified as special status. The grassland habitat located in the foothill portion of the Gabilan Range is considered a biologically sensitive area of the project site. Development of this alternative would substantially lessen project impacts. While specific mitigation would still be warranted, impacts could potentially be reduced to a less-than-significant level.

Hydrology/Water Quality. Development of this alternative would substantially reduce impervious surfaces due to the reduction of development. Although this alternative would reduce impervious surface areas, as well as off-site related impacts, this alternative would not reduce the overall level of significant

(i.e. less-than-significant with mitigation) as compared to the proposed project. Moreover, development of this alternative would also be required to adhere to the requirements of the City of Soledad Storm Drainage Master Plan.

Land Use. As identified in this EIR, development of the proposed project would conflict with adopted General Plan policies that are intended to either avoid and/or mitigated a potential environmental impact. This alternative would not conflict with any plans or policies intended to minimize and/or avoid an adverse environmental impact. This alternative would not require any General Plan amendments to insure consistency with adopted plans and policies pertaining to development within the project area.

Noise. In comparison to the proposed project, construction-related noise is anticipated to be similar due to the extent and duration of development. Consistent with the proposed project, mitigation measures would be applicable to reduce potential noise-related impacts. Project-related long-term noise impacts associated with vehicle trips and stationary sources (i.e. mechanical equipment), however, would be significantly less. Due to the reduction in vehicle trips and the decrease in commercial square footage, the Reduced Project Alternative would result in less noise impacts. The final configuration of land uses may warrant mitigation to assure that impacts do not exceed established thresholds. Development would also be less intensive and therefore impacts to adjacent sensitive land uses could potentially be minimized and/or avoided through site planning and project design.

Population and Housing. This alternative would result in substantial growth-inducing impacts. As compared to the proposed project, however, this alternative would generate less population within the project area and would not require revisions to the General Plan in order to accommodate increased density. The alternative would be required to comply with the City's adopted Inclusionary Housing Ordinance and would provide a variety of residential land use types. As the project would result in less units, this alternative would also allow the City to maintain a jobs/housing ratio that is more balanced in nature.

Public Services. Although all project impacts can be reduced to a less-than-significant level through the incorporation of mitigation for public services, the proposed alternative would substantially lessen the demand for public services (i.e. fire, police, schools, parks, etc.). This alternative would still require additional public services, including police and fire substations, but the demand for these services would be substantial less due to the reduction in units and developable area.

Utilities and Service Systems. The Reduced Project alternative would require upgrades and/or extensions of utilities such as water and wastewater facilities. As compared to the proposed project, this alternative would result in an incremental decrease in the demand for services. However, as identified in **Section 4.14 Utilities and Service Systems,** impacts would be mitigated to a level considered less-than-significant. Since the project would not generate as much demand for utilities, this alternative is considered to have fewer impacts on utilities as compared to the proposed project.

Traffic. Development of the proposed alternative is anticipated to significantly reduce the amount of project-generated traffic due to the overall reduction in the number of proposed units. While the level of significance (i.e. less-than-significant with mitigation) is not anticipated to change, this alternative would likely require less mitigation.

Summary

This alternative would result in approximately the same impacts as the proposed project in the areas of cultural resources, geology, and hazardous materials. By decreasing the extent of development, however, the Reduced Project alternative would reduce the overall site disturbance and construction-related

impacts, including grading, construction noise, and short-term air quality impacts. Furthermore, this alternative would substantially reduce the impact of the project on sensitive biological resources and would reduce aesthetic, agricultural, air quality, biological, land use, noise, population and housing, public services, utilities, and traffic impacts.

6.6 NO GOLF COURSE

Description

This alternative consists of eliminating the golf course and associated infrastructure in order to avoid potential significant adverse environmental impacts associated with agricultural resources, biological resources, cultural resources, hazardous materials, public services, utilities, and traffic. This alternative would still allow for the development of up to 4,200 residential units and commercial uses. As currently proposed, the golf course, driving range, and other associated infrastructure occupy approximately 160 acres of the 920 acre site. This area may be developed at some future time consistent with the program and policies identified in the General Plan, but additional impacts could result from additional development within the existing golf course alignment. These impacts would be beyond the scope of analysis contained in this EIR. Potential impacts include increased traffic, noise, deterioration of air quality, increased demands for public services and similar. For the purposes of this analysis, it is assumed that the existing golf course alignment would be utilized for low-intensity public recreational uses. Residential development within this alignment is beyond the scope of the analysis contained in this EIR and would be subject to additional review in accordance with the requirements of CEQA.

Development under this alternative is assumed to result in approximately the same impacts in regard to aesthetics, air quality, geology and soils, land use and planning, and noise as the proposed project. Development of the proposed alternative would substantially lessen the extent of project-related impacts; however, the proposed alternative would not necessarily reduce the overall level of significance (i.e. less-than-significant, less-than-significant with mitigation) for each of respective issue areas discussed below. Development of this alternative could, however, result in potentially significant impacts in terms of hydrology and water quality due to the elimination of the golf course and associated features, which include stormwater facilities. The following discussion addresses only the respective issues areas that would be minimized and/or avoided under the proposed alternative.

Impacts

Agricultural Resources. As identified in **Section 4.2 Agricultural Resources,** development of the proposed project would result in the conversion of 760 acres of prime farmland into urban uses. Development of the proposed alternative would, however, retain approximately 160 acres of prime farmland as Open Space or similar low-intensity recreational uses. Development of this alternative, while not reducing the overall significance of project-related impacts (i.e. significant and unavoidable), would substantially reduce the total amount of prime farmland permanently converted to non-agricultural uses. While this land would not be utilized for agricultural production, prime farmland would be retained as Open Space thereby minimizing potential project-related impacts.

Biological Resources. Development of the proposed alternative would lessen potential impacts to biological resources located within the project area. As previously identified, the loss of Open Space was identified as a potentially significant impact that would affect a number of federally listed species. Eliminating the golf course and retaining an additional 160 acres as Open Space or similar low-intensity recreational use would minimize potential impacts to badgers, borrowing owl, Salinas pocket mouse, kit fox, and other special-status species. Moreover, maintaining the golf course alignment as Open Space or

similar low-intensity recreational use would also provide additional connectivity between existing Open Space areas within the Gabilan Range and areas used as foraging habitat. Development of this alternative would substantially lessen project impacts; however, mitigation would still be warranted.

Cultural Resources. Development of the proposed alternative would avoid all project-related impacts to the historically significant Lorentzen house. As currently proposed, project development would result in the relocation of this structure in order to accommodate the proposed golf course and other project components. This alternative, however, would avoid project impacts by leaving the proposed golf course alignment as Open Space or a similar low-intensity recreational use. While standard mitigation regarding buried human remains would still pertain to this alternative, the no Golf Course Alternative would substantially project impacts to a historically significant resource such that all potential impacts could be feasibly avoid.

Hazards and Hazardous Materials. Development of the proposed alternative would reduce potential adverse environmental impacts associated with the maintenance and operation of the golf course. More specifically, development of this alternative would not require the use of pesticides and/or other types of chemicals in order to maintain the facility. While exposure of these chemicals is not anticipated to be significant, the elimination of the golf course would no longer require the application of potentially harmful chemicals. While this alternative would not reduce the overall level of significance of potential impacts due to the exposure to hazardous materials, this alternative would eliminate the need to routinely use and handle harmful chemicals.

Public Services and Recreation. Development of the proposed alternative has the potential to substantially increase Open Space or similar low-intensity recreational uses, such as parks, and thereby reduce potential impacts associated with project development by providing increased access to passive use recreational opportunities. More specifically, the proposed alternative would increase passive recreational uses by approximately 160 acres. Total Open Space provided as part of this alternative would account for approximately 25% of total land uses. Although not an official component of this alternative, additional public parks could be designated within the existing golf course alignment. While development of the proposed alternative would increase the total acreage of open space, this alternative would not necessarily reduce the level of significance (i.e. less-than-significant) of potential impacts. Mitigations requiring the payment of impact fees and other similar mitigations would still apply.

Utilities and Service Systems. Development of the proposed alternative would substantially lessen annual project demand. As indicated in **Section 4.14 Utilities and Service Systems** the proposed golf course would account for an annual water demand of approximately 543 acre feet per year. Although the golf course would be provided recycled water, this alternative would substantially lessen projected demands.

Traffic. Development of the proposed alternative is anticipated to reduce the amount of project-generated traffic associated with the golf course. The reduction of traffic trips, however, is not anticipated to be substantial as project traffic associated with the operation of the golf-course is not a significant component of project traffic. While the level of significance (i.e. less-than-significant with mitigation) is not anticipated to change, this alternative would likely require less mitigation.

Summary

This alternative would result in approximately the same impacts as the proposed project in the areas of aesthetics, air quality, geology and soils, land use and planning, and noise. By eliminating development of the golf course and thereby increasing the amount of area to be preserved as Open Space or similar low-intensity recreational use this alternative would reduce potential agricultural, biological, cultural, hazards, public services, and utilities impacts associated with project development. Eliminating development of the

proposed golf course, however, could result in additional development potential within the project area. As identified by the City of Soledad, the existing golf course could be developed for residential use in accordance with the City's General Plan. Additional residential development within the golf course alignment is beyond the scope of this analysis and could result in additional environmental impacts. These impacts would be subject to review under the requirements of CEQA.

6.7 ALTERNATIVE DESIGN: INCREASED SENIOR HOUSING ALTERNATIVE

Description

The Increased Senior Housing Alternative consists of increasing the number of senior level housing from 500 to 1,500 units in order to minimize and/or avoid potential impacts to public services and traffic. Build-out of this alternative would still result in the construction of 4,200 units and commercial uses; however, a larger proportion of these units, approximately 35 percent, would be restricted for senior level housing. This alternative is anticipated to result in approximately the same impacts as the proposed project in terms of aesthetics, agricultural resources, biological resources, cultural resources, geology and soils, hazards, hydrology and water quality, land use and planning, noise, and utilities as the proposed project. Development of this alternative, however, would lessen project impacts to school facilities. The following discussion addresses only the respective issues areas that would be minimized and/or avoided under the proposed alternative.

Impacts

Population and Housing. Development of the proposed alternative would increase the amount of senior level housing provided in conjunction with project development and therefore reduce potential impacts associated with development of the proposed project. The incorporation of additional senior level housing, however, would not reduce the level of significance of project-related impacts and mitigation measures would still be necessary to ensure that project impacts are reduced to a level considered less-than-significant.

Public Services and Recreation. Development of the proposed alternative would lessen potential impacts to educational resources. More specifically, as identified in **Section 4.12 Public Services and Recreation,** development of the proposed project would generate an estimated 4,291 new students. These additional students, per the Soledad Unified School District, would necessitate the construction of several additional school facilities in order to accommodate the projected students. According to the Soledad Unified School District, development of the proposed alternative would generate approximately 3,132 school aged children. Despite the overall reduction of school aged children, development of this alternative would still require additional school facilities, including a high school and an additional elementary school. Therefore, mitigation measures would still be warranted as part of the proposed alternative. While reducing overall projected student population growth, this alternative would not reduce and/or eliminate the need for additional educational facilities to mitigate project-related impacts.

Traffic. Development of the proposed alternative is anticipated to reduce the amount of project-generated traffic due to the increase in the number of senior level housing. As identified in the Traffic Impact Analysis prepared by Hexagon Transportation Consultants, Inc., senior level housing results in less daily traffic trips as compared to other housing types. More specifically, the ITE trip generation rate for senior housing is identified as 3.48 traffic trips per day. Assuming the construction of 1,500 senior housing units, preliminary estimates indicate that the proposed senior level housing would account for approximately 5,200 daily traffic trips. As compared to the proposed project, the increased traffic trips associated with the senior level housing would correspond with an overall reduction of project traffic by

an estimated 4,311 daily trips. Although this alternative would result in less daily traffic trips, project impacts are still anticipated to be significant.

Summary

Although development of this alternative is likely to lessen the extent of project impacts by reducing daily traffic trips and the number of projected students, this alternative would not reduce the overall level of significance of project impacts. Moreover, this alternative would still require mitigation in order to reduce/minimize potential impacts. For instance, development of this alternative would still necessitate an additional high school site in order to accommodate projected students and traffic improvements would still be necessary. While minimizing impacts related to public services and traffic, this project would result in approximately the same environmental impacts as the proposed project.

6.8 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

A comparison of the impacts of each alternative relative to the proposed project is presented in Table 6-1. CEQA requires that an environmentally superior alternative to the proposed project be specified. In general, the environmentally superior alternative is that which minimizes the adverse impacts of the project to the greatest extent, while achieving the basic objectives of the project.

The No Project – No Development alternative could be considered the environmentally superior alternative because all adverse impacts associated with project construction and operation would be avoided. However, the No Project – No Development alternative does not satisfy the primary project objective to provide a range of housing types for future Soledad residents. In addition, CEQA Guidelines section 15126.6(e)(2) states: "If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.

Among the remaining alternatives, the Reduced Project alternative would represent the environmentally superior alternative, since it avoids or reduces many of the project's impacts associated with more intense development on the site. While this alternative would result in less units than the "Buildout Consistent with the General Plan" Alternative, the General Plan alternative assumes buildout according to the maximum allowable density on the site. The Reduced Project alternative would allow the City to meet its objectives, while insuring that adverse environmental impacts are reduced to the extent feasible. This alternative would reduce impacts in other impact areas in accordance with the decrease in development.

7.0 References

7.1 REPORT PREPARATION

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APPENDIX A

Notice of Preparation (NOP) and Comments on the NOP

MIRAVALE PHASE III

Notice of Preparation
City of Soledad

To: _____
(Responsible Agency/Interested Person or Entity)

From: City of Soledad
(Lead Agency)

City of Soledad, City Hall
248 Main Street
Soledad, California 93960
Tel: (831) 678-3963
Fax: (831) 678-3965
E-mail: communitydev@cityofsoledad.com

Subject: Notice of Preparation (NOP) for the Draft Environmental Impact Report for Miravale Phase III Specific Plan

Project Applicant: Nader Agha

Public Review Period: NOP response period is from August 24, 2006 to September 23, 2006

NOP Scoping Meeting: One scoping meeting will be held to receive input on the EIR:

(1) September 7, 2006 at 5:00 PM at the City of Soledad City Hall Council Chambers, 248 Main Street, Soledad, CA 93960

The project description, location, and the potential environmental effects are discussed below.

The City of Soledad will be the Lead Agency and will prepare an Environmental Impact Report (EIR) for the Miravale Phase III Specific Plan Project. The California Environmental Quality Act (CEQA), Section 15082, states that once a decision is made to prepare an EIR, the lead agency must prepare a Notice of Preparation (NOP) to inform all responsible agencies of that decision. The purpose of the NOP is to provide responsible agencies and interested persons with sufficient information describing the proposed project and its potential environmental effects to enable them to make a meaningful response as to the scope and content of the information to be included in the EIR.

This NOP is being released to request comments on the scope of the EIR for the proposed project. The responses to this NOP will help the City of Soledad determine the scope of the EIR and ensure an appropriate level of environmental review. Project related documents and files are available at the address above.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date, but not later than 30 days after receipt of this notice. Please send your responses to Don Fleming at the address above. We will need the name for a contact person in your agency.

Date _____ Signature _____

I. INTRODUCTION

PROJECT LOCATION:

The 920-acre project site is located within unincorporated lands of Monterey County on the northern edge of the City of Soledad, approximately 35 miles southeast of the Monterey Peninsula and 85 miles southeast of the San Francisco Bay Area (see Figure 1). The project site is generally between San Vicente Road and Orchard Lane, and is surrounded by agricultural land to the north and east, an existing residential subdivision to the south, and undeveloped foothills of the Gabilan Mountain Range to the west. The Assessor's Parcel Numbers are: 417-151-082, 417-151-083, 417-151-084, 417-151-085, 257-081-005, 257-081-026, 257-081-027, and 257-081-032.

PROJECT DESCRIPTION:

The Miravale Phase III Specific Plan project proposes a mixed-use development consisting of approximately 2,600 single-family residential units, 1,600 multi-family residential units, 300 senior housing units, 120 hotel rooms, 250,000 square feet of retail commercial space and an 18-hole golf course. Conceptual plans include a variety of residential types, including apartments, townhouses, and attached homes on small and large lots. The project also proposes three school sites (2 elementary schools and 1 middle school), a fire and police substation, and approximately 71 acres of open space and recreation areas, including parks, playgrounds, and a trail system (see Figure 2).

The project site is currently zoned by the County for farmland and permanent grazing uses and is being used for agricultural cultivation and grazing. It includes two existing single family units, which will be removed as part of the project. According to the City's General Plan, the majority of the project site is located within a designated Expansion Area, comprising all or a portion of three sub-areas: Northwest Expansion, San Vicente West, and Mirassou. A specific plan is required by the City in advance of annexation and development of each sub-area. Development of the project site will require annexation to the City pursuant to Local Agency Formation Commission of Monterey County (LAFCO) regulations.

The project entitlements will include, but not be limited to, General Plan Amendment, Specific Plan, Zone Change (Pre-Zoning), Architectural Review, Sphere of Influence Amendment, Annexation, Tentative Subdivision Map, and Development Agreements to allow for the proposed development.

II. PROBABLE ENVIRONMENTAL EFFECTS

ENVIRONMENTAL ISSUE AND PROBABLE EFFECTS

The environmental review of the project will focus on the following issues and probable environmental effects, as identified to date. The environmental analysis will address short-term (construction) and long term (life of project) impacts.

Aesthetics: The EIR will evaluate the visual effects of the project, based on existing visual characteristics, impacts to scenic views, proposed site layout/design, and density of development. The visual analysis will consider the City's policies on protection of views and aesthetics.

Agricultural Resources: According to the Important Farmlands Map, the project site contains farmland that is mapped as prime or of statewide importance. The site also contains lands under Williamson Act

contract. The EIR will analyze potential impacts to existing agricultural operations and land uses, including loss of farmland, impacts to Williamson Act properties, and compatibility issues.

Air Quality: The EIR will describe the air quality of the area and provide an assessment of the potential air quality impacts of the project in compliance with the Monterey Bay Unified Air Pollution Control District guidelines. Short-term air quality impacts associated with construction related activities will also be addressed.

Biological Resources: A biological assessment will be performed as part of the EIR to determine site conditions, the presence/absence of sensitive species and habitats, and potential impacts of the project on these resources.

Cultural Resources: The EIR will include a cultural resources investigation to determine the potential impacts from the project on any historic, architectural, or archaeological resources.

Geology and Soils: The EIR will address potential soil, geologic, and geotechnical hazards on the site, based on a preliminary geotechnical/geologic report. Such hazards may include seismicity, problematic soil conditions, liquefaction, and erosion.

Hazardous Materials/Health and Safety: The EIR will address potential hazards associated with development of the project site, including potential impacts from hazardous materials associated with past or current uses (e.g., agricultural chemicals, hydrocarbons, etc,) and the use, storage, or transport of hazardous materials.

Hydrology and Water Quality: The EIR will address drainage, flooding, and water quality conditions on the site. Potential impacts from development could include increases in runoff and flooding potential, as well as degradation of water quality from increased erosion and sedimentation. Proposed drainage and wastewater disposal systems will be evaluated.

Land Use and Planning: The EIR will address land use compatibility and project compliance with applicable land use policies. The project will require annexation of the project site into the City of Soledad boundaries, as well as expansion of the City's Sphere of Influence, subject to the review and approval by the Monterey County LAFCO. Existing land uses on and surrounding the project site will be described and potential land use impacts assessed (i.e., compatibility with surrounding uses, consistency with plans and policies, effects on the community).

Noise: The EIR will describe the existing ambient noise levels in the vicinity, which are dominated by vehicular traffic. The EIR will assess the short-term (construction) and long-term (operational) noise impacts of the proposed project on the surrounding land uses, as well as noise impacts on proposed residential uses that may be affected by existing and future noise levels.

Population and Housing: A direct increase in population would occur due to proposed housing components of the project and an indirect increase may result from the creation of new jobs. The population and housing analysis in the EIR will consider the trends in population statistics for the local area and region.

Public Services/Utilities: The EIR will evaluate the existing public service systems serving the project area and evaluate the public service impacts of the project, including increased demands for sanitary sewer, storm drain, park, emergency, and school services.

Traffic and Circulation: The EIR will describe the existing and proposed roadway system, and evaluate traffic impacts. Traffic impacts, including degradation of levels of service on affected roadways and freeways, adequacy of site access, and provision of parking will be evaluated in a technical traffic study.

Water Supply: The EIR will describe the available water supply resources and projected demand for all phases of project implementation. This assessment will also address the proposed water system infrastructure to assess compliance with relevant standards (i.e., health and fire safety) and the adequacy of proposed storage and transmission capacity and pressures.

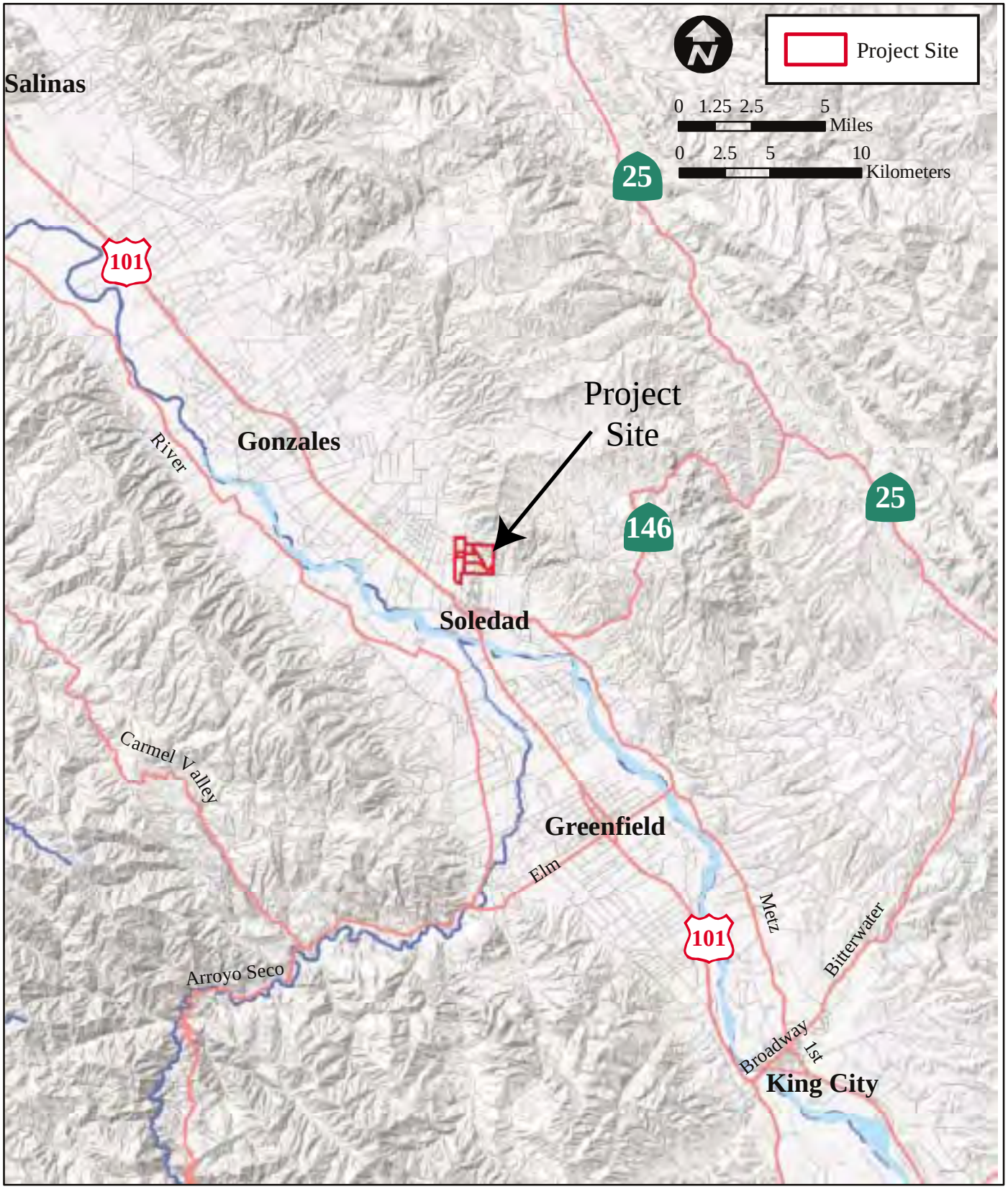
Growth Inducement: The EIR will evaluate the potential growth-inducing effects of the proposed development, including increases in jobs and housing, and improvements that may remove impediments to growth.

Cumulative Impacts: The EIR will evaluate the potential cumulative impacts of the project when combined with past, present and reasonably anticipated projects in the region. This evaluation will address (at a minimum) traffic, air quality, public services, and land use.

Alternatives: The EIR will consider a range of reasonable alternatives to the proposed project that could feasibly obtain most of the basic objectives of the proposed project, in accordance with CEQA Guidelines Section 15126.6.

Attachments:

Figure 1: Vicinity Map
Figure 2: Site Plan



	Vicinity Map	Figure 1

VESTING TENTATIVE MAP

MIRAVALE III SUBDIVISION

SOLEDAD, CALIFORNIA

NOTES

THE PROPERTY TO BE SUBDIVIDED CONSISTS OF SECTION 16: APN 417-151-082, 417-151-083, 417-151-084, 417-151-085 AND THE MARTINES PROPERTY APN 257-081-005, 257-081-026, 257-081-027 AND 257-081-032. THE PROPERTIES HAVE FRONTAGE ON SAN VICENTE ROAD.

EXISTING ZONING:
MONTEREY COUNTY F/40 (FARMLAND; 40-ACRE MINIMUM FOR ALL PARCELS EXCEPT 417-151-083. APN 417-151-083 ZONING IS MONTEREY COUNTY F/40 AND PG/40 (FARMLAND, 40-ACRE MINIMUM AND PERMANENT GRAZING 40-ACRE MINIMUM). ANNEXATION TO THE CITY OF SOLEDAD IS ANTICIPATED, SUBJECT TO LAFCO REGULATIONS.

PROPOSED ZONING:
R1,R1 WITH PLANNED UNIT DEVELOPMENT TO ALLOW VARIATIONS FROM 2,500 TO 6,000 SQUARE FEET. R-3 TO ALLOW TOWNHOMES AND APARTMENTS AT BETWEEN 14 AND 20 DWELLINGS PER ACRE, A MOBILE HOME PARK AND RETAIL COMMERCIAL.

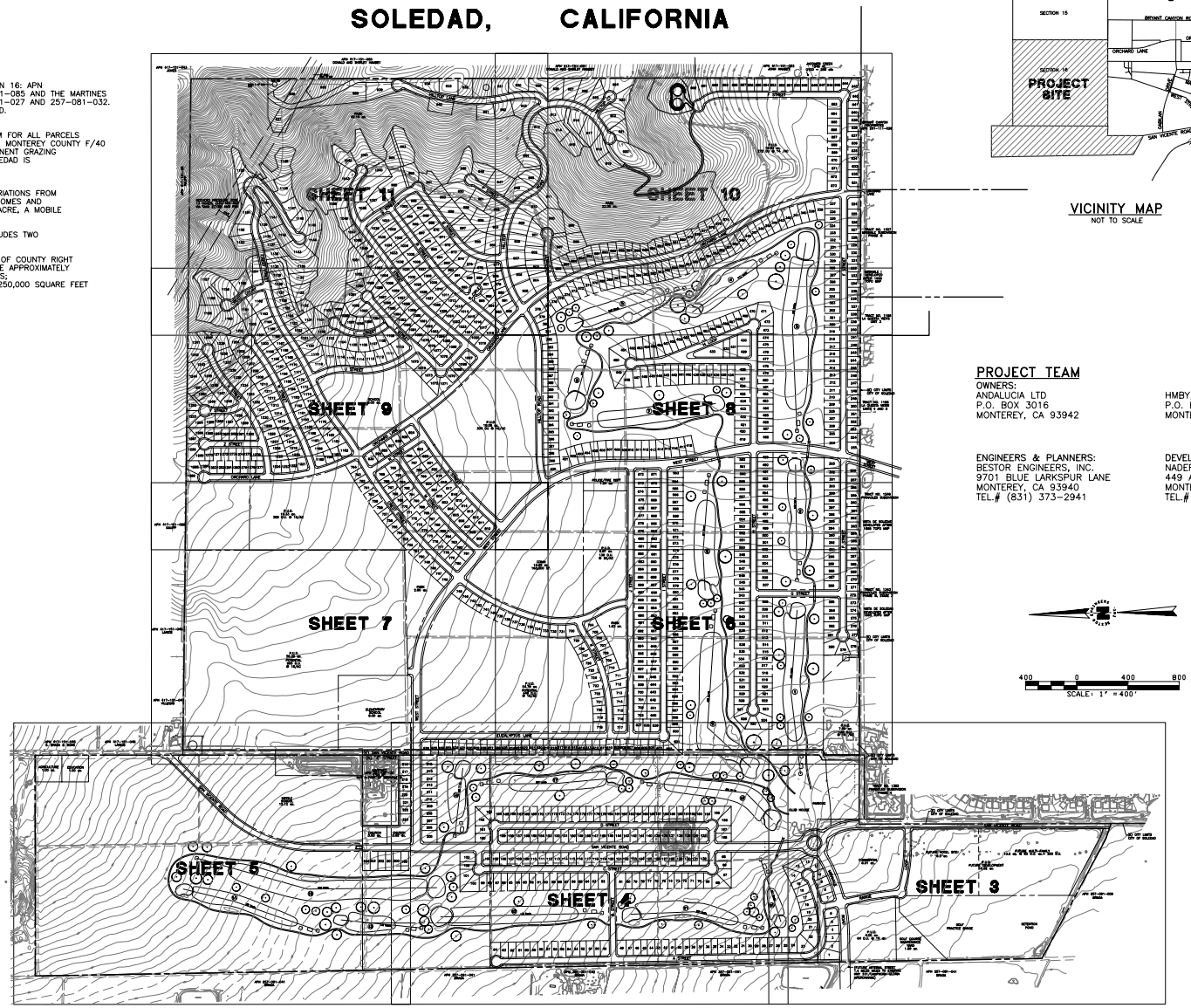
THE PROPERTY IS CURRENTLY IN CULTIVATION. IT INCLUDES TWO EXISTING HOMES THAT WILL BE REMOVED.

TOTAL PROPERTY IS 918.829 ACRES PLUS 3.03 ACRES OF COUNTY RIGHT OF WAY TO BE ABANDONED. TOTAL PROPOSED USES ARE APPROXIMATELY 2,600 SINGLE FAMILY HOMES; 1,600 MULTI-FAMILY UNITS; 300 UNITS OF SENIOR HOUSING; A 120 ROOM HOTEL, 250,000 SQUARE FEET OF RETAIL, AND AN 18 HOLE GOLF COURSE.

PROPOSED UTILITY SUPPLIES ARE:
ELECTRICITY – PG&E
GAS – PG&E
CATV – CHARTER COMMUNICATION CO.
WATER – CITY OF SOLEDAD
SANITARY SEWER – CITY OF SOLEDAD
STORM DRAINAGE – CITY OF SOLEDAD
TELEPHONE – AT&T

PROPOSED USES

SINGLE FAMILY HOMES	2600 UNITS
MULTI-FAMILY HOMES	1600 UNITS
SENIOR HOUSING	300 UNITS
HOTEL	120 ROOMS
RETAIL	250,000 SQUARE FEET



VICINITY MAP
NOT TO SCALE

PROJECT TEAM

OWNERS:
ANDALUCIA LTD
P.O. BOX 3016
MONTEREY, CA 93942

HMBY, LP
P.O. BOX 3016
MONTEREY, CA 93942

ENGINEERS & PLANNERS:
BESTOR ENGINEERS, INC.
9701 BLUE LARKSPUR LANE
MONTEREY, CA 93940
TEL.# (831) 373-2941

DEVELOPER & SUBDIVIDER:
NADER AGHA
449 ALVARADO STREET
MONTEREY, CA 93940
TEL.# (831) 646-9030

REVISIONS

DESIGNED BY
DRAWN BY
DATE:
ENGINEER
RCE:
EXP:

PRELIMINARY
NOT FOR CONSTRUCTION

BESTOR ENGINEERS, INC.
CIVIL ENGINEERING – SURVEYING – LAND PLANNING
9701 BLUE LARKSPUR LANE, MONTEREY, CALIFORNIA 93940

PREPARED FOR: NADER AGHA
MIRAVALE III SUBDIVISION
TENTATIVE MAP
SOLEDAD, CALIFORNIA
COUNTY OF MONTEREY, CALIFORNIA

SCALE: AS SHOWN
DATE: 8/7/06
SHEET: 1 OF 11
WO: 6310.00

L:\6310\dwgs\planshts\VTM-01.DWG – SIBAAF – AUG 14, 2006 – 11:15:11

THE USE OF THESE PLANS AND SPECIFICATIONS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED AND PUBLICATION THEREOF IS EXPRESSLY LIMITED TO SUCH USE. REPRODUCTION OF ANY SHEETS, IN WHOLE OR IN PART, IS PROHIBITED. TITLE IN THE PLANS AND SPECIFICATIONS REMAINS IN THE ENGINEER WITHOUT PREJUDICE. VISUAL CONTACT WITH THESE PLANS AND SPECIFICATIONS SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF THE ACCEPTANCE OF THESE RESTRICTIONS.

Comments on the NOP

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse and Planning Unit

Arnold Schwarzenegger
Governor

Sean Walsh
Director

Notice of Preparation

August 24, 2006

RECEIVED

AUG 3 0 2006

PLANNING DEPARTMENT

To: Reviewing Agencies

Re: Miravale Phase III Specific Plan
SCH# 2006081129

Attached for your review and comment is the Notice of Preparation (NOP) for the Miravale Phase III Specific Plan draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Don Fleming
City of Soledad
248 Main Street
Soledad, CA 93960

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Project Analyst, State Clearinghouse

Attachments
cc: Lead Agency

Document Details Report
State Clearinghouse Data Base

SCH# 2006081129
Project Title Miravale Phase III Specific Plan
Lead Agency Soledad, City of

Type NOP Notice of Preparation

Description The Miravale Phase III Specific Plan project proposes a mixed-use development consisting of approximately 2,600 single-family residential units, 1,600 multi-family residential units, 300 senior housing units, 120 hotel rooms, 250,000 square feet of retail commercial space and an 18-hole golf course.

Lead Agency Contact

Name Don Fleming
Agency City of Soledad
Phone (831) 678-3963 **Fax**
email
Address 248 Main Street
City Soledad **State** CA **Zip** 93960

Project Location

County Monterey
City Soledad
Region
Cross Streets San Vicente Road, Orchard Lane
Parcel No. 417-151-082, 083, 084, 085; 257-081-005, 026, 027, 032
Township **Range** **Section** **Base**

Proximity to:

Highways 101
Airports
Railways Yes
Waterways
Schools Yes
Land Use Farmland and Permanent Grazing, 40 acre minimum [F/40 and PG/40], Central Salinas Valley Area Plan, Monterey County General Plan, City of Soledad General Plan.

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Cumulative Effects; Drainage/Absorption; Economics/Jobs; Flood Plain/Flooding; Geologic/Seismic; Growth Inducing; Landuse; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wildlife

Reviewing Agencies Resources Agency; Regional Water Quality Control Board, Region 3; Department of Parks and Recreation; Native American Heritage Commission; Department of Housing and Community Development; Department of Health Services; Office of Emergency Services; Office of Historic Preservation; Department of Fish and Game, Region 3; Department of Water Resources; Department of Conservation; California Highway Patrol; Caltrans, District 5; Department of Toxic Substances Control

Date Received 08/24/2006 **Start of Review** 08/24/2006 **End of Review** 09/22/2006

Note: Blanks in data fields result from insufficient information provided by lead agency.

NOP Distribution List

County: MONTEREY SCH# [illegible]

Resources Agency

- [x] **Resources Agency** Nadell Gayou
- [ ] **Dept. of Boating & Waterways** David Johnson
- [ ] **California Coastal Commission** Elizabeth A. Fuchs
- [ ] **Colorado River Board** Gerald R. Zimmerman
- [x] **Dept. of Conservation** Roseanne Taylor
- [ ] **California Energy Commission** Paul Richins
- [ ] **Dept. of Forestry & Fire Protection** Allen Robertson
- [x] **Office of Historic Preservation** Wayne Donaldson
- [x] **Dept of Parks & Recreation** Environmental Stewardship Section
- [ ] **Reclamation Board** DeeDee Jones
- [ ] **S.F. Bay Conservation & Dev't. Comm.** Steve McAdam
- [x] **Dept. of Water Resources** Resources Agency Nadell Gayou
- [ ] _____ Conservancy

Fish and Game

- [ ] **Depart. of Fish & Game** Scott Flint Environmental Services Division
- [ ] **Fish & Game Region 1** Donald Koch
- [ ] **Fish & Game Region 2** Banky Curtis
- [x] **Fish & Game Region 3** Robert Floerke
- [ ] **Fish & Game Region 4** Julie Vance
- [ ] **Fish & Game Region 5** Don Chadwick Habitat Conservation Program
- [ ] **Fish & Game Region 6** Gabrina Gatchel Habitat Conservation Program
- [ ] **Fish & Game Region 6 I/M** Tammy Allen Inyo/Mono, Habitat Conservation Program
- [ ] **Dept. of Fish & Game M** George Isaac Marine Region

Other Departments

- [ ] **Food & Agriculture** Steve Shaffer Dept. of Food and Agriculture
- [ ] **Depart. of General Services** Public School Construction
- [ ] **Dept. of General Services** Robert Sleppy Environmental Services Section
- [x] **Dept. of Health Services** Veronica Malloy Dept. of Health/Drinking Water

Independent Commissions,Boards

- [ ] **Delta Protection Commission** Debby Eddy
- [x] **Office of Emergency Services** Dennis Castrillo
- [ ] **Governor's Office of Planning & Research** State Clearinghouse
- [x] **Native American Heritage Comm.** Debbie Treadway
- [ ] **Public Utilities Commission** Ken Lewis
- [ ] **State Lands Commission** Jean Sarino
- [ ] **Tahoe Regional Planning Agency (TRPA)** Cherry Jacques

Business, Trans & Housing

- [ ] **Caltrans - Division of Aeronautics** Sandy Hesnard
- [ ] **Caltrans - Planning** Terri Pencovic
- [x] **California Highway Patrol** Shirley Kelly Office of Special Projects
- [x] **Housing & Community Development** Lisa Nichols Housing Policy Division

Dept. of Transportation

- [ ] **Caltrans, District 1** Rex Jackman
- [ ] **Caltrans, District 2** Marcelino Gonzalez
- [ ] **Caltrans, District 3** Jeff Pulverman
- [ ] **Caltrans, District 4** Tim Sable
- [x] **Caltrans, District 5** David Murray
- [ ] **Caltrans, District 6** Marc Birnbaum
- [ ] **Caltrans, District 7** Cheryl J. Powell
- [ ] **Caltrans, District 8** Dan Kopulsky
- [ ] **Caltrans, District 9** Gayle Rosander
- [ ] **Caltrans, District 10** Tom Dumas
- [ ] **Caltrans, District 11** Mario Orso
- [ ] **Caltrans, District 12** Bob Joseph

Cal EPA

Air Resources Board

- [ ] Airport Projects Jim Lerner
- [ ] Transportation Projects Ravi Ramalingam
- [ ] Industrial Projects Mike Tollstrup
- [ ] **California Integrated Waste Management Board** Sue O'Leary
- [ ] **State Water Resources Control Board** Jim Hockenberry Division of Financial Assistance
- [ ] **State Water Resources Control Board** Student Intern, 401 Water Quality Certification Unit Division of Water Quality
- [ ] **State Water Resouces Control Board** Steven Herrera Division of Water Rights
- [x] **Dept. of Toxic Substances Control** CEQA Tracking Center
- [ ] **Department of Pesticide Regulation**

Regional Water Quality Control Board (RWQCB)

- [ ] **RWQCB 1** Cathleen Hudson North Coast Region (1)
- [ ] **RWQCB 2** Environmental Document Coordinator San Francisco Bay Region (2)
- [x] **RWQCB 3** Central Coast Region (3)
- [ ] **RWQCB 4** Teresa Rodgers Los Angeles Region (4)
- [ ] **RWQCB 5S** Central Valley Region (5)
  - [ ] **RWQCB 5F** Central Valley Region (5) Fresno Branch Office
  - [ ] **RWQCB 5R** Central Valley Region (5) Redding Branch Office
- [ ] **RWQCB 6** Lahontan Region (6)
  - [ ] **RWQCB 6V** Lahontan Region (6) Victorville Branch Office
- [ ] **RWQCB 7** Colorado River Basin Region (7)
- [ ] **RWQCB 8** Santa Ana Region (8)
- [ ] **RWQCB 9** San Diego Region (9)

- [ ] **Other** _____

Last Updated on 04/28/06

(cc: Don)

DEPARTMENT OF CONSERVATION

DIVISION OF LAND RESOURCE PROTECTION

801 K STREET • MS 18-01 • SACRAMENTO, CALIFORNIA 95814

PHONE 916 / 324-0850 • **FAX** 916 / 327-3430 • **TDD** 916 / 324-2555 • **WEBSITE** conservation.ca.gov

RECEIVED
SEP 25 2006
CITY OF SOLEDAD

September 22, 2006

Don Fleming
City of Soledad
248 Main Street
Soledad, CA 93960

Subject: Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) for the Miravale Phase III Specific Plan **SCH# 2006081129**

Dear Mr. Fleming:

The Department of Conservation's Division of Land Resource Protection (Division) monitors farmland conversion on a statewide basis and administers the California Land Conservation (Williamson) Act and other agricultural land conservation programs. The Division has reviewed the above NOP and offers the following recommendations for the DEIR with respect to the project's potential impacts on agricultural land.

The proposed project involves a mixed-use development of residential, hotel, retail/commercial, and golf course uses on a 920-acre site. Entitlements associated with the project include general plan amendment, specific plan, zone change, architectural review, sphere of influence amendment, annexation, tentative subdivision map and development agreements. The NOP notes that the site includes Prime Farmland, Farmland of Statewide Importance and lands under Williamson Act contract. Therefore, the Division recommends that, at a minimum, the following items be specifically addressed to document and treat the project impacts on agricultural land and Williamson Act lands.

Agricultural Setting of the Project

The DEIR should describe the project setting in terms of the actual and potential agricultural productivity of the land. The Division's Monterey County Important Farmland Map, which defines farmland according to soil attributes and land use, can be used for this purpose. In addition, we recommend including the following information to characterize the agricultural land resource setting of the project.

- Current and past agricultural use of the project area. Include data on the types of crops grown, and crop yields and farmgate sales values.

- To help describe the full agricultural resource value of the soils on the site, we recommend the use of economic multipliers to assess the total contribution of the site's potential or actual agricultural production to the local, regional and state economies. State and Federal agencies such as the UC Cooperative Extension Service and USDA are sources of economic multipliers.

Project Impacts on Agricultural Land

- Type, amount, and location of farmland conversion resulting directly and indirectly (growth-inducement) from project implementation.
- Impacts on current and future agricultural operations; e.g., land-use conflicts, increases in land values and taxes, vandalism, etc.
- Incremental project impacts leading to cumulatively considerable impacts on agricultural land. This would include impacts from the proposed project as well as impacts from past, current and probable future projects.

Impacts on agricultural resources may also be quantified and qualified by use of established thresholds of significance (California Code of Regulations Section 15064.7). The Division has developed a California version of the USDA Land Evaluation and Site Assessment (LESA) Model, a semi-quantitative rating system for establishing the environmental significance of project-specific impacts on farmland. The model may also be used to rate the relative value of alternative project sites. The LESA Model is available on the Division's website noted later in this letter.

Williamson Act Lands

A project is deemed to be of statewide, regional or area-wide significance if it will result in cancellation of a Williamson Act contract for a parcel of 100 or more acres [California Code of Regulations Section 15206(b)(3)]. Since lands under Williamson Act contract exist in or adjacent to the project site, the Department recommends that the following information be provided in the DEIR:

- A map detailing the location of agricultural preserves and contracted land within each preserve. The DEIR should also tabulate the number of Williamson Act acres, according to land type (e.g., prime or non-prime agricultural land), which could be impacted directly or indirectly by the project.
- A discussion of Williamson Act contracts that may be terminated in order to accommodate the project. The DEIR should discuss the impacts that termination of Williamson Act contracts would have on nearby properties also under contract; i.e., growth-inducing impacts (in the sense that the removal of contract protection not only lifts a barrier to development, but results in higher property taxes, and thus, an incentive to shift to a more intensive land use, such as urban development.)
- As a general rule, land can be withdrawn from Williamson Act contract only through the nine-year nonrenewal process. Immediate termination via cancellation is reserved for "extraordinary", unforeseen situations (See Sierra Club v. City of Hayward (1981) 28 Cal.3d 840, 852-855).

The City or County of jurisdiction must approve a request for contract cancellation, and base that approval on specific findings that are supported by substantial evidence (Government Code Section 51282). If Williamson Act contract cancellation is proposed, we recommend that a discussion of the findings be included in the DEIR. Finally, the notice of the hearing to approve the tentative cancellation, and a copy of the landowner's petition, must be mailed to the Director of the Department of Conservation ten (10) working days prior to the hearing. (The notice should be mailed to Bridgett Luther, Director, Department of Conservation, c/o Division of Land Resource Protection, 801 K Street MS 18-01, Sacramento, CA 95814-3528.)

- If the project site is under Williamson Act contract, and any part of the site is to continue under contract after project completion, the DEIR should discuss the proposed uses for those lands. Uses of contracted land must meet compatibility standards identified in Government Code Sections 51238 - 51238.3. Otherwise, contract termination (see paragraph above) must occur prior to the initiation of the land use. The DEIR should also discuss plans for the city to succeed to existing contracts in the annexation area unless conditions specified in Government Code Section 51243.5 apply.
- An agricultural preserve is a zone authorized by the Williamson Act, and established by the local government, to designate land qualified to be placed under the Act's 10-year contracts. Preserves are also intended to create a setting for contract-protected lands that is conducive to continuing agricultural use. The uses of agricultural preserve land must be restricted by zoning or other means so as not to be incompatible with the agricultural use of contracted land within the preserve (Government Code Section 51230). Therefore, the DEIR should discuss any proposed general plan designation or zoning within agricultural preserves affected by the project.

Mitigation Measures and Alternatives

Feasible alternatives to the project's location or configuration that would lessen or avoid farmland conversion impacts should be considered in the DEIR. Similarly, while the direct conversion of agricultural land is often deemed to be an unavoidable impact by California Environmental Quality Act (CEQA) analyses, mitigation measures must nevertheless be considered.

The Division recommends the purchase of agricultural conservation easements on land of at least equal quality and size as partial compensation for the direct loss of agricultural land, as well as for the mitigation of growth inducing and cumulative impacts on agricultural land. We highlight this measure because of its growing acceptance and use by lead agencies as mitigation under CEQA.

Mitigation using conservation easements can be implemented by at least two alternative approaches: the outright purchase of conservation easements tied to the project, or via the donation of mitigation fees to a local, regional or statewide organization or agency, including land trusts and conservancies, whose purpose includes the purchase, holding and maintenance of agricultural conservation easements.
Whatever the approach, the conversion of agricultural land should be deemed an impact of at least regional significance and the search for mitigation lands conducted regionally, and not limited strictly to lands within the Soledad area.

Information about conservation easements is available on the Division's website, or by contacting the Division at the address and phone number listed below. The Division's website address is:

http://www.conservation.ca.gov/DLRP/

Of course, the use of conservation easements is only one form of mitigation that should be considered. The following mitigation measures could also be considered:

- Increasing home density or clustering residential units to allow a greater portion of the development site to remain in agricultural production.
- Protecting nearby farmland from *premature* conversion through the use of less than permanent long-term restrictions on use such as 20-year Farmland Security Zone contracts (Government Code Section 51296) or 10-year Williamson Act contracts (Government Code Section 51200 et seq.).
- Establishing buffers such as setbacks, berms, greenbelts, and open space areas to separate farmland from incompatible urban uses.
- Investing in the commercial viability of the remaining agricultural land in the project area through a mitigation bank which invests in agricultural infrastructure, water supplies and marketing.

The Department believes that the most effective approach to farmland conservation and impact mitigation is one that is integrated with general plan policies. For example, the measures suggested above could be most effectively applied as part of a comprehensive agricultural land conservation element in the City's general plan. Mitigation policies could then be applied systematically toward larger goals of sustaining an agricultural land resource base and economy. Within the context of a general plan mitigation strategy, other measures could be considered, such as the use of transfer of development credits, mitigation banking, and economic incentives for continuing agricultural uses.

Thank you for the opportunity to comment on the NOP. If you have questions on our comments, or require technical assistance or information on agricultural land conservation, please contact the Division at 801 K Street, MS 18-01, Sacramento, California 95814; or, phone (916) 324-0850.

Sincerely,

Brian Leahy

Brian Leahy
Assistant Director

cc: Monterey County RCD
744 La Guardia Building A
Salinas, CA 93905

State of California – The Resources Agency
ARNOLD SCHWARZENEGGER, Governor
DEPARTMENT OF FISH AND GAME
http://www.dfg.ca.gov
POST OFFICE BOX 47
YOUNTVILLE, CALIFORNIA 94599
(707) 944-5500

RECEIVED
SEP 01 2006
PLANNING DEPARTMENT

August 30, 2006

Mr. Don Fleming
City of Soledad, City Hall
248 Main Street
Soledad, CA 93960

Dear Mr. Fleming:

Subject: Miravale Phase III Specific Plan, Soledad, Monterey County

The Department of Fish and Game (DFG) has reviewed the documents provided for the subject project and we have the following comments.

Please provide a complete assessment (including but not limited to type, quantity and locations) of the habitats, flora and fauna within and adjacent to the project area, including endangered, threatened, and locally unique species and sensitive habitats. The assessment should include the reasonably foreseeable direct and indirect changes (temporary and permanent) that may occur with implementation of the project. Rare, threatened and endangered species to be addressed should include all those which meet the California Environmental Quality Act (CEQA) definition (see CEQA Guidelines, Section 15380). DFG recommended survey and monitoring protocols and guidelines are available at http://www.dfg.ca.gov/hcpb/species/stds_gdl/survmonitr.shtml.

Please be advised that a California Endangered Species Act (CESA) Permit must be obtained if the project has the potential to result in take of species of plants or animals listed under CESA, either during construction or over the life of the project. Issuance of a CESA Permit is subject to CEQA documentation; therefore, the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the project will impact CESA listed species, early consultation is encouraged, as significant modification to the project and mitigation measures may be required in order to obtain a CESA Permit.

For any activity that will divert or obstruct the natural flow, or change the bed, channel, or bank (which may include associated riparian resources) of a river or stream, or use material from a streambed, DFG may require a Streambed Alteration Agreement (SAA), pursuant to Section 1600 et seq. of the Fish and Game Code, with the applicant. Issuance of SAAs is subject to CEQA. DFG, as a responsible agency under CEQA, will consider the CEQA document for the project. The CEQA document should fully identify the potential impacts to the stream or riparian resources and provide adequate

avoidance, mitigation, monitoring and reporting commitments for completion of the agreement. To obtain information about the SAA notification process, please access our website at www.dfg.ca.gov/1600; or to request a notification package, contact the Streambed Alteration Program at (707) 944-5520.

If you have any questions, please contact Mr. Carl Wilcox, Habitat Conservation Manager, at (707) 944-5525.

Sincerely,

Cindy Catalano

Robert W. Floerke
Regional Manager
Central Coast Region

Linda Adams
Secretary for Environmental Protection

California Regional Water Quality Control Board

Central Coast Region

Internet Address: http://www.swrcb.ca.gov/rwqcb3
895 Aerovista Place, Suite 101, San Luis Obispo, California 93401
Phone (805) 549-3147 • FAX (805) 543-0397

Arnold Schwarzenegger
Governor

RECEIVED
SEP 01 2006
PLANNING DEPARTMENT

August 29, 2006

Don Fleming
248 Main Street
Soledad, CA 93960

Dear Don Fleming,

RE: Notice of Preparation, Miravale Phase III Specific Plan, Monterey County SCH#2006081129

Thank you for the opportunity to review the above-referenced document. The Central Coast Regional Water Quality Control Board (Water Board) is a responsible agency under the California Environmental Quality Act (CEQA). Water Board staff understands that the project includes a mixed-use development consisting of approximately 2,600 single-family residential units, 1,600 multi-family residential units, 300 senior housing units, 120 hotel rooms, 250,000 square feet of retail space and an 18-hole golf course. We recommend you consider Low Impact Development (LID) design techniques for your proposed project. LID or equivalent methods are necessary to mitigate stormwater runoff pollution and stream erosion and sedimentation impacts that result from significantly increased downstream flows due to introduced impermeable surfaces.

LID is an alternative site design strategy that uses natural and engineered infiltration and storage techniques to control stormwater runoff where it is generated. The objective is to disperse LID devices uniformly across a site to minimize runoff. LID serves to preserve the hydrologic and environmental functions altered by conventional stormwater management. LID methods provide temporary retention areas; increase infiltration; allow for pollutant removal; and control the release of stormwater into adjacent waterways (Anne Guillette, Whole Building Design Guide). For further reference please see:

http://www.epa.gov/owow/nps/lid/

Eight Common LID Practices Include:

1. Site Design Layout to Reduce and Disconnect Impervious Surfaces
2. Native Vegetation Preservation
3. Bioretention
4. Tree Boxes to Capture and Infiltrate Street Runoff
5. Vegetated Swales, Buffers, and Strips
6. Roof Leader Flows Directed to Planter Boxes and Other Vegetated Areas
7. Permeable Pavement
8. Soil Amendments to Increase Infiltration Rates

Water Board staff considers a project that meets the following descriptions (inclusive) to be a "Low Impact Development" project:

A. Runoff Volume Control. The pre-development stormwater runoff volume is maintained by a combination of minimizing the site disturbance, and then providing distributed retention BMPs. Retention BMPs are structures that retain the excess (above pre-development project volumes) runoff resulting from the development for the design storm event (2-, 10-, and 25-year, 24-hour duration storm). Note that "retention" is required, as opposed to "detention"; retention may be achieved using infiltration methods, and capture-for-use methods. A "customized" or detailed runoff curve number (CN) evaluation is required to determine the required runoff volume. The storage required to maintain the pre-development volume may also be sufficient to maintain the pre-development peak rate.

B. Peak Runoff Rate Control. Low-impact development is designed to maintain the pre-development peak runoff discharge rate for the selected design storm events. This is done by maintaining the pre-development time of concentration and then using retention and/or detention BMPs (e.g., rain gardens, open drainage systems, etc.) that are distributed throughout the site. The goal is to use retention practices to control runoff volume and, if these retention practices are not sufficient to control the peak runoff rate, to use additional detention practices to control the peak runoff rate.

C. Flow Frequency Duration Control. Since low-impact development is designed to emulate the pre-development hydrologic regime through both volume and peak runoff rate controls, the flow frequency and duration for the post-development conditions must be identical (to the greatest degree possible) to those for the pre-development conditions. The impacts on the sediment and erosion and stream habitat potential at downstream reaches will then be minimized.

Your project may be subject to the NPDES Phase 2 Municipal Stormwater Permit (Permit). The Permit requires developments to meet Maximum Extent Practicable (MEP) standards to address urban runoff. In most cases, MEP standards are not met by conventional site layouts, construction methods, and storm water conveyance systems with "end of pipe" basins and treatment systems that do not address the changes in volume and rates of storm water runoff and urban pollutants (including thermal pollution). Low Impact Development does meet the MEP standard and is more effective at reducing pollutants in storm water runoff at a practicable cost.

Please consider these comments in the CEQA approval process for this project. If you have questions, please contact Donette Dunaway at (805) 549-3698.

Sincerely,

for Roger W. Briggs
Executive Officer

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State of California – The Resources Agency
DEPARTMENT OF FISH AND GAME
http://www.dfg.ca.gov
POST OFFICE BOX 47
YOUNTVILLE, CALIFORNIA 94599
(707) 944-5500

ARNOLD SCHWARZENEGGER, Governor

September 15, 2006

RECEIVED
SEP 19 2006
PLANNING DEPARTMENT

Mr. Don Fleming
City of Soledad
248 Main Street
Soledad, CA 93960

Dear Mr. Fleming:

Subject: Miravale Phase III Specific Plan, Soledad, Monterey County, SCH 2006081129

The Department of Fish and Game (DFG) has reviewed the documents provided for the subject project and we have the following comments.

Please provide a complete assessment (including but not limited to type, quantity and locations) of the habitats, flora and fauna within and adjacent to the project area, including endangered, threatened, and locally unique species and sensitive habitats. The assessment should include the reasonably foreseeable direct and indirect changes (temporary and permanent) that may occur with implementation of the project. Rare, threatened and endangered species to be addressed should include all those which meet the California Environmental Quality Act (CEQA) definition (see CEQA Guidelines, Section 15380). DFG recommended survey and monitoring protocols and guidelines are available at http://www.dfg.ca.gov/hcpb/species/stds_gdl/survmonitr.shtml.

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consider the CEQA document for the project. The CEQA document should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring and reporting commitments for completion of the agreement. To obtain information about the SAA notification process, please access our website at www.dfg.ca.gov/1600; or to request a notification package, contact the Streambed Alteration Program at (707) 944-5520.

If you have any questions, please contact, Mr. Carl Wilcox, Habitat Conservation Manager, at (707) 944-5525.

Sincerely,

for Scott Wilson
Robert W. Floerke
Regional Manager
Central Coast Region

cc: State Clearinghouse

SOLEDAD UNIFIED SCHOOL DISTRICT

Jorge Z. Guzmán District Superintendent

"Education for Life"

Soledad High School
425 Gabilan Drive
Soledad, CA 93960
(831) 678-6400

Community Education Center
690 Main Street
Soledad, CA 93960
(831) 678-6300

Main Street Middle School
441 Main Street
Soledad, CA 93960
(831) 678-6460

K-6
ELEMENTARY SCHOOLS

Gabilan School
330 N. Walker Drive
Soledad, CA 93960
(831) 678-6440

Rose Ferrero School
400 Entrada Drive
Soledad, CA 93960
(831) 678-6480

San Vicente School
1300 Metz Road
Soledad, CA 93960
(831) 678-6420

Frank Ledesma School
973 Vista de Soledad
Soledad, CA 93960
(831) 678-6320

Jack Franscioni School
779 Orchard Lane
Soledad, CA 93960
(831) 678-6340

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SEP 19 2006
PLANNING DEPARTMENT

September 18, 2006

Don Fleming, Planning and Development Director
City of Soledad
P.O. Box 156
Soledad, CA 93960

Dear Mr. Fleming:

RE: NOTICE OF PREPARATION RESPONSE: MIRAVALE PHASE III

Thank you for the opportunity to respond to the Notice of Preparation (NOP) for the Draft Environmental Impact Report for Miravale Phase III Specific Plan.

In regards to my response, the following items warrant your attention:

1. The Miravale III subdivision has two elementary, one middle school/adult education combination center and Future Farmers of America (FFA) sites designated and dedicated for future growth; considering the loading factors that are being used and the schools that will be constructed districtwide adequacy for facilities should be sufficient. We are working with our school facility consultants to re-examine the loading factors.

   The sites should meet the necessary California Department of Education established standards. They should be safe and free of environmental toxics.

2. Our current high school enrollment is 1,048 students with maximum capacity of 1,400 students. The existing site has adequate space to add portable buildings to accommodate the steady growth. We are in the process of placing (4) portables at the high school in the next two to three months. However, with pending and future projects, our high school will exceed capacity. It is my recommendation that the General Plan be amended to show and to have future developers designate a 40-acre additional high school site in the northwest or future expansion areas.

Please feel free to contact me if you have any questions and thank you for your attention to this matter and consideration to amend the General Plan to include another future high school for our community

Sincerely,

Jorge Z. Guzman
District Superintendent

C: Board of Trustees
Noelia Chapa, City Manager

AMBAG
ASSOCIATION OF MONTEREY BAY AREA GOVERNMENTS

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SEP 19 2006
PLANNING DEPARTMENT

September 14, 2006

Mr. Don Fleming
City of Soledad
P.O. Box 156
Soledad, CA 93960

Re: MCH# 20060816 – Notice of Preparation
Miravale Phase 3

Dear Mr. Fleming:

AMBAG's Regional Clearinghouse circulated a summary of notice of your environmental document to our member agencies and interested parties for review and comment.

The AMBAG Board of Directors considered the project on September 13, 2006 and has no comments at this time.

Thank you for complying with the Clearinghouse process.

Sincerely,

Nicolas Papadakis
Executive Director

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OCT 0 3 2006

PLANNING DEPARTMENT

LAFCO *of Monterey County*

LOCAL AGENCY FORMATION COMMISSION
P.O. Box 1369 132 W. Gabilan Street, Suite 102
Salinas, CA 93902 Salinas, CA 93901
Telephone (831) 754-5838 Fax (831) 754-5831

KATE McKENNA, AICP
Executive Officer

September 29, 2006

Mr. Don Fleming, Community Development Director
City Hall
City of Soledad
248 Main Street
Soledad, CA 93960

RE: Notice of Preparation for the Draft Environmental Impact Report for Miravale Phase III Specific Plan

Dear Mr. Fleming:

Thank you the courtesy shown by your staff in accommodating our request for an extension of time to submit comments for the Miravale III Notice of Preparation.

As you know, LAFCO has the statutory responsibility to make determinations regarding changes in local government boundaries. For purposes of CEQA compliance, we are a responsible agency for the Miravale project. LAFCO requests that analysis of the following issues be included in the environmental review process:

Open Space and Agricultural Resources

- A detailed review of the project's direct impact on open space and farmland mapped as prime and of statewide importance. The review should include a full assessment of recommendations for avoidance of impacts and mitigation of impacts, such as permanent conservation and agricultural buffers. Some examples of potential conservation actions are on-site open space and agricultural reserves, off-site replacement of agricultural lands, and payment of mitigation fees to a regional agricultural lands conservation bank program.

Land Use and Planning

- A review of the proposal's compatibility and compliance with the "factors to be considered in review of proposal" for LAFCO (see Section 56668 of the Government Code).
- A review of the proposal's compatibility and compliance with the adopted LAFCO of Monterey County's "Sphere Of Influence Policies and Criteria" (attached).

- A review of the proposal's compatibility and compliance with draft Sphere of Influence policies currently under consideration by LAFCO of Monterey County (attached).
- A review of compliance with regional population and employment forecasts and regional air quality plans.

Municipal Services

- A review of impacts on delivery of municipal services including water, sewer, fire, schools, police, emergency medical services, flood protection, parks and open space.

Cumulative Impact

- The cumulative impact to the Salinas Valley of the conversion of farmland mapped as prime and of statewide importance and any required mitigations.
- The cumulative impacts to regional roadways and regional jobs/housing balance.
- The cumulative impacts to the regional water supply.

Alternatives

- Alternatives that would avoid and lessen the project's direct and cumulative impacts, particularly to agricultural resources, availability of water, regional housing needs and regional traffic.

The Miravale III proposal will need to be considered as part of the City's comprehensive Sphere of Influence amendment proposal and subsequent annexation proposals. We extend an invitation to the City of Soledad to participate in LAFCO's preliminary review process as a way to promote early and informal dialogue, understanding and cooperation. The preliminary review process would consist of an informal presentation and discussion about the City's comprehensive growth plans as identified in the recently adopted General Plan. The Miravale III project would be part of that discussion. We encourage the City to take part in the preliminary review process prior to formal submittal of Soledad's comprehensive Sphere of Influence amendment proposal and annexation proposals to LAFCO.

In addition, please note the statutory requirement for early consultation between the City and County (Government Code Section 56425b) before the formal Sphere of Influence amendment is submitted to LAFCO.

We appreciate this opportunity to provide comments, and would be pleased to meet with your City staff and consultants for more detailed discussions.

Sincerely,

Kate McKenna

Kate McKenna, AICP
Executive Officer

Attachments (2)

LOCAL AGENCY FORMATION COMMISSION
(LAFCO)
OF MONTEREY COUNTY

SPHERE OF INFLUENCE POLICIES AND CRITERIA

April, 2003

I. LEGISLATIVE AUTHORITY

The State Legislature has provided Local Agency Formation Commissions (LAFCO's) with the following directions in the preparation of spheres of influence:

1. "Among the purposes of a Local Agency Formation Commission are the discouragement of urban sprawl and the encouragement of the orderly formation and development of local governmental agencies based upon local conditions and circumstances. One of the objects of the Local Agency Formation Commission is to make studies and to obtain and furnish information which will contribute to the logical and reasonable development of local governmental agencies so as to advantageously provide for the present and future needs of each County and its communities..."

2. "In order to carry out its purposes and responsibilities for planning and shaping the logical and orderly development and coordination of local governmental agencies so as to advantageously provide for the present and future needs of the County and its communities, the Local Agency Formation Commission shall develop and determine the sphere of influence of each governmental agency within the County. As used in this section, "sphere of influence" means a plan for the probable ultimate physical boundaries and service area of a local governmental agency. In determining the sphere of influence of each local governmental agency, the Commission shall consider and prepare a written statement of its determinations with respect to each of the following:

   a. The present and planned land uses in the area, including agricultural and open space lands.

   b. The present and probable need for public facilities and services in the area.

   c. The present capacity of public facilities and the adequacy of public services which the agency provides or is authorized to provide.

   d. The existence of any social or economic communities of interest in the area if the Commission determines that they are relevant to the agency."

3. Every determination made by a Commission involving proposals for changes of organization or reorganization shall be consistent with the spheres of influence of the local agencies affected by those determinations.

4. The Commission may recommend governmental reorganizations to particular agencies in the County, using spheres of influence as the basis for such recommendations."

II. DEFINITIONS

1. Agricultural Lands: Land currently used for the purpose of producing an agricultural commodity for commercial purposes, land left fallow under a crop rotational program, or land enrolled in an agricultural subsidy or set-aside program (Government Code Section 56016).

2. Agricultural Preserve: Lands subject to an existing land conservation agreement established pursuant to the California Land Conservation Act of 1965 (the Williamson Act, Government Code Section 51200 et seq.).

3. County: Monterey County.

4. Essential Services: Those basic services necessary to protect the health, safety, and general well-being of a community, including but not limited to police, fire, water, sanitation, etc.

5. General Purpose Government: A City or County government.

6. LAFCO: Monterey County Local Agency Formation Commission.

7. Local Agency: A City or special district.

8. Open Space Lands: Parcel or area of land or water which is substantially unimproved and devoted to open space use as defined in Government Code Section 65560.

9. Planning Concern Area: An area established by the Local Agency Formation Commission with the assistance of the appropriate cities and the County designating a general area of concern of a city for which planning decisions and other governmental actions of the County may have an impact on the city. A "Planning Concern Area" will usually be larger than the adopted sphere of influence boundary and may take into consideration the planning area of the city as identified within their local general plans.

10. Prime Agricultural Land: (A) Land that, if irrigated, qualifies for rating as Class I or II in the USDA Natural Resources Conservation Service land-use capacity classification, whether or not the land is actually irrigated, provided that irrigation is feasible; (B) land that qualifies for rating 80-100 in the Storie Index Rating; (C) land that supports livestock used for the production of food and fiber and that has an annual carrying capacity equivalent to at least one animal unit per acre; (D) land planted with fruit or nut-bearing trees, vines, bushes, or crops that have a non-bearing period of less than five years and that will return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than four hundred dollars ($400) per acre for three of the previous five calendar years; (E) Land that has returned

from the production of unprocessed agricultural plant products an annual gross value of not less than four hundred dollars ($400) per acre for three of the previous five calendar years. (Government Code Section 56064).

11. Regional Agencies: Association of Monterey Bay Area Governments (AMBAG), Regional Water Quality Control Board, Central Coast Regional Coastal Commission, Air Pollution Control Board, etc.

12. Sphere of Influence: A plan for the probable physical boundaries and service area of a local agency. The area around a local agency eligible for annexation and extension of urban service within a twenty-year period.

13. Sphere of Influence Boundary: Boundary, adopted by the Monterey County Local Agency Formation Commission, which delineates the limits beyond which a local governmental agency will not annex territory.

14. Urban Services: Those services which are provided to an urban area including, but not limited to, police, structural fire protection, non-agricultural water, sewer, drainage, street lighting, streets and roads.

15. Urban Service Districts: Special districts which are authorized to provide public sanitary sewer services or domestic water distribution services.

16. Urban Service Area: Urban developed areas within an urban service district or city sphere of influence, which is now served by existing urban facilities, utilities, and services or is proposed to be served by urban facilities, utilities and services within the next five years.

17. Urban Transition Area: Area within the spheres of influence boundaries of a city or an urban service district which is not programmed for urban facilities or utility extensions within the next five years. This area will most likely be used for urban expansion within approximately five to twenty years.

18. Future Study Area: Territory outside of an adopted sphere of influence that may warrant inclusion in the sphere in future years. Further study would have to be completed prior to inclusion.

19. Principal County: Principal County has the meaning contained in any definition of principal county, as set forth in the principal act. If the principal act has no definition of principal county, or if there is any inconsistency between the definitions contained in two or more applicable principal acts, principal county means the county having all or the greater portion of the entire assessed value, as shown on the last equalized assessment roll of the county or counties, of all taxable property within a district or districts for which a change of organization or reorganization is proposed.

III. POLICY GUIDELINES FOR SPHERES OF INFLUENCE

The Commission will generally apply the following policy guidelines in the spheres of influence program, in addition to the local conditions and circumstances of each local agency. The Monterey County Local Agency Formation Commission will consider the particular local conditions and circumstances of each agency and community.

1. LAFCO intends that its sphere of influence determination will serve as a master plan for the future organization of local government within the County. The spheres shall be used to discourage urban sprawl; limit proliferation of local governmental agencies; encourage efficiency, economy and orderly changes in local government; promote compact, community centered urban development; and minimize adverse impacts on lands classified as prime agriculture.

2. The sphere of influence lines shall be a declaration of policy which shall be a primary guide to LAFCO in the decision on any proposal under its jurisdiction. Every determination made by the Commission shall be consistent with the spheres of influence of the agencies affected by those determinations.

3. Any proposal which is inconsistent with an agency's adopted sphere of influence shall not be approved until the Commission, at a noticed public hearing, has considered an amendment or revision to that agency's sphere of influence.

4. Inclusion within an agency's sphere of influence does not assure annexation to that agency. The Commission shall evaluate boundary change proposals as they relate to all of the relevant factors listed in the Cortese-Knox Local Government Reorganization Act of 1985 (Government Code Section 56841 et seq.).

5. When possible, a single larger general purpose agency, rather than a number of adjacent smaller ones, established for a given service in the same general area will be preferred. Where an area could be assigned to the sphere of influence of more than one agency providing a particular needed service, the following hierarchy shall apply dependent upon ability to serve.

   a. Inclusion within a City sphere of influence.

   b. Inclusion within a multi-purpose district sphere of influence.

   c. Inclusion within a single-purpose district sphere of influence.

   In deciding which of two or more equally ranked agencies shall include an area within its sphere of influence, LAFCO shall consider the agencies' service and financial capabilities, social and economic interdependence, topographic factors, and the effect that eventual service extension will have on adjacent agencies.

6. Duplication of authority to perform similar functions in the same territory will be avoided. Sphere of influence boundaries shall not create islands or corridors unless it can be

demonstrated that the irregular boundaries represent the most logical and orderly service area of an agency.

7. The adopted sphere of influence shall reflect City and County General Plans, plans of regional agencies, growth management policies, annexation policies, resource management policies, and any other policies related to ultimate boundary or service area of an affected agency unless those plans or policies conflict with the legislative intent of the Cortese-Knox-Hertzberg Act of 2000 (Government Code Section 56000 et seq.).

   Where inconsistencies between plans exist, LAFCO shall rely upon that plan which most closely follows the Legislature's directive to discourage urban sprawl, direct development away from prime agricultural land and open-space lands, and encourage the orderly formation and development of local governmental agencies based upon local conditions and circumstances.

8. Extension of urban type services promotes urban development and such development belongs in cities or areas of development concentration in the unincorporated area of Monterey County. In evaluating proposals involving urban development requiring an urban level of governmental services, the Commission will discourage the formation of new special districts or premature annexation of territory within existing city spheres of influence or logical expansion area. The Commission will discourage boundary change proposals involving urban development outside adopted city spheres of influence that have the potential to negatively impact prime agriculture or open space lands, public service capacity, existing local governmental agencies, or generally represents illogical growth patterns.

9. This Commission, in recognition of the mandated requirements for considering impacts on open space lands and agricultural lands, will develop and determine spheres of influence for Cities and urban service districts in such a manner as to promote the long-term preservation and protection of this County's "Resources." The Commission believes the public interest will be best served by considering "Resources" in a broad sense to include open space, recreational opportunities, wildlife, and agricultural land. Sphere of influence determinations must conform with the Commission's Agricultural Preservation Policy adopted in November, 1979.

10. The Commission recognizes the many inter-relationships and impacts which one agency's land use, planning, and governmental decisions may have on other agencies even though they may be outside of the "sphere of influence" of the secondary agency. Consequently, this Commission, when necessary, will seek to establish and identify Areas of Planning Concern for each city within the County. The "Planning Concern Area" will seek to identify those areas which in a broad sense affect the city in terms of planning and land use decisions. Such "Planning Concern Areas" will be established with the assistance and guidance of the affected cities and the County. The "Planning Concern Area" normally will extend beyond the adopted "sphere of influence" of the city. Once established, the Commission will solicit the cooperation and involvement of the affected cities and the County to jointly involve one another in planning decisions for these areas.

IV. PROCEDURAL GUIDELINES

1. LAFCO will designate a sphere of influence for each local agency representing the agency's probable physical boundary within a zero to twenty year period.

2. LAFCO shall consider the following factors in determining or amending an agency's sphere of influence:

   a. Present and future need for agency services and the service levels specified for the subject area in applicable general plans, growth management plans, annexation policies, resource management plans, and any other plans or policies related to an agency's ultimate boundary and service area.

   b. Capability of the local agency to provide essential and urban services, taking into account evidence of resource capacity sufficient to provide for internal needs and urban expansion.

   c. The existence of agricultural preserves, agricultural lands and open space lands in the area and the effect that inclusion within a sphere of influence shall have on the physical and economic integrity of maintaining the land in non-urban use.

   d. Present and future cost and adequacy of services anticipated to be extended within the sphere of influence.

   e. Present and projected population growth, population densities, land uses, land area, ownership patterns, assessed valuations, and proximity to other populated area.

   f. The agency's capital improvement or other plans that delineate planned facility expansions and the timing of that expansion.

   g. Social or economic communities of interest in the area.

3. The Commission may establish an urban service area within an adopted sphere of influence to discourage urban sprawl and to promote compact growth patterns. Urban service areas consist of territory now served by urban facilities, utilities and services or proposed to be served within the next five years, and may include the following:

   a. Urbanized Areas. This includes all existing areas, either incorporated or unincorporated, developed to urban densities.

   b. Urban Expansion Areas. This consists of vacant land, either incorporated or unincorporated, which is capable of holding urban growth expected within the next five years.

   The territory included within urban service areas will be considered by LAFCO to be eligible for annexation within five years. Consideration will be given to city and special

district capability to provide needed services with related time schedules for planned expansion of services. Cities and special districts are encouraged to develop Capital Improvement Programs and other plans for the phased extension of services to assist LAFCO in determining logical urban service area boundaries.

4. The Commission may establish urban transition areas within adopted spheres of influence to discourage premature pressure for development. Transition areas consist of the residual lands between designated urban service areas and the ultimate sphere of influence boundary. This land will most likely be used for urban expansion within approximately five (5) to twenty (20) years. Territory included within urban transition areas, but not within urban service areas, generally will not be considered eligible for annexation to receive urban services within five years.

5. LAFCO may adopt a zero sphere of influence encompassing no territory for an agency. This occurs where LAFCO determines that the public service functions of the agency are either non-existent, no longer needed, or should be reallocated to some other agency of government.

   The local agency which has been assigned a zero sphere of influence should ultimately be dissolved. Special districts that lie substantially within the boundary or sphere of influence of a general purpose government which is capable of assuming the public service responsibilities and functions of that special district may be allocated a zero sphere of influence designation.

6. Territory not in need of urban services, including open space, agriculture, recreational, rural lands or residential rural areas, shall not be assigned to an agency's sphere of influence unless the area's exclusion would impede the planned, orderly and efficient development of an area.

7. LAFCO may adopt a sphere of influence that excludes territory currently within that agency's boundaries. This occurs where LAFCO determines that the territory consists of agricultural lands, open space lands or agricultural preserves whose preservation would be jeopardized by inclusion within the agency's sphere of influence. Exclusion of these areas from an agency's sphere of influence indicates that detachment is appropriate.

8. Two or more local agencies providing the same service(s) may be allocated a consolidated sphere of influence to include the areas served by both agencies. This would be the case where LAFCO believes that the particular service(s) should be provided to the entire area by a single local agency.

9. LAFCO may establish future study areas outside of adopted spheres of influence. These areas indicate territory which may ultimately be appropriate for inclusion within an agency's sphere upon future study or modified conditions.

10. LAFCO shall adopt, amend or revise sphere of influence determinations following the procedural steps set forth in the Cortese-Knox-Hertzberg Act of 2000 (Government Code Section 56076 et seq.).

11. LAFCO shall review sphere of influence determinations not less than every five years. If a local agency or the County desires amendment or revision of an adopted sphere of influence, the local agency by resolution may file such a request with the Executive Officer. The request shall state the nature of the proposed amendment and the reasons for the request, include a map of the proposed amendment, and contain additional data and information as may be required by the Executive Officer.

12. The Commission encourages any private individual desiring a revision of an adopted sphere of influence to request that the affected local agency initiate sphere reconsideration by resolution to promote consultation between the parties.

13. At least 30 days prior to submitting an application to the Commission for a determination of a new sphere of influence, or to update an existing sphere of influence for a city, representatives from the city shall meet with county representatives to discuss the proposed sphere, and its boundaries, and explore methods to reach agreement on the boundaries, development standards, and zoning requirements within the sphere to ensure that development within the sphere occurs in a manner that reflects the concerns of the affected city and is accomplished in a manner that promotes the logical and orderly development of areas within the sphere. If no agreement is reached between the city and county within 30 days, then the parties may, by mutual agreement, extend discussions for an additional period of 30 days. If an agreement is reached between the city and county regarding the boundaries, development standards, and zoning requirements within the proposed sphere, the agreement shall be forwarded to the Commission, and the Commission shall consider and adopt a sphere of influence for the city consistent with the policies adopted by the Commission pursuant to this section, and the Commission shall give great weight to the agreement in the Commission's final determination of the city sphere.

14. If the Commission's final determination is consistent with the agreement reached between the city and county pursuant to subdivision 13, the agreement shall be adopted by both the city and county after a noticed public hearing. Once the agreement has been adopted by the affected local agencies and their respective general plans reflect that agreement, then any development approved by the county within the sphere shall be consistent with the terms of that agreement.

15. If no agreement is reached pursuant to subdivision 13, the application may be submitted to the Commission and the Commission shall consider a sphere of influence for the city consistent with the policies adopted by the Commission pursuant to this section.

16. When adopting, amending, or updating a sphere of influence for a special district, the Commission shall do all of the following:

    a. Require existing districts to file written statements with the Commission specifying the functions or classes of services provided by those districts.

b. Establish the nature, location, and extent of any functions or classes of services provided by existing districts.

17. In order to prepare and to update spheres of influence in accordance with Section 56425, the Commission shall conduct a service review of the municipal services provided in the county or other appropriate area designated by the Commission. The Commission shall include in the area designated for service review the county, the region, the subregion, or any other geographic area as is appropriate for an analysis of the service or services to be reviewed, and shall prepare a written statement of its determinations with respect to each of the following:

    a. Infrastructure needs or deficiencies.

    b. Growth and population projections for the affected area.

    c. Financing constraints and opportunities.

    d. Cost avoidance opportunities.

    e. Opportunities for rate restructuring.

    f. Opportunities for shared facilities.

    g. Government structure options, including advantages and disadvantages of consolidation or reorganization of service providers.

    h. Evaluation of management efficiencies.

    i. Local accountability and governance.

18. In conducting a service review, the Commission shall comprehensively review all of the agencies that provide the identified service or services within the designated geographic area.

19. The Commission shall conduct a service review before, or in conjunction with, but no later than the time it is considering an action to establish a sphere of influence in accordance with Section 56425 or Section 56426.5 or to update a sphere of influence pursuant to Section 56425.

20. Individuals desiring LAFCO to initiate revision or amendment of an existing sphere of influence shall file a written request with the Executive Officer. The request shall state the nature of the proposed amendment and the reasons for the request, include a map of the proposed amendment area, and contain additional data and information as may be required by the Executive Officer.

21. The Executive Officer shall review each request for amendment, prepare a report and recommendation, and place the request on the agenda of the next meeting of the

Commission for which notice can be given after determining conformance with the California Environmental Quality Act. Copies of the Executive Officer report shall be provided to the person(s) making the request, each affected local agency, and each person who has filed a request for a report.

22. Any local agency, county, or private individual making such a request shall reimburse the Commission for the actual and direct costs incurred by the Commission. The Commission may waive such requirement if it finds that the request may be considered as part of its periodic review of spheres of influence.

23. The Monterey County Local Agency Formation Commission shall adopt, amend, or revise spheres of influence after a public hearing called and held for that purpose. At least 15 days prior to the date of any such hearing, the Executive Officer shall give mailed notice of the hearing to each affected local agency and the County, and to any interested party who has filed a written request for such notice with the Executive Officer. In addition, at least 15 days prior to the date of any such hearing, the Executive Officer shall cause notice of the hearing to be published in a newspaper of general circulation which is circulated within the territory affected by the sphere of influence proposed to be adopted or amended.

    LAFCO may continue from time to time any sphere of influence hearing. At any sphere of influence hearing, LAFCO shall hear and consider oral or written testimony presented by any affected local agency, the County, or any interested person who wishes to appear.

24. On the date and time set for hearing and provided in the notice, the Commission may, without further notice, consider the amendments to a sphere of influence or set a future date for the hearing on the request.

AGENDA ITEM NO. 8.c

LAFCO *of Monterey County*

LOCAL AGENCY FORMATION COMMISSION
P.O. Box 1369 132 W. Gabilan Street, Suite 102
Salinas, CA 93902 Salinas, CA 93901
Telephone (831) 754-5838 Fax (831) 754-5831
www. monterey.lafco.ca.gov

KATE McKENNA, AICP
Executive Officer

DATE: September 25, 2006

TO: Chair and Members of the Formation Commission

FROM: Kate McKenna, AICP, Executive Officer

SUBJECT: ANNEXATION AND SPHERE OF INFLUENCE POLICIES

SUMMARY OF RECOMMENDATIONS:

It is recommended that the Commission adopt a Resolution to revise local annexation and Sphere of Influence policies to include two new policies relating to regional traffic impact mitigation and urban development patterns.

EXECUTIVE OFFICER'S REPORT:

Commissioners Calcagno and DiMaggio have requested that the following draft policies be placed on the agenda for consideration:

1. For annexations and Spheres of Influence applications, LAFCO of Monterey County shall consider as part of its decision whether the proposal mitigates its regional traffic impacts by, for example, monetary contribution to a regional transportation improvement fund as established by the Transportation Agency of Monterey County or otherwise;

2. For annexations and Sphere of Influence applications, LAFCO of Monterey County shall consider as part of its decision whether the city in which the annexation or Sphere of Influence amendment is proposed has included certain goals, policies, and objectives into its General Plan that encourage mixed uses, mixed densities, and development patterns that will result in increased efficiency of land use, and that encourage and provide planned, well-ordered, efficient urban development patterns.

LAFCO counsel analyzed the proposed policies and determined that LAFCO has the statutory authority to adopt them. Counsel recommended minor changes in wording, reflected above. Authority is vested in at least two provisions of the Cortese-Knox-Hertzberg Act of 2000:

Government Code Sec. **56300(a)** -- "It is the intent of the Legislature that each commission, not later than January 1, 2002, shall establish written policies and procedures and exercise its powers pursuant to this part in a manner consistent with those policies and procedures and that encourages and provides planned, well-ordered, efficient urban development patterns ..."

Government Code Sec. **56668** -- "Factors to be considered in the review of a proposal shall include, but not be limited to, all of the following:

a) the likelihood of significant growth in the area, and in adjacent incorporated and unincorporated areas, during the next 10 years;

b) the present cost and adequacy of governmental services and controls in the area; probable future need for those services and controls ("services" are expressly defined to include "public facilities necessary to provide those services");

c) conformity of the proposal and of its anticipated effects with . . . adopted commission policies on providing planned, orderly, efficient patterns of urban development; and

d) consistency with city or county general plan and specific plans."

The proposed policy revisions are categorically exempt from the California Environmental Quality Act under Class 7 (protection of natural resources) and Class 8 (protection of the environment).

Respectfully submitted,

Kate McKenna, AICP
Executive Officer

Enclosure: Resolution

THE LOCAL AGENCY FORMATION COMMISSION
OF MONTEREY COUNTY

RESOLUTION NO. 06 – XX

RESOLUTION OF THE LOCAL AGENCY FORMATION COMMISSION ADOPTING REVISIONS TO ANNEXATION AND SPHERE OF INFLUENCE POLICIES

WHEREAS, these proceedings are taken in conformance with the provisions of the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000, Section 56300(a), and Section 56668 of the Government Code; and

WHEREAS, these proceedings were duly noticed in accordance with the requirements of Cortese-Knox-Hertzberg Act of 2000; and

WHEREAS, the Local Agency Formation Commission of Monterey County is required by the Cortese-Knox-Hertzberg Act of 2000 to establish written policies and procedures; and

WHEREAS, the Commission desires to revise its Annexation and Sphere of Influence policies; and

WHEREAS, regional traffic impacts of an annexation proposal or sphere of influence amendment can affect the adequacy and future needs of governmental services and facilities; and

WHEREAS, regional traffic impacts of an annexation proposal or sphere of influence amendment are reflective of whether or not the proposal promotes efficient patterns of urban development; and

WHEREAS, regional traffic impacts of an annexation proposal or sphere of influence amendment can affect the economic vitality of our agricultural natural resources; and

WHEREAS, regional traffic impacts of an annexation proposal or sphere of influence amendment can adversely affect the environment through air quality and noise impacts; and

WHEREAS, an annexation proposal or sphere of influence amendment for a city whose general plan includes goals, policies, and objectives that encourages mixed uses, and mixed densities encourages planned, well-ordered, efficient urban development patterns; and

WHEREAS, an annexation proposal or sphere of influence amendment for a city whose general plan includes goals, policies, and objectives that encourages mixed uses, and mixed densities is protective of our agricultural and open space resources; and

WHEREAS, an annexation proposal or sphere of influence amendment for a city whose general plan includes goals, policies, and objectives that encourages mixed uses, and mixed densities is protective of the environment;

NOW, THEREFORE, the Local Agency Formation Commission of Monterey County does HEREBY RESOLVE as follows:

That the policy revisions are exempt from CEQA based on class 7 and class 8 categorical exemptions; and

That the LAFCO Commission shall revise its Annexation and Sphere of Influence policies to include:

a) For annexations and Sphere of Influence applications, LAFCO of Monterey County shall consider as part of its decision whether the proposal mitigates its regional traffic impacts by, for example, monetary contribution to a regional transportation improvement fund as established by the Transportation Agency of Monterey County or otherwise, and

b) For annexations and Sphere of Influence applications, LAFCO of Monterey County shall consider as part of its decision whether the city in which the annexation or Sphere of Influence amendment is proposed has included certain goals, policies, and objectives into its General Plan that encourage mixed uses, mixed densities, and development patterns that will result in increased efficiency of land use, and that encourage and provide planned, well-ordered, efficient urban development patterns.

UPON MOTION OF Commissioner _____, seconded by Commissioner _____, the foregoing resolution is adopted this 25th day of September 2006 by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

ATTEST: I certify that the within instrument is a true and complete copy of the original resolution of said Commission on file within this office.

Witness my hand this ____ day of September, 2006

By: _____
Kate McKenna, AICP
Executive Officer

MONTEREY BAY
Unified Air Pollution Control District
serving Monterey, San Benito, and Santa Cruz counties

AIR POLLUTION CONTROL OFFICER
Douglas Quetin

24580 Silver Cloud Court • Monterey, California 93940 • 831/647-9411 • FAX 831/647-8501

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Santa Cruz County

VICE CHAIR:
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King City

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Santa Cruz County

Jerry Smith
Monterey County

September 19, 2006

RECEIVED
SEP 21 2006
PLANNING DEPARTMENT

Mr. Don Fleming, Community Development Director
City of Soledad
248 Main Street
Soledad, California 93960

SUBJECT: NOP FOR MIRAVALE PHASE III SPECIFIC PLAN

Dear Mr. Fleming:

Staff reviewed the referenced document and has the following suggestions for a scope of work for the air quality analysis:

Specific Plan's Cumulative Air Quality Impact on Regional Ozone
The District uses consistency with the 2004 Air Quality Management Plan (AQMP) for the North Central Coast Air Basin to determine a specific plan's cumulative impact on regional air quality (ozone levels). Please request a formal consistency determination from AMBAG for the proposed 4,500 residential units and include it in the Draft EIR.

Specific Plan's Localized Air Quality Impact on Carbon Monoxide Levels
Localized impact is evaluated by determining if build-out identified in the Specific Plan would create or substantially contribute to carbon monoxide "hotspots" (where federal or State ambient air quality standards are exceeded). If project or cumulative traffic would cause LOS to decline from D or better to E or F, dispersion modeling should be undertaken to determine if carbon monoxide concentrations would violate ambient air quality standards at sensitive receptor locations.

Odors, Nuisances and Sensitive Receptors
If the Specific Plan would revise land use designations that might result in development of odors, nuisances or sensitive receptors in adjacent land uses, the Draft EIR should include an assessment of those impacts. District Rule 402, Nuisances, should be reviewed for applicable requirements.

Mitigation Measures
Mitigation measures should be identified for any significant impacts on air quality. The Draft EIR should quantify the emission reduction effectiveness of each measure, identify the agencies responsible for implementation and monitoring, and determine whether mitigation measures reduce impacts to a less-than-significant level.

Projects Constructed in Accord with the Specific Plan

The Draft EIR should indicate that projects constructed in accord with the Specific Plan could have impacts on air quality, which would be evaluated when the projects are proposed. The District has established the following thresholds of significance for individual projects: 137 lbs/day for VOC or NO_x, 82 lbs/day for PM_{10}, 150 lbs/day for SO_x, a significant decline in LOS, and a cancer risk greater than 10 per 1,000,000 people. (Please refer to Table 5-3 on page 5-5, and page 9-2 of the District's CEQA Air Quality Guidelines, July 2004).

Siting New Sensitive Receptors within 500 Feet of Urban / Rural Roads

In April 2005, the California Environmental Protection Agency / California Air Resources Board published the "Air Quality and Land Use Handbook: A Community Health Perspective"[1]. Focusing on community health and prevention of exposure to air pollution that could be substantially elevated near freeways, it includes the following recommendations:

Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.

If any of the proposed residential development might be located within 500 feet of a rural road with 50,000 vehicles per day, the District suggests that the Specific Plan address the recommendations cited above.

The District's CEQA Air Quality Guidelines may be found on the District's website at www.mbuapcd.org under "Air Quality Plan".

Thank you for the opportunity to review the document.

Sincerely,

Jean Getchell
Supervising Planner
Planning and Air Monitoring Division

cc: Todd Muck, AMBAG

1. Air Quality and Land Use Handbook: A Community Health Perspective. California Environmental Protection Agency, California Air Resources Board. April 2005.

CC Susan

TAMC
TRANSPORTATION AGENCY
FOR MONTEREY COUNTY

Regional Transportation Planning Agency • Congestion Management Planning
Local Transportation Commission • Monterey County Service Authority for Freeways & Expressways

RECEIVED
SEP 25 2006
CITY OF SOLEDAD

September 20, 2006

Mr. Don Fleming
City of Soledad
City Hall
248 Main Street
Soledad, California 93930

SUBJECT: Comments on the Notice of Preparation for the Draft Environmental Impact Report for Miravale Phase III Specific Plan

Dear Mr. Fleming:

The Transportation Agency for Monterey County is the Regional Transportation Planning Agency and Congestion Management Agency for Monterey County. Transportation Agency staff has reviewed the Notice of Preparation for the Draft Environmental Impact Report for Miravale Phase III Specific Plan, a 920-acre project within unincorporated lands of Monterey County proposing a mixed-use development consisting of approximately 2,600 single-family residential units, 1,600 multi-family residential units, 300 senior housing units, 120 hotel rooms, 250,000 square feet of retail commercial space and an 18-hole golf course. Transportation Agency staff offers the following comments for your consideration:

Regional Road and Highway Impacts

1. The traffic analysis should evaluate the traffic impacts of the project to regional roads and highways under both "project-specific" and "cumulative" conditions, specifically US 101. The Transportation Agency and Caltrans consider payment of regional development impact fees, as identified in our Agency's *Nexus Study for a Regional Development Impact Fee,* on an ad hoc basis as adequate mitigation for new developments' cumulative impacts to state highways and regional roads across Monterey County. Under this program, regional impact fees would be discounted for any overlap with the City of Soledad's local impact fee program and for any affordable housing units that are included in the development.

Currently, the regional development impact fee is being updated to explore the implementation of zones for fee calculation based on geographic sub-regions, to utilize the most recent General Plan updates and land use assumptions, and to reevaluate the commercial trip generation rates. Taking these program refinements into consideration, the City of Greenfield Council at its August meeting adopted a Notice of Intent to adopt a regional development impact fee and to condition all new development projects with payment of the regional fee on a project-by-project basis. Transportation Agency staff will be presenting and asking for the adoption of the same Notice of Intent at the City of King Council this month, and will look to make a similar request to the City of Soledad Council in the near future.

2. The Level of Service for each regional roadway segment and intersection analyzed in the DEIR should be calculated under both project-specific and "cumulative conditions" and disclosed in the Draft Environmental Impact Report. "Cumulative conditions" should be clearly defined in the document. Roadway performance deficiencies and feasible mitigation measures under both scenarios should be identified.

3. If the development is to be located in a planned annexation area and construction is set to begin before the annexation is approved, the Transportation Agency recommends that the infrastructure, particularly roadways, sidewalks, and gutters, be constructed to a standard no less than what the City currently requires to ensure that the City or new residents will not have to bear the cost of upgrades once the annexation is complete.

Pedestrian, Bicycle, & Transit Travel

4. The Transportation Agency supports accommodation of alternative forms of transportation (rail, bus transit, bicycle and pedestrian transportation), both through the design of transportation facilities, and through the design and orientation of land uses. Our Agency urges that the attached list of alternative measures be considered and implemented by the development to promote alternatives to automobile travel and accommodate access to the project by transit, bicycle and foot. A discussion of any travel demand reduction measures to be implemented by the City of Soledad should be included in the Draft Environmental Impact Report. Monterey-Salinas Transit's *Designing for Transit* Guideline Manual should also be used as a resource for accommodating transit access to the project site.

Thank you for the opportunity to review this document. If you have any questions, please contact Michael Zeller of my staff at (831) 775-0903.

Sincerely,

Debra L. Hale
Executive Director

CC: Dave Murray, California Department of Transportation (Caltrans) District 5
Ron Lundquist, Monterey County Department of Public Works
Rob Russell, City of Salinas
Carl Sedoryk, Monterey-Salinas Transit
Nicholas Papadakis, AMBAG
Douglas Quentin, Monterey Bay Unified Air Pollution Control District

ATT: Transportation Agency Development Principles
List of Alternative Measures

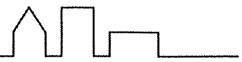
Transportation Agency for Monterey County
Transportation-Related Principles for Community Development

Mission

The Transportation Agency for Monterey County aims to develop and maintain a multi-modal transportation system that enhances the mobility, safety, access, environmental quality, and economic activities in Monterey County.

The purpose of the following set of principles is to reduce future impacts to Monterey County's regional transportation system, reduce the cost of transportation infrastructure, and improve the Transportation Agency's ability to meet Monterey County's regional transportation needs. Our agency recommends that new land use development in the county adhere to the following set of principles, which emphasize developing a land use pattern that is supportive of non-single occupant auto modes of transportation so as to maximize the carrying-capacity of Monterey County's existing regional transportation infrastructure.

1. Land Use



- **1.a** Encourage mixed use developments to accommodate short trips by non-auto modes
- **1.b** Encourage growth in areas where transportation infrastructure exists or is most cost-effective to extend
- **1.c** Encourage a balance of employment and housing to reduce regional commute demands
- **1.d** Encourage higher residential densities in core areas or around transit stops to support regular transit service throughout the region
- **1.e** Encourage land use jurisdictions to utilize the Caltrans Traffic Impact Studies Guide or develop traffic impact study guidelines of their own when analyzing the impacts of growth on the regional transportation system
- **1.f** Require new development to pay for its proportional impact to the transportation system, preferably via regional and local fee programs, or on-street project construction

2. Street Network Design

- **2.a** Provide an interconnected street system for new development to facilitate short trips by non-auto modes of transportation using the following features:
  - **2.a.1** Provide a grid-based street network.
  - **2.a.2** Encourage short block lengths in new development
  - **2.a.3** Discourage cul-de-sac streets in new development unless they incorporate pedestrian and bike easements that reduce trip lengths
- **2.b** Incorporate traffic calming features into the street network to slow the flow of traffic and enhance the pedestrian environment:
  - **2.b.1** Provide curb bulb-outs at intersections to reduce the length of pedestrian crossings
  - **2.b.2** Allow on street parking to slow the flow of cars and create pedestrian/auto buffer
  - **2.b.3** Provide landscaped buffers between pedestrians and motorized traffic and provide pedestrian-scale street lighting no more than 15 feet high

- ❖ **2.c** Design streets to accommodate all modes of transportation
  - **2.c.1** Incorporate sidewalks and bicycle lanes into new street construction
  - **2.c.2** Accommodate safe bicycle travel by providing on-street bicycle lanes and routes instead of separated bicycle paths
  - **2.c.3** Incorporate bus pullouts, transit stops, transit shelters and other transit amenities to serve new development according to the MST Designing for Transit Handbook

3. Site Design

- ❖ **3.a** Orient buildings to face the street in new development to improve access for pedestrians from sidewalks
- ❖ **3.b** Incorporate residential uses over commercial uses in commercial areas to encourage trips by foot, bike, or transit and improve access by each of these modes
- ❖ **3.b** Incorporate reduced building setbacks, especially in commercial areas, to reduce the length of pedestrian trips and facilitate easy access
- ❖ **3.c** Locate on-site parking to the rear of structures or underground
- ❖ **3.d** Provide pedestrian facilities connecting building entrances with the street where parking is not provided to the rear of structures to enhance pedestrian access and safety
- ❖ **3.f** Incorporate bicycle storage facilities into site plans to accommodate access by bicyclists

4. Transportation Demand Management

- ❖ **4.a** Encourage telecommuting in non-residential development as a traffic mitigation measure
- ❖ **4.b** Encourage flexible work schedules for employees as a traffic mitigation measure
- ❖ **4.c** Encourage employers to utilize available rideshare programs or create their own
- ❖ **4.d** Encourage employers to offer transit incentives to employees to mitigate traffic impacts
- ❖ **4.e** Provide preferential carpool or vanpool parking in non-residential developments
- ❖ **4.e** Encourage large employers to offer child care facilities as resources allow and encourage all employers to provide information on nearby child care resources
- ❖ **4.f** Locate child care facilities near employment centers

SAMPLES OF ALTERNATIVE MEASURES

1. Provide ridesharing, public transportation and nearby licensed child care facility information to tenants/buyers as part of move-in materials.

2. Print transit information on promotional materials.

3. Install bicycle amenities, such as bicycle racks and bicycle lanes.

4. Provide bus pullouts, pedestrian access, transit stops, shelters and amenities as part of the site plan.

5. Provide locked and secure transportation information centers or kiosks with bus route/schedule information, in common areas.

6. Provide pedestrian facilities linking transit stops and common areas.

7. Provide resources for site amenities that reduce vehicular trip making.

8. Park-and-ride facilities.

9. On-site childcare facilities.

10. Shuttle bus service, bus pools or improved transit service as part of the development.

11. Facilities to encourage telecommuting.

12. Pedestrian and bicycle system improvements.

13. Transit oriented design and/or pedestrian oriented design.

14. Provide preferential carpool/vanpool parking spaces.

15. Implement a parking surcharge for single occupant vehicles.

16. Provide shower/locker facilities.

17. Employ or appoint a transportation/rideshare coordinator.

18. Implement a rideshare program.

19. Provide incentives for employees to rideshare or take public transportation.

20. Implement compressed work schedules.

SAMPLES OF STREET AND ROAD IMPROVEMENTS

1. Safety improvements
2. Traffic signal improvements.
3. Traffic signals.
4. Turning or auxiliary lanes.
5. Add travel lanes.
6. Improve highway interchange.
7. Construct interchange.
8. Construct new street or road.

DEPARTMENT OF TRANSPORTATION
50 HIGUERA STREET
SAN LUIS OBISPO, CA 93401-5415
PHONE (805) 549-3101
FAX (805) 549-3077
TDD (805) 549-3259
http://www.dot.ca.gov/dist05/

Flex your power!
Be energy efficient!

September 6, 2006

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PLANNING DEPARTMENT

MON-146-.24
SCH# 2006081129

Don Fleming
City of Soledad
248 Main Street
Soledad, CA 93960

Dear Mr. Fleming:

COMMENTS TO MIRAVALE PHASE III DEVELOPMENT NOTICE OF PREPARATION

The California Department of Transportation (Department), District 5, Development Review, has reviewed the above referenced Notice of Preparation and offers the following comments in preparing your Environmental Impact Report (EIR).

1. The Department supports local development that is consistent with State planning priorities intended to promote equity, strengthen the economy, protect the environment, and promote public health and safety. We accomplish this by working with local jurisdictions to achieve a shared vision of how the transportation system should and can accommodate interregional and local travel and development.

2. To ensure the traffic study in the Draft EIR includes the information needed by the Department to analyze the impacts (both cumulative and project-specific) of this project, it is recommended that the analysis be prepared in accordance with the Department's *"Guide for the Preparation of Traffic Impact Studies."* An alternative methodology that produces technically comparable results can also be used.

3. Because the Department is responsible for the safety, operations, and maintenance of the State transportation system, our Level of Service (LOS) standards should be used to determine the significance of the project's impact. We endeavor to maintain a target LOS at the transition between LOS C and LOS D on all State transportation facilities. In cases where a State facility is already operating at an unacceptable LOS, *any* additional trips added should be considered a significant cumulative traffic impact, and should be mitigated accordingly.

4. Our future comments to this, and any subsequent EIR for the project will stress the importance of using the Association of Monterey Bay Area Governments Model for traffic analysis, and to include all impacted transportation agencies early and often in the development discussions.

5. The traffic study should include information on existing traffic volumes within the study area, including the State transportation system, and should be based on recent traffic volumes less than two years old. Counts older than two years cannot be used. Feel free to contact us for assistance in acquiring the most recent count data available.

6. The methodologies used to calculate the LOS should be consistent with the methods in the current version of the Highway Capacity Manual. All LOS calculations should also be included in the Draft EIR's as an appendix made available for review.

7. The Transportation Agency for Monterey County (TAMC) has prepared a Nexus Study, dated September 2005, for a proposed Regional Development Impact Fee Program which identifies proposed regional transportation improvements. Based on the proposed TAMC program, this project should contribute a "fair share" contribution as mitigation for its' cumulative impacts to the regional transportation system as a condition of approval. The conditions of approval should also stipulate that if the TAMC program is not implemented by December 31, 2006, the fees identified for these developments will be transferred to Caltrans to help fund improvements, including, but not limited to, U.S. 101 corridor improvements.

8. Special attention should be focused on all roadway segments analyzed in the traffic study that have higher than statewide average collision rates. The EIR should identify these areas and specify special mitigation measures as a result of the increased traffic with this development.

9. At any time during the environmental review and approval process, the Department retains the statutory right to request a formal scoping meeting to resolve any issues of concern. Such formal scoping meeting requests are allowed per the provisions of the California Public Resources Code Section 21083.9 [a] [1].

10. The issuance of any encroachment permit will be based upon reviewing complete engineering drawings, traffic studies, hydraulic calculations, environmental reports, etc.

We look forward to receiving the Draft EIR, and providing comments from a more thorough analysis. District 5 staff has been, and will continue to be, committed to working very closely with you to achieve a shared vision of how the transportation system should and can accommodate interregional and local travel.

If you have any questions, or need further clarification on items discussed above, please don't hesitate to call me at (805) 542-4751.

Sincerely,

JOHN J. OLEJNIK
Associate Transportation Planner
District 5 Development Review Coordinator

cc: Ron Lundquist (Monterey Co DPW)
Debbie Hale (TAMC)

APPENDIX B

Specific Plan Permitted Uses

LDR & LDR-H / M3-R-1 Permitted Uses		
Category	**Regulation**	**Interpretation**
Land Use	Low Density Residential (LDR) Hillside Low Density Residential (LDR - H)	
Zoning District	M3-R-1	
Density Range	1 to 10	This zone is primarily 1-6 du/ac. Density above 6 du/ac is allowed in order to accommodate affordable duplex and triplex units.
Permitted Uses		
The following uses shall be permitted in the R-1 district:		
Single family dwellings Accessory Buildings (including garage) Churches	Duets, duplexes, or triplexes. Refer also to Section 17.10.020 of the Municipal Code	Home occupations, subject to Section 17.38.140 of the Municipal Code

VR/ M3-VR Permitted Uses		
VR/ M3-VR		
Category	**Restriction**	**Interpretation**
Land Use	Village Residential (VR)	
Zoning	Village Residential (M3-VR)	
Density Range	12-30 dwelling units / gross acre	
Permitted Uses		
Single-Family dwellings, duplexes, triplexes, apartments, clustered "pack" style homes, townhouses, condominiums, accessory buildings, neighborhood serving uses - including garages, and day nurseries. Any other uses that the Planning Commission finds to be consistent with the purpose of this section and the Specific Plan.		

C / M3-GC & M3-CC Permitted Uses

Category	Restriction	Interpretation
Land Use	Commercial (C)	
Zoning	(M3-GC & M3-VC)	Includes Village Commercial and Gateway Commercial
Permitted Uses		
Village Commercial (VC)		**Gateway Commercial (GC)**
Bakery goods, barbershop, beauty shop, bicycle shop, books, clothing store, deli, department store, drug store, dry cleaner, florist shop, furniture store, garden supplies, gift shops, grocery store, hardware store, health foods, hobby shops, ice cream, laundromats, meat market, music store, newspaper stand, pet shop, photographic supplies, electronic stores, restaurants, shoe repair store, sporting goods, stationary store, toy store, any other use which the planning commission finds to be consistent with the purposes of this section		Auto parts, bakery goods, barbershop, beauty shop, bicycle shop, books, clothing store, community center, day care, deli, department store, drug store, dry cleaner, florist shop, furniture store, garden supplies, gift shops, grocery store, gym, hardware store, health foods, hobby shops, ice cream, laundromats, meat market, music store, newspaper stand, pet shop, photographic supplies, electronic stores, restaurants, spa, shoe repair store, sporting goods, stationary store, toy store, specialty retail, art gallery, any other use which the planning commission finds to be consistent with the purposes of this section
Conditional Uses		
Village Commercial (VC)		**Gateway Commercial (GC)**
Banks and other financial institutions, buildings with more than 50,000sf of gross floor area (75,000 sf for two or more stories), bowling alleys, cocktail lounges, liquor products, pool and billiards, any use the planning commission determines consistent with the provisions of this section.		Antiques and the sales of used items, banks and other financial institutions, buildings with more than 10,000sf of gross floor area (15,000 sf for two or more stories), bowling alleys, cocktail lounges, liquor products, office, pool and billiards, hotel, wine tasting room, live music venues, all drive throughs, used items including furniture and clothing where owned and operated by a non-profit organization, and any use the planning commission determines consistent with the provisions of this section.
Prohibited Uses VC & GC		
Liquor stores as a principal use, bars, automobile body and paint shop, exclusive automobile repair; sheet metal shop; fortune tellers, adult entertainment; gambling; pawn shops, thrift shops, and flea markets. All drive throughs are prohibited in Village Commercial.		

APPENDIX C

Hillside Development Standards

City of Soledad Miravale III Specific Plan
Hillside Development Standards & Guidelines
December 19, 2006

I. Introduction

The City of Soledad is situated in the mid-Salinas Valley at the base of the Gabion Mountains. The mountains provide a backdrop to the City of Soledad. It is the intent to preserve this natural asset by assuring that development on the hillside:

- Maintains the existing open rural character,
- Is in harmony with the natural setting,
- Conserves land forms and other features of the natural landscape,
- Preserves wildlife habitat and movement corridors,
- Protects and preserves viewsheds of the mountains, and
- Promotes the establishment of native trees and shrubs.

A. Goal

The goal of the Hillside Development Standards and Guidelines is to work hand-in-hand with the city's discretionary development review process to achieve design excellence that fosters sustainable development and preserves the natural environment.

B. Location

These Hillside Development Standards and Guidelines apply to lots with an average slope of 30% or greater. Refer to the Land Use Figure 2-1.

C. Hillside Development Standards versus Guidelines

The Hillside Development Standards and Guidelines contain both standards and guidelines. Refer to the low density residential chapter for standards that are not addressed in this chapter.

- Standards -- Mandatory non-discretionary regulations that must be followed. The word "shall" or "prohibited" denotes a standard or mandatory regulation.

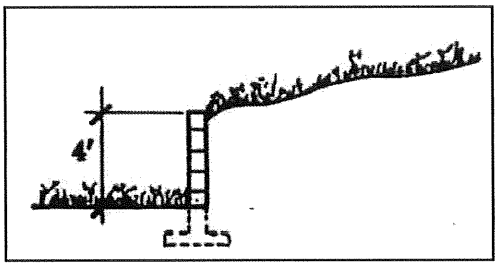
- Guidelines -- Discretionary statements that present good ideas or recommendations on how to achieve the objectives established by these Hillside Development Standards and Guidelines. The word "should" denotes that they are guidelines. Therefore. if a statement does not include the word "shall" or "prohibited", it is a guideline.

II. Site Planning

Increased lot sizes is the preferred approach in areas of 30% slope or greater. In areas with a 30% slope or greater, street sections should be reduced to two 10' travel lanes, parallel parking on one side of the street, and no sidewalks. This will help reduce the impacts of grading and create a more rural character.

A. Grading Design

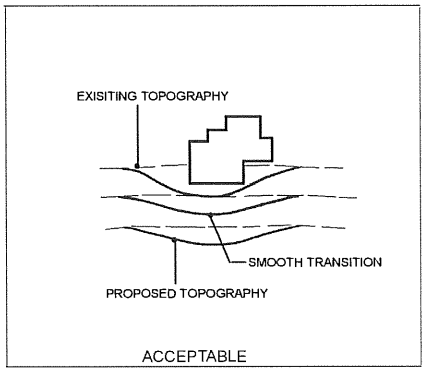
- Keep a low profile and conform to the natural slopes.
- Minimize grading on individual lots; generally, locate houses close to the street; minimize the grading of visible driveways.
- The grading plan shall minimize as much as possible erosion, sedimentation, fire, and water quality concerns.
- All cuts and fills shall be at 2:1 slope or less unless stabilized by a retaining wall or curbing as approved by the City Engineer.
- Retaining walls above 4' in height are discouraged.

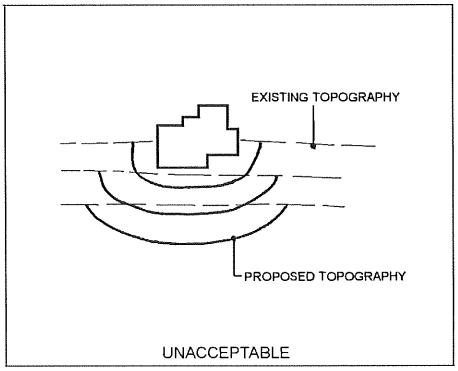


- Retaining walls more than 18" in height (measured from the immediate grade) shall be textured and colored to complement adjacent building surface or landscaping.
- To minimize grading and slope disturbance, stepped or raised foundation systems should be implemented where feasible. Raised foundations should be limited to 5' from existing grade.
- No cut slopes should be over 8' in height for homes and attached garages (this excludes cellars).
- No cut slopes should be over 4' in height for accessory buildings, tennis courts, pools, driveways, decks, and yards.
- No fill slopes should be over 3' in height.

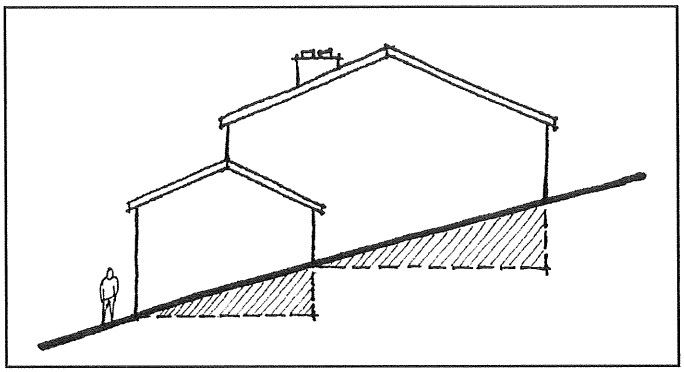
Preserve Natural Topography

- Grading transitions from existing to proposed land forms must be gradual and reflect the gradients of the existing natural slopes of the immediate area. Slopes should be rounded and contoured to blend with existing terrain.





- Grading should retain as much natural vegetation (especially trees) as possible.
- Development on hillsides shall accommodate a majority of the grade differential by stepping the buildings to reflect the slope of the natural topography.



Stepped Buildings are preferred on a hillside as opposed to large cuts or fills

- In sloped areas devoid of trees, native trees should be planted to help stabilize slope and promote the establishment of native trees.
- Attractive natural amenities such as rock outcroppings, vegetation, streams, and drainage areas should be incorporated into the development.
- Include planting that is compatible with native hillside vegetation and that provides a visual transition from developed to open areas.
- Grading plans shall include provisions for restoration of vegetation on cut and fill areas. Manufactured slopes shall be planted with fire-resistant plantings that will also help control erosion.
- Grading is not allowed during the rainy season (October 15 to April 15) unless approved by City Engineer. If grading is planned to occur between October 15 and April 15, interim provisions for erosion and sedimentation control shall be in place before grading begins in accordance with the city's storm water ordinance.

B. Fire Hazards

- A 100' buffer of irrigated landscaping shall be provided between open space areas and building structures, and may be a combination of private property and open spaces area.
- A landscape plan shall be provided and will be reviewed by the City Planning and Public Works Department and with input from the Fire Department.
- The landscape plan shall create a defensible space around the homes, and if there is a fire ladder on the property, it shall be eliminated in an environmentally sensitive manner.

- Hillside areas shall have adequate fire exits. Adequate and dependable water supplies for fire protection and suppression purposes shall be provided. If no public hydrant is available, there shall be an on-site water supply in a storage facility.
- Above-ground water tanks shall not be located in required setback areas.

C. Drainage

- Runoffs should be dispersed within a subject property to the extent possible.
- Upslope drainage is to be carefully considered during design in order to minimize impacts to downslope development.
- Manmade drainage channels shall receive a naturalizing treatment such as rock and landscaping so that the structure appears as a natural part of the environment.
- Comply with the city's storm water ordinance.
- Large drainage structures should be avoided.
- Manmade drainage channels should be placed in the least visible locations possible.

III. Building Design

- Structures should be designed to complement the site surroundings. Compatible colors and materials should be utilized.
- Foundations should step down slopes and conform to the terrain. Exposed pilings or structures cantilevered over slopes should be avoided when possible. If necessary, landscaping or other screening methods should be used to minimize visual impacts.
- Architectural features such as porches, balconies, chimneys, door placement, window proportions, dormers, wood detailing, fencing, siding, and color scheme should be used to complement the overall building design, site and neighborhood context.
- Exterior wall materials, trim and architectural details should be provided on all elevations. All elevations exposed to public rights-of-way should be architecturally enhanced.
- Building wall and roof planes should be varied and articulated into smaller modules and features to reduce the structures apparent bulk and size. Roofing colors should be soft earth tones to minimize reflective glare and visual impacts.
- Unsightly utility and mechanical equipment should be screened from view. Roof mounted air conditioners, coolers or antennas are discouraged.
- The prominence of the garage should be minimized to create a visual relationship between the front entrance of the home and the street.
- Orient upper floor, windows, decks, and balconies to avoid impacting the privacy of neighbors. Use landscaping to screen views to your neighbors living areas most sensitive to privacy.
- Buildings shall be designed to minimize bulk, mass, and volume so as to not be prominently visible from a distance or from surrounding properties.
- Buildings should be designed to conform to the natural topography of the site and run with contours. Blending with existing terrain reduces the appearance of bulk.
- Design structure to step up slope avoiding large blank walls or support columns.

A. Decks

- Decks which are attached to the ground (non-cantilevered decks) may not be higher than 5' above finish grade.
- If grade changes more than 5', decks may be stepped down slope with levels being no more than 5' in height above grade.
- Exposed deck supports are allowed on decks less than 5' in height above finish grade.

APPENDIX D

Miravale III Williamson Act Contract Information

First American Title Company

FAX COVER SHEET

DATE: 02/09/2005
TO: George Schroeder
FAX NO.: (831) 649-0566
ATTN:
FROM: Donald Turner

RE: File No.: 2701-1244859
Property: 32854 San Vicente Road, Soledad, CA 93960

SUBJECT:

Hello George
Herewith is the Williamson Act document.
It has a reference to an Assessor parcel number which no longer exists.
For your convenience I have included the current Assessor map as well as an enlarged portion that includes the property affected by the document, which is APN 257-081-026 and 257-081-027.
Let me know if you need anything further
Don Turner

This message is intended only for the use of the individual or entity to which it is addressed, and may contain information that is privileged or confidential. If the reader of this message is not the intended recipient, or the employee or agent responsible for delivering the message to the intended recipient you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by telephone and return the original message to us at the above address via the U.S. Postal Service.

If you do not receive all pages as indicated or have problems in receiving this fax, please contact the above sender at: **(831) 784-7663** Our return fax number is: **(831) 424-0974**

REEL 830 PAGE 711

RECORDED AT REQUEST OF

COUNTY OF MONTEREY

FEB 28 3 33 PM '73

OFFICE OF RECORDER
COUNTY OF MONTEREY
SALINAS, CALIFORNIA

REEL 830 PAGE 711

Before the Board of Supervisors in and for the County of Monterey, State of California

RESOLUTION NO. 73-34-25

Establishing an Agricultural Preserve with Uniform Rules Including Compatible Uses. . .) Philip R. Kelsey

WHEREAS, the County of Monterey has been requested to establish the herein agricultural preserve; and

WHEREAS, the County of Monterey is authorized to establish agricultural preserves pursuant to the California Land Conservation Act of 1965; and

WHEREAS, the procedural requirements to establish an agricultural preserve as required by the Act have been followed; and

WHEREAS, the land to be included within the agricultural preserve is used for the purpose of producing agricultural commodities for commercial purposes and compatible uses; and

WHEREAS, no land is within one mile of any city in the County of Monterey at the time this preserve is created; and

WHEREAS, the following uniform rules shall apply within this preserve;

Compatible uses for land to be included within the agricultural preserve are found to be those set out in Exhibit "A" attached hereto, and made a part hereof.

Grounds for cancellation are those set out in the Land Conservation Act and no other.

NOW, THEREFORE, BE IT RESOLVED, that the following real property located in the County of Monterey, State of California, being within Monterey County Assessor's Parcel Number(s) 257-081-03

and being more particularly described in Exhibit "B" attached hereto and made a part hereof, is hereby designated and established as an agricultural preserve within the meaning of and pursuant to the Land Conservation Act of 1965 and shall be known as and referred to as Agricultural Preserve No. 73-25.

On motion of Supervisor Church, seconded by Supervisor Branson, the foregoing resolution is adopted this 23rd day of January, 1973, by the following vote:

AYES: Supervisors Church, Atteridge, Tavernetti, Branson.
NOES: None.
ABSENT: None. Supervisor Poyner abstains.

COUNTY OF MONTEREY, STATE OF CALIFORNIA, ss.

I, ERNEST A. MAGGINI, County Clerk and ex-officio Clerk of the Board of Supervisors of the County of Monterey, State of California, hereby certify that the foregoing is a full, true and correct copy of an original order of said Board of Supervisors duly made and entered in the minutes thereof at page ... of Minute Book 28, on the 23rd day of January, 1973, and now remaining of record in my office.

Witness my hand and the seal of said Board of Supervisors this 23rd day of January, 1973.

ERNEST A. MAGGINI,
County Clerk and ex-officio Clerk of the Board of Supervisors, County of Monterey, State of California.

By ... Deputy.

EXHIBIT "A"

LAND CONSERVATION AGREEMENT

COMPATIBLE USES

The following is a list of land uses determined to be compatible with the agricultural use of the land subject to this agreement:

1. The drying, packing or other processing of an agricultural commodity usually performed on the premises where it is produced but not including slaughter houses, fertilizer yards, bone yards or plants for the reduction of animal or vegetable matter.

2. Structures necessary and incidental to the agricultural use of the land.

3. Single family dwellings incidental to the agricultural use of the land for the residence of the owner, and the family of the owner.

Single family dwellings incidental to the agricultural use of the land for the residence of the lessee of the land and the family of the lessee.

4. Dwellings for persons employed by owner or lessee in the agricultural use of the land.

5. An aircraft landing strip incidental to the agricultural use of the land.

6. The erection, construction, alteration or maintenance of gas, electric, water or communication utility facilities.

7. The erection, construction, alteration or maintenance of radio, television or microwave antennas, transmitters and related facilities.

8. Public or private hunting of wildlife or fishing.

9. Public or private hunting clubs and accessory structures.

10. Public or private rifle and pistol practice range, trap or skeet field, archery range or other similar use.

11. Public or private riding or hiking trails.

EXHIBIT "B"

REEL 830 PAGE 713

PARCEL I:

That certain real property, lying, being and situate in the Rancho San Vicente, in County of Monterey, State of California, being a portion of Subdivision C in Lot 2, as said subdivision and Lot are shown and so designated on map entitled, "MAP OF RE-SURVEY OF PART OF SAN VICENTE RANCHO", filed on the 8th day of June, 1918, in Volume 1 of Surveys, at page 94, Records of the said County of Monterey, said real property being particularly described as follows, to-wit:

BEGINNING at a one-inch diameter steel bar standing in the easterly boundary of said subdivision C, from which the original 4" x 4" post set in a rock mound at the northeast corner of said subdivision C bears N. 00° 00½' W., 4142.2 feet distant; thence along said easterly boundary S. 00° 00½' E., 2557.6 feet to a one inch diameter steel bar; thence leave said easterly boundary and running S. 89° 59½' W., 1681.4 feet to a one inch diameter steel bar; thence N. 00° 59' W., 2558.0 feet to a one inch diameter steel bar; thence N. 89° 59½' E., 1724.9 feet to the place of beginning.

CONTAINING an area of 100.00 acres of land; meridian conforming with the meridian shown on filed map hereinabove referred to.

PARCEL II:

Certain real property lying, being and situate in Rancho San Vicente in County of Monterey, State of California, being a portion of subdivision C in Lot 2, as said subdivision and Lot are shown and so designated on map entitled, "MAP OF RE-SURVEY OF PART OF SAN VICENTE RANCHO", filed on the 8th day of June 1918, in Volume 1 of Surveys, at page 94, Records of the said County of Monterey, said real property being particularly described as follows, to-wit:

BEGINNING at a one inch diameter steel bar standing in the easterly boundary of said subdivision C, from which the original 4" x 4" post set in a rock mound at the northeast corner of said subdivision C bears N. 00° 00½' W., 6699.8 feet distant; thence along said easterly boundary S. 00° 00½' E., 996.3 feet to a one inch diameter steel bar; thence leave said easterly boundary and running S. 89° 59½' W., 1664 4 feet to a one inch diameter steel bar; thence N. 0° 59' W., 996.4 feet to a one inch diameter steel bar; thence N. 89° 59½' E., 1681.4 feet to the place of beginning.

CONTAINING an area of 38.26 acres of land; meridian conforming to the meridian shown on filed map herein referred to.

Exhibit "[illegible]" - page 2

EXCEPTING FROM PARCEL II, the following described portion:

BEGINNING at a 1" diameter steel bar standing at the most Northeasterly corner of the hereinabove mentioned 38.26 acre tract of land from which the original 4" x 4" post set in a rock mound at the Northeast corner of said Subdivision C bears N. 0° 00½' W., 6699.8 feet distant; thence from said point of beginning, and running along the Easterly boundary of said 38.26 acre tract of land,

(1) S. 0° 00½' E., 996.3 feet to a 1" diameter steel bar standing at the most Southeasterly corner of said 38.26 acre tract of land; thence leave said Easterly boundary and running along the Southerly boundary of said 38.26 acre tract of land.

(2) S. 89° 59½' W., 1311.65 feet; thence leave said Southerly boundary and running

(3) N. 0° 00½' W., 996.3 feet to a point in the NOrtherly boundary of said 38.26 acre tract of land; thence along last mentioned boundary,

(4) N. 89° 59½' E., 1311.65 feet to the place of beginning.

CONTAINING an area of 30.0 acres of land.

Courses all true.

LAND CONSERVATION CONTRACT

THIS CONTRACT made and entered into this 27th day of February 1973, by and between the COUNTY OF MONTEREY, a political subdivision of the State of California, hereinafter called "County" and PHILIP R. KELSEY hereinafter called "Owner".

WITNESSETH:

WHEREAS, Owner possesses certain real property located within the County of Monterey, State of California, which is presently devoted to the production of food and fibre and is described in Exhibit A attached hereto and made a part hereof; and

WHEREAS, the property is located in an agricultural preserve (No. 73-25) heretofore established by County by Resolution No. 73-54-25; and

WHEREAS, both Owner and County desire to limit the use of the property to agricultural and compatible uses;

NOW, THEREFORE, County and Owner agree as follows:

1. CONTRACT SUBJECT TO CALIFORNIA LAND CONSERVATION ACT OF 1965, AS AMENDED.

This contract is entered into pursuant to Chapter 7 (commencing with Section 51200) of Part 1, Division 1, Title 5 of the Government Code, which is known as the California Land Conservation Act of 1965, or as the Williamson Act. This contract is subject to all of the provisions of this act including any amendments thereto which may be enacted from time to time.

2. RESTRICTION ON USE OF PROPERTY

During the term of this contract, and any and all renewals thereof, the property described in Exhibit A shall not be used by Owner, or Owner's successors in interest, for any purpose other than the production of food and fibre for commercial purposes and uses compatible thereto. A list of all such compatible uses is set forth in Exhibit B, attached hereto and by this reference incorporated herein. County, by uniform rule adopted by the Board of Supervisors of County, may from time to time during the term of this contract and all renewals thereof, add to the list of compatible uses which shall be uniform throughout the agricultural preserve in which the property in Exhibit A is located; provided, however, County may not during the term of this contract or any renewal thereof, without the prior written consent of Owner, remove any of the compatible uses for the subject property which are set forth in Exhibit B. The provisions of this contract and any uniform rule supplementing the list of compatible uses are not intended to limit or supersede the planning and zoning powers of County.

3. TERM OF CONTRACT

This contract shall become effective on the 28th day of

February, 1973, and shall remain in full force and effect for an initial term of twenty years. The initial term of twenty years shall be measured commencing as of the first day of January next succeeding the date of execution. Each succeeding first day of January shall be deemed to be the annual renewal date of this contract. This contract shall be automatically renewed on each succeeding January 1 and one additional year shall be added automatically to the initial term unless notice of nonrenewal is given as provided in paragraph 4.

4. NOTICE OF NONRENEWAL

(a) If either party desires in any year not to renew this contract, that party shall serve written notice of nonrenewal upon the other party in advance of the annual renewal date of this contract. Unless such written notice of nonrenewal is served by Owner at least 90 days prior to the renewal date, or by County at least 60 days prior to the renewal date, this contract shall be considered renewed as provided in paragraph 3 above.

(b) If either party serves written notice of nonrenewal in any year within the time limits of (a) above, this contract shall remain in effect for the balance of the period remaining since the original execution or the last renewal of this contract, as the case may be.

5. NO COMPENSATION

Owner shall not receive any payment from County in consideration of the obligations imposed under this contract, it being recognized and agreed that the consideration for the execution of this contract is the substantial benefit to be derived therefrom, and the advantage that may accrue to Owner as a result of the effect upon the assessed value of the property on account of the restrictions on the use of the property contained herein.

6. SUCCESSORS IN INTEREST

This contract and the restrictions imposed hereunder shall run with the property described in Exhibit A and shall be binding upon the heirs, executors, administrators, trustees, successors, and assigns of Owner. This contract shall also be transferred from County to any succeeding city or county acquiring jurisdiction over the property described in Exhibit A. On the completion of annexation proceedings by a city, that city shall succeed to all rights, duties and powers of the County under this contract for that portion of the property described in Exhibit A annexed to the city.

7. DIVISION OF LAND

The property described in Exhibit A shall not be divided without the written approval of the County first had and obtained. This contract is divisible in the event the property described in Exhibit A is divided. Owner agrees to submit any proposed division to County for its approval and County, if it approves said division, shall, as a condition of its approval of the division, require the execution by Owner of contract identical to this contract on each parcel created by the division. Owner agrees to execute such contract.

8. CONDEMNATION

When any action in eminent domain for the condemnation of the fee title of any land described in Exhibit A is filed or when such

land is acquired in lieu of eminent domain for a public improvement by a public agency or person, or whenever there is any such action or acquisition by the federal government, or any person, instrumentality or agency acting under authority or power of the federal government, this contract becomes null and void as to the land actually being condemned or so acquired as of the date the action is filed or so acquired.

9. CANCELLATION

This contract may be cancelled by the mutual agreement of the parties hereto and the approval of the State of California in the manner provided in this paragraph. It is understood by the parties hereto that the existence of an opportunity for another use of the property shall not be sufficient reason for the cancellation of this contract. A potential alternative use of the property may be considered only if there is no proximate non-contracted land suitable for the use to which it is proposed that this property be put. The parties further understand that the uneconomic character of an existing agricultural use shall not be sufficient reason for cancellation of this contract, but may be considered only if there is no other reasonable or comparable agricultural use to which the land may be put.

(a) Upon the written request of Owner to cancel this contract, the Board of Supervisors of the County of Monterey may adopt a resolution consenting to such request. Prior to the adoption of a resolution consenting to the request of the landowner to cancel this contract, the Board of Supervisors of County shall hold a public hearing on the matter. Notice of the hearing shall be mailed to each and every owner of property under contract within the agricultural preserve in which the property described in Exhibit A is located, and shall be published pursuant to Section 6061 of the Government Code. If at the hearing, or prior thereto, the owners of 51 percent of the acreage under contract in the agricultural preserve protest the cancellation of this contract, the Board of Supervisors shall not consent to cancel this contract.

(b) If the Board of Supervisors adopts a resolution consenting to the request of Owner to cancel this contract, the parties shall request that the cancellation be approved by the State Director of Agriculture upon the recommendation of the State Board of Agriculture. The State Board of Agriculture may recommend and the State Director of Agriculture may approve the cancellation only if they find: (1) The cancellation is not inconsistent with the purposes of the California Land Conservation Act of 1965 as amended; and (2) the cancellation is in the public interest.

(c) The provisions of sub-paragraph (b) of this paragraph 9 relating to the State Board of Agriculture and the Director of Agriculture shall be applicable only if both the State Board and the State Director consent to act as described herein. If either the State Board or the State Director fail or refuse to act within 60 days after being requested to do so, the Board of Supervisors of the County of Monterey shall act in the place and stead of the State Board and State Director and shall make all findings and decisions required by sub-paragraph (b).

10. LIABILITY OF OWNER UPON CANCELLATION

(a) Prior to any action by the Board of Supervisors giving tentative approval to the cancellation of this contract, the County Assessor shall determine the full cash value of the land as though it were free of the contractual restrictions imposed by this contract. The Assessor shall multiply such value by the most recent county ratio announced pursuant to Section 401 of the Revenue and Taxation Code, and shall certify the product to the Board of Supervisors as the cancellation valuation of the land for the purpose of determining the cancellation fee. The Board of Supervisors shall thereafter and prior to giving tentative approval to the cancellation of this contract determine and certify to the County Auditor the amount of the cancellation fee which the Owner must pay the County Treasurer as deferred taxes upon cancellation. That fee shall be an amount equal to 50 percent of the cancellation value of the property; provided, however, if after the date this contract was initially entered into the publicly announced County ratio of assessed to full cash value is changed, the percentage payment shall be changed so no greater percent of full cash value will be paid than would have been paid had there been no change in ratio. It is agreed by the parties hereto that the publicly announced County ratio at the time this contract is executed is 25 percent of full cash value.

(b) If the State Board of Agriculture recommends that it is in the public interest to do so, and the State Director of Agriculture so finds, the Director may waive any such payment or any portion thereof, or may make such payment or portion thereof, contingent upon the future use made of the property and its economic return to Owner for a period of time not to exceed the unexpired term of the contract had it not been cancelled, provided: (i) the cancellation is caused by an involuntary transfer or change in the use which may be made of the property and the property is not immediately suitable, nor will be immediately used, for a purpose which produces a greater economic return to Owner; and (ii) County has recommended to the State Board of Agriculture that no such payment be required or that the deferment of such payment or portion thereof be allowed, and the board of Supervisors has determined it is in the best interests of the public conservation of agricultural land and that such payment be either deferred or not required.

(c) The provisions of sub-paragraph (b) of this paragraph 10 relating to the State Board of Agriculture and the Director of Agriculture shall be applicable only if the State Board and the State Director both consent to act as described herein. If either the State Board or the State Director fail or refuse to act within 60 days after being requested to do so, the Board of Supervisors of the County of Monterey shall act in the place and stead of the State Board and the State Director and shall make all findings and decisions required by sub-paragraph (b).

(d) Owner shall make payment of the cancellation fee in full prior to the cancellation becoming effective.

11. NOTICES

All notices required or permitted by this contract shall be given in writing and may be mailed or delivered in person. If mailed the address of Owner shall be the last known address on the assessment records of County, and County's address shall be In Care of Board of Supervisors, Courthouse, Salinas, California, and deposit in the mail, postage prepaid, shall be deemed receipt thereof.

12. COSTS OF LITIGATION

In case County shall, without any fault on its part, be made a party to any litigation commenced by or against Owner, then Owner shall and will pay all costs and reasonable attorneys' fees incurred by or imposed upon County by or in connection with such litigation, and owner shall and will pay all costs and reasonable attorneys' fees which may be incurred or paid by County in enforcing the covenants and agreements of this contract.

IN WITNESS WHEREOF the parties hereto have caused this contract to be executed; by Owner on February 15, 1973 and by County on February 27, 1973.

COUNTY OF MONTEREY

By _____
Chairman, Board of Supervisors

STATE OF CALIFORNIA }
COUNTY OF MONTEREY } ss

On this 27th day of February, 1973, before me, ERNEST A. MAGGINI, County Clerk of the County of Monterey, and ex-officio Clerk of the Board of Supervisors and of the Superior Court, in and for said County and State, personally appeared ELLIS P. TAVERNETTI, known to me to be the Chairman of said Board of Supervisors of the County of Monterey, and known to me to be the person who executed the within instrument on behalf of said political subdivision, and acknowledged to me that such County of Monterey executed the same.

ERNEST A. MAGGINI, County Clerk and ex-officio Clerk of the Board of Supervisors of Monterey County, State of California.

By _____
Deputy

_____
Philip R. Kelsey

_____

_____

_____

_____
Owner

REEL 830 PAGE 720

STATE OF CALIFORNIA }
COUNTY OF _____ } ss

On this 15 day of February, 19 83, before me Virginia Miranda, A Notary Public in and for the County of Monterey, State of California, residing therein, duly commissioned and sworn, personally appeared Philip A. Kelsey

known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal in the County of Monterey the day and year in this certificate first above written.

Virginia D Miranda

Notary Public in and for the Monterey County of State of California.

My Commission Expires Feb 10, 1985

OFFICIAL SEAL
VIRGINIA MIRANDA
NOTARY PUBLIC-CALIFORNIA
MONTEREY COUNTY
My Commission Expires Feb. 10, 1985

EXHIBIT "A"

REEL 830 PAGE 721

PARCEL I:

That certain real property, lying, being and situate in the Rancho San Vicente, in County of Monterey, State of California, being a portion of Subdivision C in Lot 2, as said subdivision and Lot are shown and so designated on map entitled, "MAP OF RE-SURVEY OF PART OF SAN VICENTE RANCHO", filed on the 8th day of June, 1918, in Volume 1 of Surveys, at page 94, Records of the said County of Monterey, said real property being particularly described as follows, to-wit:

BEGINNING at a one-inch diameter steel bar standing in the easterly boundary of said subdivision C, from which the original 4" x 4" post set in a rock mound at the northeast corner of said subdivision C bears N. 00° 00½' W., 4142.2 feet distant; thence along said easterly boundary S. 00° 00½' E., 2557.6 feet to a one inch diameter steel bar; thence leave said easterly boundary and running S. 89° 59½' W., 1681.4 feet to a one inch diameter steel bar; thence N. 00° 59' W., 2558.0 feet to a one inch diameter steel bar; thence N. 89° 59½' E., 1724.9 feet to the place of beginning.

CONTAINING an area of 100.00 acres of land; meridian conforming with the meridian shown on filed map hereinabove referred to.

PARCEL II:

Certain real property lying, being and situate in Rancho San Vicente in County of Monterey, State of California, being a portion of subdivision C in Lot 2, as said subdivision and Lot are shown and so designated on map entitled, "MAP OF RE-SURVEY OF PART OF SAN VICENTE RANCHO", filed on the 8th day of June 1918, in Volume 1 of Surveys, at page 94, Records of the said County of Monterey, said real property being particularly described as follows, to-wit:

BEGINNING at a one inch diameter steel bar standing in the easterly boundary of said subdivision C, from which the original 4" x 4" post set in a rock mound at the northeast corner of said subdivision C bears N. 00° 00½' W., 6699.8 feet distant; thence along said easterly boundary S. 00° 00½' E., 996.3 feet to a one inch diameter steel bar; thence leave said easterly boundary and running S. 89° 59½' W., 1664.4 feet to a one inch diameter steel bar; thence N. 0° 59' W., 996.4 feet to a one inch diameter steel bar; thence N. 89° 59½' E., 1681.4 feet to the place of beginning.

CONTAINING an area of 38.26 acres of land; meridian conforming to the meridian shown on filed map herein referred to.

EXCEPTING FROM PARCEL II, the following described portion:

BEGINNING at a 1" diameter steel bar standing at the most Northeasterly corner of the hereinabove mentioned 38.26 acre tract of land from which the original 4" x 4" post set in a rock mound at the Northeast corner of said Subdivision C bears N. 0° 00½' W., 6699.8 feet distant; thence from said point of beginning, and running along the Easterly boundary of said 38.26 acre tract of land,

(1) S. 0° 00½' E., 996.3 feet to a 1" diameter steel bar standing at the most Southeasterly corner of said 38.26 acre tract of land; thence leave said Easterly boundary and running along the Southerly boundary of said 38.26 acre tract of land.

(2) S. 89° 59½' W., 1311.65 feet; thence leave said Southerly boundary and running

(3) N. 0° 00½' W., 996.3 feet to a point in the NOrtherly boundary of said 38.26 acre tract of land; thence along last mentioned boundary,

(4) N. 89° 59½' E., 1311.65 feet to the place of beginning.

CONTAINING an area of 30.0 acres of land.

Courses all true.

EXHIBIT "B"

LAND CONSERVATION AGREEMENT

COMPATIBLE USES

The following is a list of land uses determined to be compatible with the agricultural use of the land subject to this agreement:

1. The drying, packing or other processing of an agricultural commodity usually performed on the premises where it is produced but not including slaughter houses, fertilizer yards, bone yards or plants for the reduction of animal or vegetable matter.

2. Structures necessary and incidental to the agricultural use of the land.

3. Single family dwellings incidental to the agricultural use of the land for the residence of the owner, and the family of the owner.

Single family dwellings incidental to the agricultural use of the land for the residence of the lessee of the land and the family of the lessee.

4. Dwellings for persons employed by owner or lessee in the agricultural use of the land.

5. An aircraft landing strip incidental to the agricultural use of the land.

6. The erection, construction, alteration or maintenance of gas, electric, water or communication utility facilities.

7. The erection, construction, alteration or maintenance of radio, television or microwave antennas, transmitters and related facilities.

8. Public or private hunting of wildlife or fishing.

9. Public or private hunting clubs and accessory structures.

10. Public or private rifle and pistol practice range, trap or skeet field, archery range or other similar use.

11. Public or private riding or hiking trails.

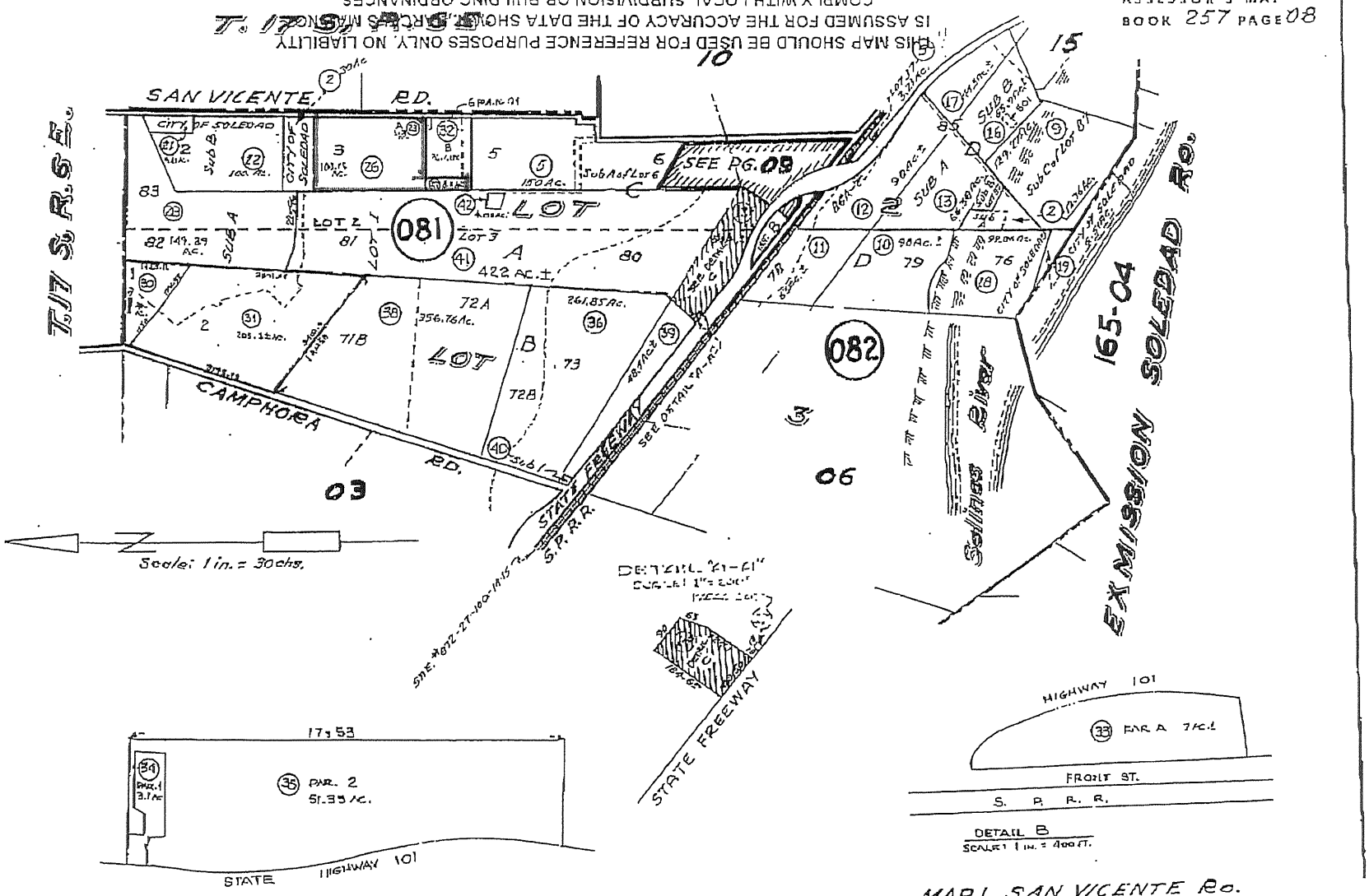
END OF DOCUMENT

Feb-09-05 09:32am From-First American Title T-432 P.015/016 F-307
8316478183
Description: Monterey,CA Assessor Map 257.8 Page: 1 of 1
Order: sdf Comment:

COUNTY OF MONTEREY
ASSESSOR'S MAP
BOOK 257 PAGE 08

THIS MAP SHOULD BE USED FOR REFERENCE PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA SHOWN. PARCELS MAY NOT COMPLY WITH LOCAL SUBDIVISION OR BUILDING ORDINANCES.

TAX CODE AREA



MAP1 SAN VICENTE Rd.
POR OF LOTS 2 & 3

JUN 2 6 2000

FERENCE PURPOSES ONLY. NO LIABILITY
F THE DATA SHOWN. PARCELS MAY NOT
VISION OR BUILDING ORDINANCES.

WHEN RECORDED MAIL TO:

Darlene Drain

Clerk to the Board of Supervisors

168 W. Alisal Street, First Floor

Salinas, California 93901

Stephen L. Vagnini
Monterey County Recorder
Recorded at the request of
County of Monterey

CRLUCY
8/04/2006
15:37:29

DOCUMENT: **2006069093**

Titles: 1/ Pages: 5

Fees....
Taxes...
Other...
AMT PAID

THIS SPACE FOR RECORDER'S USE ONLY

NOTICE OF NON-RENEWAL

OF LAND CONSERVATION CONTRACT No. 73-25

(Agricultural Preserve No. 73-25)

(HMBY, L.P., a California Limited Partnership)

NOTICE OF NON-RENEWAL OF

LAND CONSERVATION CONTRACT NO. 73-25

NOTICE IS HEREBY GIVEN:

WHEREAS, the undersigned is the owner of land described under Land Conservation Contract No. 73-25 within Agricultural Preserve No. 73-25, established pursuant to Monterey County Board of Supervisors Resolution No. 73-34-25, recorded on February 28, 1973, Document No. G 07347, in the Office of the County Recorder, at Reel 830, Page 711;

WHEREAS, the Owner desires a non-renewal of Land Conservation Contract No. 73-25;

NOW, THEREFORE, the Owner declares the intent not to renew Land Conservation Contract No. 73-25 as it applies to the real property described in the Legal Description, attached hereto as Exhibit A and incorporated by this reference.

OWNER:

HMBY, L.P. a California Limited Partnership

By: _____
Nader T. Agha

Its: General Partner

STATE OF CALIFORNIA)
COUNTY OF MONTEREY)

On 8/2, 2006, before me, Natalie C. Bates, Notary Public, personally appeared Nader T. Agha, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/ signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

[SEAL]

NATALIE C. BATES
Commission # 1562910
Notary Public - California
Monterey County
My Comm. Expires Feb 14, 2009

Natalie C Bates
Notary Public

NOTICE OF NON-RENEWAL OF

LAND CONSERVATION CONTRACT NO. 73-25

(Signature continuation page)

Notice received:

By _____ Date: August 3 2006
CLERK OF THE BOARD OF SUPERVISORS

STATE OF CALIFORNIA)
COUNTY OF MONTEREY)

On AUGUST 3, 2006 before me, CYNTHIA JUAREZ, Notary Public, personally appeared DARLENE DRAIN, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/ signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

CYNTHIA JUAREZ
Commission # 1676446
Notary Public - California
Monterey County
My Comm. Expires Jun 14, 2010

WITNESS my hand and official seal.

_____
Notary Public

[SEAL]

***Note to Clerk of the Board:** This document must be recorded, with the Monterey County Recorder's Office, within 20 days of receipt. A copy of the recorded document must be forwarded to the *Department of Conservation, Division of Land Resource Protection, Williamson Act Program, Attention: Dennis O'Bryant, Program Manager, 801 K Street, Sacramento, California 95814.* Also, please copy the Monterey County Agricultural Preserve Committee.

EXHIBIT "A"

NOTICE OF NONRENEWAL OF
LAND CONSERVATION CONTRACT NO. 73-25

LEGAL DESCRIPTION

PARCEL I

That certain real property , lying, being and situate in the Rancho San Vicente, in the County of Monterey, State of California, being a portion of Subdivision C in Lot 2, as said subdivision and Lot are shown and so designated on map entitled, "MAP OF RE-SURVEY OF PART OF SAN VICENTE RANCHO", filed on the 8th day of June, 1918, in Volume 1 of Surveys, at page 94, Records of the said County of Monterey, said real property being particularly described as follows, to-wit:

Beginning at a one-inch diameter steel bar standing in the easterly boundary of said subdivision C, from which the original 4" x 4" post sat in a rock mound at the northeast corner of said subdivision C bears N. 00° 00 ½' W. 4142.2 feet distant; thence along said easterly boundary S. 00° ½ ' E., 2557.6 feet to a one inch diameter steel bar; thence leave said easterly boundary and running S. 89° 59 ½' W., 1681.4 feet to a one inch diameter steel bar; thence N. 00° 59' W., 2558.0 feet to a one inch diameter steel bar; thence N. 89° 59 ½' E., 1724.9 feet to the place of beginning.

CONTAINING an area of 100.00 acres of land; meridian conforming with the meridian shown on filed map hereinabove referred to.

PARCEL II:

Certain real property lying, being and situate in Rancho San Vicente in County of Monterey, State of California, being a portion of sub-division C in Lot 2, as said subdivision and Lot are shown and so designated on map entitled, "Map OF RE-SURVEY OF PART OF SAN VICENTE RANCHO", filed on the 8th day of June 1918, in Volume 1 of Surveys, at page 94, Records of the said County of Monterey, said real property being particularly described as follows, to-wit:

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CONTAINING and area of 38.26 acres of land; meridian conforming to the meridian shown on filed map herein referred to.

EXCEPTING FROM PARCEL II, the following described portion:

BEGINNING at a 1" diameter steel bar standing at the most North-easterly corner of the hereinabove mentioned 38.26 acre tract of land from which the original 4" x 4" post set in a rock mound at the Northeast corner of said Subdivision C bears N. 0° 00 ½′ W., 6699.8 feet distant; thence from said point of beginning, and running along the Easterly boundary of said 38.26 acre tract of land,

(1) S. 0° 00 ½′ E. 996.3 feet to a 1" diameter steel bar standing at the most Southeasterly corner of said 38.26 acre tract of land; thence leave said Easterly boundary and running along the Southerly boundary of said 38.26 acre tract of land,

(2) S. 89° 59 ½′ W., 1311.65 feet; thence leave said Southerly boundary and running

(3) N. 0° 00 ½′ W., 996.3 feet to a point in the Northerly boundary of said 38.26 acre tract of land; thence along the last mentioned boundary,

(4) N. 89° 59 ½′ E., 1311.65 feet to the place of beginning.

CONTAINING an area of 30.0 acres of land.

Courses all true.

END OF DOCUMENT.

APPENDIX E

Air Quality URBEMIS Table / AMBAG Letter

URBEMIS 2002 For Windows 8.7.0

File Name: \\Lance\f\I&R Docs\06-161 Miravale III\AQ\Urbemis\Miravale III Phase 3.urb
Project Name: Miravale III Phase 3
Project Location: North Central Coast (Monterey area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	216.26	31.52	65.11	0.57	0.26

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	80.82	89.69	860.93	2.25	357.66

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	297.08	121.21	926.04	2.82	357.92

URBEMIS 2002 For Windows 8.7.0

File Name: \\Lance\f\I&R Docs\06-161 Miravale III\AQ\Urbemis\Miravale III Phase 3.urb
Project Name: Miravale III Phase 3
Project Location: North Central Coast (Monterey area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	1,769.45	83.02	2,869.05	6.78	425.45

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	90.51	115.08	907.15	2.22	357.66

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	1,859.96	198.10	3,776.20	8.99	783.12

URBEMIS 2002 For Windows 8.7.0

File Name: \\Lance\f\I&R Docs\06-161 Miravale III\AQ\Urbemis\Miravale III Phase 3.urb
Project Name: Miravale III Phase 3
Project Location: North Central Coast (Monterey area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	2.39	31.25	15.04	0	0.06
Hearth	1,560.84	51.77	2,854.01	6.78	425.39
Landscaping - No winter emissions					
Consumer Prdcts	134.54	-	-	-	-
Architectural Coatings	71.68	-	-	-	-
TOTALS(lbs/day,unmitigated)	1,769.45	83.02	2,869.05	6.78	425.45

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	26.02	30.81	253.99	0.62	91.41
Apartments low rise	21.42	25.11	207.02	0.51	74.51
Hotel	3.04	4.11	31.07	0.08	13.32
Strip mall	40.03	55.04	415.07	1.01	178.43
TOTAL EMISSIONS (lbs/day)	90.51	115.08	907.15	2.22	357.66

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2025 Temperature (F): 50 Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Single family housing	207.50	6.88 trips/dwelling unit	1,266.00	8,710.08
Apartments low rise	78.10	4.78 trips/dwelling unit	1,484.00	7,099.46
Hotel		7.58 trips/rooms	120.00	909.60
Strip mall		44.30 trips/1000 sq. ft.	275.00	12,182.50
		Sum of Total Trips		28,901.64
		Total Vehicle Miles Traveled		234,653.67

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	53.50	0.00	100.00	0.00
Light Truck < 3,750 lbs	15.70	0.00	99.40	0.60
Light Truck 3,751- 5,750	16.50	0.00	100.00	0.00
Med Truck 5,751- 8,500	7.50	0.00	98.70	1.30
Lite-Heavy 8,501-10,000	1.00	0.00	80.00	20.00
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	0.90	0.00	22.20	77.80
Heavy-Heavy 33,001-60,000	0.80	0.00	0.00	100.00
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.50	40.00	60.00	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	2.00	0.00	90.00	10.00

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.0	5.0	6.5	9.6	9.6	9.6
Rural Trip Length (miles)	10.0	5.0	6.5	9.6	9.6	9.6
Trip Speeds (mph)	30.0	20.0	25.0	30.0	30.0	30.0
% of Trips - Residential	22.6	27.4	50.0			
% of Trips - Commercial (by land use)						
Hotel				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Single family housing
have changed from the defaults 9.57/422. to 6.88/207.5
The Trip Rate and/or Acreage values for Apartments low rise
have changed from the defaults 6.9/92.75 to 4.784/78.1

Changes made to the default values for Area

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2025.

URBEMIS 2002 For Windows 8.7.0

File Name: \\Lance\f\I&R Docs\06-161 Miravale III\AQ\Urbemis\Miravale III Phase 3.urb
Project Name: Miravale III Phase 3
Project Location: North Central Coast (Monterey area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	2.39	31.25	15.04	0	0.06
Hearth - No summer emissions					
Landscaping	7.65	0.27	50.07	0.57	0.20
Consumer Prdcts	134.54	-	-	-	-
Architectural Coatings	71.68	-	-	-	-
TOTALS(lbs/day,unmitigated)	216.26	31.52	65.11	0.57	0.26

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	24.76	24.02	239.98	0.64	91.41
Apartments low rise	21.72	19.58	195.60	0.52	74.51
Hotel	2.71	3.20	29.65	0.08	13.32
Strip mall	31.63	42.89	395.71	1.01	178.43
TOTAL EMISSIONS (lbs/day)	80.82	89.69	860.93	2.25	357.66

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2025 Temperature (F): 75 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Single family housing	207.50	6.88 trips/dwelling unit	1,266.00	8,710.08
Apartments low rise	78.10	4.78 trips/dwelling unit	1,484.00	7,099.46
Hotel		7.58 trips/rooms	120.00	909.60
Strip mall		44.30 trips/1000 sq. ft.	275.00	12,182.50
		Sum of Total Trips		28,901.64
		Total Vehicle Miles Traveled		234,653.67

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	53.50	0.00	100.00	0.00
Light Truck < 3,750 lbs	15.70	0.00	99.40	0.60
Light Truck 3,751- 5,750	16.50	0.00	100.00	0.00
Med Truck 5,751- 8,500	7.50	0.00	98.70	1.30
Lite-Heavy 8,501-10,000	1.00	0.00	80.00	20.00
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	0.90	0.00	22.20	77.80
Heavy-Heavy 33,001-60,000	0.80	0.00	0.00	100.00
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.50	40.00	60.00	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	2.00	0.00	90.00	10.00

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.0	5.0	6.5	9.6	9.6	9.6
Rural Trip Length (miles)	10.0	5.0	6.5	9.6	9.6	9.6
Trip Speeds (mph)	30.0	20.0	25.0	30.0	30.0	30.0
% of Trips - Residential	22.6	27.4	50.0			
% of Trips - Commercial (by land use)						
Hotel				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Single family housing
have changed from the defaults 9.57/422. to 6.88/207.5
The Trip Rate and/or Acreage values for Apartments low rise
have changed from the defaults 6.9/92.75 to 4.784/78.1

Changes made to the default values for Area

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2025.

URBEMIS 2002 For Windows 8.7.0

File Name: \\Lance\f\I&R Docs\06-161 Miravale III\AQ\Urbemis\Miravale III Phase 2.urb
Project Name: Miravale III Phase 2
Project Location: North Central Coast (Monterey area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	167.67	25.26	51.91	0.44	0.20

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	98.28	116.62	1,101.64	1.98	319.78

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	265.95	141.88	1,153.55	2.42	319.98

URBEMIS 2002 For Windows 8.7.0

File Name: \\Lance\f\I&R Docs\06-161 Miravale III\AQ\Urbemis\Miravale III Phase 2.urb
Project Name: Miravale III Phase 2
Project Location: North Central Coast (Monterey area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	1,360.35	64.82	2,204.29	5.20	326.75

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	112.19	150.07	1,197.22	1.95	319.78

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	1,472.53	214.89	3,401.51	7.16	646.53

URBEMIS 2002 For Windows 8.7.0

File Name: \\Lance\f\I&R Docs\06-161 Miravale III\AQ\Urbemis\Miravale III Phase 2.urb
Project Name: Miravale III Phase 2
Project Location: North Central Coast (Monterey area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	1.91	25.04	12.40	0	0.05
Hearth	1,198.73	39.78	2,191.89	5.20	326.70
Landscaping - No winter emissions					
Consumer Prdcts	103.33	-	-	-	-
Architectural Coatings	56.38	-	-	-	-
TOTALS(lbs/day,unmitigated)	1,360.35	64.82	2,204.29	5.20	326.75

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	28.59	35.08	295.55	0.48	71.26
Apartments low rise	22.89	27.86	234.69	0.38	56.59
Hotel	4.27	6.06	46.44	0.08	13.34
Strip mall	56.43	81.07	620.54	1.01	178.59
TOTAL EMISSIONS (lbs/day)	112.19	150.07	1,197.22	1.95	319.78

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2020 Temperature (F): 50 Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Single family housing	161.60	6.88 trips/dwelling unit	986.00	6,783.68
Apartments low rise	59.30	4.78 trips/dwelling unit	1,126.00	5,386.78
Hotel		7.58 trips/rooms	120.00	909.60
Strip mall		44.30 trips/1000 sq. ft.	275.00	12,182.50
		Sum of Total Trips		25,262.56
		Total Vehicle Miles Traveled		209,691.39

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.40	0.40	99.40	0.20
Light Truck < 3,750 lbs	15.30	0.70	98.00	1.30
Light Truck 3,751- 5,750	16.40	0.60	98.80	0.60
Med Truck 5,751- 8,500	7.30	0.00	98.60	1.40
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.80	0.00	0.00	100.00
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.60	50.00	50.00	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.50	0.00	93.30	6.70

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.0	5.0	6.5	9.6	9.6	9.6
Rural Trip Length (miles)	10.0	5.0	6.5	9.6	9.6	9.6
Trip Speeds (mph)	30.0	20.0	25.0	30.0	30.0	30.0
% of Trips - Residential	22.6	27.4	50.0			
% of Trips - Commercial (by land use)						
Hotel				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Single family housing
have changed from the defaults 9.57/328.67 to 6.88/161.6
The Trip Rate and/or Acreage values for Apartments low rise
have changed from the defaults 6.9/70.38 to 4.784/59.3

Changes made to the default values for Area

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2020.

URBEMIS 2002 For Windows 8.7.0

File Name: \\Lance\f\I&R Docs\06-161 Miravale III\AQ\Urbemis\Miravale III Phase 2.urb
Project Name: Miravale III Phase 2
Project Location: North Central Coast (Monterey area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	1.91	25.04	12.40	0	0.05
Hearth - No summer emissions					
Landscaping	6.04	0.21	39.51	0.44	0.16
Consumer Prdcts	103.33	-	-	-	-
Architectural Coatings	56.38	-	-	-	-
TOTALS(lbs/day,unmitigated)	167.67	25.26	51.91	0.44	0.20

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	26.96	27.28	270.89	0.50	71.26
Apartments low rise	22.97	21.66	215.11	0.39	56.59
Hotel	3.79	4.70	42.90	0.08	13.34
Strip mall	44.57	62.97	572.74	1.01	178.59
TOTAL EMISSIONS (lbs/day)	98.28	116.62	1,101.64	1.98	319.78

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2020 Temperature (F): 75 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Single family housing	161.60	6.88 trips/dwelling unit	986.00	6,783.68
Apartments low rise	59.30	4.78 trips/dwelling unit	1,126.00	5,386.78
Hotel		7.58 trips/rooms	120.00	909.60
Strip mall		44.30 trips/1000 sq. ft.	275.00	12,182.50
		Sum of Total Trips		25,262.56
		Total Vehicle Miles Traveled		209,691.39

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.40	0.40	99.40	0.20
Light Truck < 3,750 lbs	15.30	0.70	98.00	1.30
Light Truck 3,751- 5,750	16.40	0.60	98.80	0.60
Med Truck 5,751- 8,500	7.30	0.00	98.60	1.40
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.80	0.00	0.00	100.00
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.60	50.00	50.00	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.50	0.00	93.30	6.70

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.0	5.0	6.5	9.6	9.6	9.6
Rural Trip Length (miles)	10.0	5.0	6.5	9.6	9.6	9.6
Trip Speeds (mph)	30.0	20.0	25.0	30.0	30.0	30.0
% of Trips - Residential	22.6	27.4	50.0			
% of Trips - Commercial (by land use)						
Hotel				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Single family housing have changed from the defaults 9.57/328.67 to 6.88/161.6
The Trip Rate and/or Acreage values for Apartments low rise have changed from the defaults 6.9/70.38 to 4.784/59.3

Changes made to the default values for Area

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2020.

URBEMIS 2002 For Windows 8.7.0

File Name: \\Lance\f\I&R Docs\06-161 Miravale III\AQ\Urbemis\Miravale III Phase 1.urb
Project Name: Miravale III Phase 1
Project Location: North Central Coast (Monterey area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	35.37	7.35	18.11	0.14	0.07

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	50.45	69.35	608.91	0.88	132.56

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	85.82	76.70	627.02	1.02	132.63

URBEMIS 2002 For Windows 8.7.0

File Name: \\Lance\f\I&R Docs\06-161 Miravale III\AQ\Urbemis\Miravale III Phase 1.urb
Project Name: Miravale III Phase 1
Project Location: North Central Coast (Monterey area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	246.10	14.54	393.58	0.93	58.04

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	60.73	89.15	657.74	0.78	132.56

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	306.83	103.69	1,051.32	1.71	190.60

URBEMIS 2002 For Windows 8.7.0

File Name: \\Lance\f\I&R Docs\06-161 Miravale III\AQ\Urbemis\Miravale III Phase 1.urb
Project Name: Miravale III Phase 1
Project Location: North Central Coast (Monterey area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.55	7.28	4.31	0	0.01
Hearth	212.85	7.26	389.27	0.93	58.02
Landscaping - No winter emissions					
Consumer Prdcts	18.35	-	-	-	-
Architectural Coatings	14.35	-	-	-	-
TOTALS(lbs/day,unmitigated)	246.10	14.54	393.58	0.93	58.04

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	12.18	15.81	126.35	0.15	22.00
Apartments low rise	1.99	2.57	20.52	0.02	3.57
Hotel	5.86	8.83	63.87	0.08	13.35
Strip mall	40.69	61.94	447.00	0.53	93.65
TOTAL EMISSIONS (lbs/day)	60.73	89.15	657.74	0.78	132.56

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015 Temperature (F): 50 Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Single family housing	49.83	6.88 trips/dwelling unit	304.00	2,091.52
Apartments low rise	3.74	4.78 trips/dwelling unit	71.00	339.66
Hotel		7.58 trips/rooms	120.00	909.60
Strip mall		44.30 trips/1000 sq. ft.	144.05	6,381.42
		Sum of Total Trips		9,722.20
		Total Vehicle Miles Traveled		86,962.14

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.40	0.40	99.40	0.20
Light Truck < 3,750 lbs	15.30	0.70	98.00	1.30
Light Truck 3,751- 5,750	16.40	0.60	98.80	0.60
Med Truck 5,751- 8,500	7.30	0.00	98.60	1.40
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.80	0.00	0.00	100.00
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.60	50.00	50.00	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.50	0.00	93.30	6.70

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.0	5.0	6.5	9.6	9.6	9.6
Rural Trip Length (miles)	10.0	5.0	6.5	9.6	9.6	9.6
Trip Speeds (mph)	30.0	20.0	25.0	30.0	30.0	30.0
% of Trips - Residential	22.6	27.4	50.0			
% of Trips - Commercial (by land use)						
Hotel				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Single family housing have changed from the defaults 9.57/101.33 to 6.88/49.83
The Trip Rate and/or Acreage values for Apartments low rise have changed from the defaults 6.9/4.44 to 4.784/3.74

Changes made to the default values for Area

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.

URBEMIS 2002 For Windows 8.7.0

File Name: \\Lance\f\I&R Docs\06-161 Miravale III\AQ\Urbemis\Miravale III Phase 1.urb
Project Name: Miravale III Phase 1
Project Location: North Central Coast (Monterey area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.55	7.28	4.31	0	0.01
Hearth - No summer emissions					
Landscaping	2.12	0.07	13.80	0.14	0.05
Consumer Prdcts	18.35	-	-	-	-
Architectural Coatings	14.35	-	-	-	-
TOTALS(lbs/day,unmitigated)	35.37	7.35	18.11	0.14	0.07

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	11.35	12.30	116.25	0.16	22.00
Apartments low rise	1.96	2.00	18.88	0.03	3.57
Hotel	5.13	6.87	59.28	0.09	13.35
Strip mall	32.01	48.18	414.50	0.61	93.65
TOTAL EMISSIONS (lbs/day)	50.45	69.35	608.91	0.88	132.56

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015 Temperature (F): 75 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Single family housing	49.83	6.88 trips/dwelling unit	304.00	2,091.52
Apartments low rise	3.74	4.78 trips/dwelling unit	71.00	339.66
Hotel		7.58 trips/rooms	120.00	909.60
Strip mall		44.30 trips/1000 sq. ft.	144.05	6,381.42
		Sum of Total Trips		9,722.20
		Total Vehicle Miles Traveled		86,962.14

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.40	0.40	99.40	0.20
Light Truck < 3,750 lbs	15.30	0.70	98.00	1.30
Light Truck 3,751- 5,750	16.40	0.60	98.80	0.60
Med Truck 5,751- 8,500	7.30	0.00	98.60	1.40
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.80	0.00	0.00	100.00
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.60	50.00	50.00	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.50	0.00	93.30	6.70

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.0	5.0	6.5	9.6	9.6	9.6
Rural Trip Length (miles)	10.0	5.0	6.5	9.6	9.6	9.6
Trip Speeds (mph)	30.0	20.0	25.0	30.0	30.0	30.0
% of Trips - Residential	22.6	27.4	50.0			
% of Trips - Commercial (by land use)						
Hotel				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Single family housing have changed from the defaults 9.57/101.33 to 6.88/49.83
The Trip Rate and/or Acreage values for Apartments low rise have changed from the defaults 6.9/4.44 to 4.784/3.74

Changes made to the default values for Area

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.

URBEMIS 2002 For Windows 8.7.0

File Name: \\Lance\f\I&R Docs\06-161 Miravale III\AQ\Urbemis\Miravale III Phase 4.urb
Project Name: Miravale III Phase 4
Project Location: North Central Coast (Monterey area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	328.45	46.10	98.57	0.89	0.39

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	82.08	82.01	844.31	2.74	425.93

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	410.53	128.12	942.88	3.62	426.33

URBEMIS 2002 For Windows 8.7.0

File Name: \\Lance\f\I&R Docs\06-161 Miravale III\AQ\Urbemis\Miravale III Phase 4.urb
Project Name: Miravale III Phase 4
Project Location: North Central Coast (Monterey area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	2,700.45	124.81	4,380.05	10.35	649.78

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	90.67	105.34	887.03	2.69	425.93

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	2,791.12	230.15	5,267.08	13.04	1,075.72

URBEMIS 2002 For Windows 8.7.0

File Name: \\Lance\f\I&R Docs\06-161 Miravale III\AQ\Urbemis\Miravale III Phase 4.urb
Project Name: Miravale III Phase 4
Project Location: North Central Coast (Monterey area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	3.51	45.69	21.18	0	0.09
Hearth	2,383.83	79.12	4,358.88	10.35	649.70
Landscaping - No winter emissions					
Consumer Prdcts	205.48	-	-	-	-
Architectural Coatings	107.64	-	-	-	-
TOTALS(lbs/day,unmitigated)	2,700.45	124.81	4,380.05	10.35	649.78

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	24.81	27.29	238.06	0.72	106.06
Apartments low rise	26.42	28.79	251.12	0.76	111.88
Retirement community	4.08	4.38	38.25	0.12	17.04
Hotel	2.50	3.13	25.13	0.08	13.31
Strip mall	32.85	41.74	334.46	1.01	177.65
TOTAL EMISSIONS (lbs/day)	90.67	105.34	887.03	2.69	425.93

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2030 Temperature (F): 50 Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Single family housing	241.00	6.88 trips/dwelling unit	1,470.00	10,113.60
Apartments low rise	117.40	4.78 trips/dwelling unit	2,230.00	10,668.32
Retirement community	26.30	3.25 trips/dwelling unit	500.00	1,625.00
Hotel		7.58 trips/rooms	120.00	909.60
Strip mall		44.30 trips/1000 sq. ft.	274.00	12,138.20
		Sum of Total Trips		35,454.72
		Total Vehicle Miles Traveled		279,481.51

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	52.50	0.00	100.00	0.00
Light Truck < 3,750 lbs	15.90	0.00	100.00	0.00
Light Truck 3,751- 5,750	16.70	0.00	100.00	0.00
Med Truck 5,751- 8,500	7.60	0.00	100.00	0.00
Lite-Heavy 8,501-10,000	1.00	0.00	80.00	20.00
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	0.90	0.00	22.20	77.80
Heavy-Heavy 33,001-60,000	0.70	0.00	0.00	100.00
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.50	33.30	66.70	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	2.60	0.00	92.30	7.70

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.0	5.0	6.5	9.6	9.6	9.6
Rural Trip Length (miles)	10.0	5.0	6.5	9.6	9.6	9.6
Trip Speeds (mph)	30.0	20.0	25.0	30.0	30.0	30.0
% of Trips - Residential	22.6	27.4	50.0			
% of Trips - Commercial (by land use)						
Hotel				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Single family housing
have changed from the defaults 9.57/490. to 6.88/241.
The Trip Rate and/or Acreage values for Apartments low rise
have changed from the defaults 6.9/139.38 to 4.784/117.4
The Trip Rate and/or Acreage values for Retirement community
have changed from the defaults 3.71/100. to 3.25/26.3

Changes made to the default values for Area

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2030.

URBEMIS 2002 For Windows 8.7.0

File Name: \\Lance\f\I&R Docs\06-161 Miravale III\AQ\Urbemis\Miravale III Phase 4.urb
Project Name: Miravale III Phase 4
Project Location: North Central Coast (Monterey area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	3.51	45.69	21.18	0	0.09
Hearth - No summer emissions					
Landscaping	11.83	0.41	77.39	0.89	0.31
Consumer Prdcts	205.48	-	-	-	-
Architectural Coatings	107.64	-	-	-	-
TOTALS(lbs/day,unmitigated)	328.45	46.10	98.57	0.89	0.39

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	23.22	21.24	225.79	0.74	106.06
Apartments low rise	26.22	22.41	238.17	0.79	111.88
Retirement community	4.40	3.41	36.28	0.12	17.04
Hotel	2.21	2.44	24.06	0.08	13.31
Strip mall	26.02	32.52	320.01	1.01	177.65
TOTAL EMISSIONS (lbs/day)	82.08	82.01	844.31	2.74	425.93

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2030 Temperature (F): 75 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Single family housing	241.00	6.88 trips/dwelling unit	1,470.00	10,113.60
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Hotel		7.58 trips/rooms	120.00	909.60
Strip mall		44.30 trips/1000 sq. ft.	274.00	12,138.20
		Sum of Total Trips		35,454.72
		Total Vehicle Miles Traveled		279,481.51

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	52.50	0.00	100.00	0.00
Light Truck < 3,750 lbs	15.90	0.00	100.00	0.00
Light Truck 3,751- 5,750	16.70	0.00	100.00	0.00
Med Truck 5,751- 8,500	7.60	0.00	100.00	0.00
Lite-Heavy 8,501-10,000	1.00	0.00	80.00	20.00
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	0.90	0.00	22.20	77.80
Heavy-Heavy 33,001-60,000	0.70	0.00	0.00	100.00
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.50	33.30	66.70	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	2.60	0.00	92.30	7.70

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.0	5.0	6.5	9.6	9.6	9.6
Rural Trip Length (miles)	10.0	5.0	6.5	9.6	9.6	9.6
Trip Speeds (mph)	30.0	20.0	25.0	30.0	30.0	30.0
% of Trips - Residential	22.6	27.4	50.0			
% of Trips - Commercial (by land use)						
Hotel				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Single family housing
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The Trip Rate and/or Acreage values for Apartments low rise
have changed from the defaults 6.9/139.38 to 4.784/117.4
The Trip Rate and/or Acreage values for Retirement community
have changed from the defaults 3.71/100. to 3.25/26.3

Changes made to the default values for Area

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2030.

Attachment 2

AMBAG CONSISTENCY LETTER

AMBAG
ASSOCIATION OF MONTEREY BAY AREA GOVERNMENTS

February 21, 2007

Alina Pommerenck
Illingworth & Rodkin, Inc.
505 Petaluma Boulevard South
Petaluma, CA 94952

Dear Ms. Pommerenck:

This letter is in response to your February 10, 2007 request for a determination of consistency of the Miravale Phase III Subdivision EIR with the *Air Quality Management Plan for the Monterey Bay Region* (AQMP).

Consistency of the institutional/commercial portions of this project are determined by comparing the estimated current population of the jurisdiction in which the project is located with the applicable population forecast in the AQMP. If the estimated current population does not exceed the forecast, indirect emissions associated with the project are deemed to be consistent with the AQMP.

As the current population of the nearest city, Soledad is 28,075 (1/1/06 Department of Finance estimate). The forecasted population for Soledad in the year 2010, the next forecasted year, is 32,413. As the current population of Soledad is less than the forecasted population, the institutional/commercial/industrial portion of the Miravale Phase III Subdivision EIR is **consistent** with the AQMP.

Consistency of housing projects with the AQMP is analyzed by comparing the total potential population growth facilitated by the project with the forecasted growth for Monterey County. The *2004 Population, Housing Unit, and Employment Forecasts* adopted by the AMBAG Board of Directors on April 14, 2004 are the forecasts used for this consistency determination.

AMBAG staff surveyed each jurisdiction in Monterey County to determine the number of housing units that jurisdictions have approved but have not yet received a building permit. The total number of units is 8,395. Building permit data was also collected. A total of 867 housing units have received building permits between January and December 2006. The California Department of Finance estimates there are 138,617 dwelling units in Monterey County as of 1/01/06. Combined, there are 147,879 existing, approved, and or permitted housing units in Monterey County as of 2006.

APPENDIX F

Special-status Species Potentially Present in the Project Vicinity

Appendix F. Table of Special-status Species Potentially Present in the Project Vicinity. Sources: USFWS Listed Species in Monterey County, CNDDB occurrences from Soledad quad and all surrounding quads, published and unpublished data, and personal knowledge.

Species	Status (USFWS/ CDFG/ CNPS)	General Habitat	Potential Occurrence within Project Vicinity
MAMMALS			
Antrozous pallidus Pallid bat	--/CSC	A wide variety of habitat are utilized, including grasslands, shrublands, woodlands, and forest from sea level up through mixed conifer forests. Most common in open, dry habitats with rocky areas for roosting. Also relatively common on bridges.	**Medium.** No CNDDB occurrences within 10 miles of the project site. Appropriate foraging habitat and marginally appropriate roosting habitat is present within project boundaries.
Dipodomys elephantinus big-eared kangaroo rat	--/ CSC	Chaparral covered slopes of the southern part of the Gabilian Range, in the vicinity of the Pinnacles. Forages under shrubs and in open burrows for cover and nesting.	**Not Present.** Appropriate habitat not present. Species not captured during onsite small mammal trapping study.
Enhydra lutris nereis southern sea-otter	FT/	Found in nearshore marine habitats environments of California from Ano Nuevo to Point Sal. Often associated with giant kelp and bull kelp, these opportunistic foragers eat mainly abalones, sea urchins, crabs, and clams.	**Not Present.** Habitat absent.
Eumops perotis californicus Western mastiff-bat	FSC/ CSC	Many open habitats including conifer and deciduous woodlands, coastal scrub, grassland, and chaparral. Roost in crevices in cliff faces, high buildings, trees, and tunnels.	**Unlikely.** No CNDDB occurrences of this species within 10 miles of the project site. The project site supports marginally appropriate foraging and roosting habitat for this species.
Neotoma fuscipes luciana Monterey dusky-footed woodrat	--/ CSC	Dense chaparral, oak and riparian woodland, and in mixed coniferous forest that has a well developed understory. Prefers fairly moist habitat but is also found in drier habitats such as pinyon-juniper woodland.	**Not Present.** Appropriate habitat not present. No woodrat nests observed.
Perognathus inornatus psamnophilus Salinas pocket mouse	FSC/ CSC	Typically found in grasslands and blue oak savanna, needs friable soils.	**Present.** One male was captured during onsite small mammal sampling, and appropriate habitat is

Species	Status (USFWS/ CDFG/ CNPS)	General Habitat	Potential Occurrence within Project Vicinity
			present in foothill portions of the site.
Taxidea taxus American badger	--/CSC	dry, open grasslands, fields, and pastures	**Present.** CNDDB reports an occurrence of this species approximately 6 miles south of the project site. Appropriate habitat is present in foothill portions of the site. American badger dens observed near onsite reservoirs and in foothill habitats.
Vulpes macrotis mutica San Joaquin Kit fox	FE/ ST	Open, level areas with loose-textured soils supporting scattered, shrubby vegetation with little human disturbance. Live in annual grasslands or grassy open stages dominated by scattered brush, shrubs, and scrub.	**Present.** The CNDDB reports the presence of SJKF critical habitat within 2 km of project boundaries. Appropriate denning habitat is present in foothill portions of the site. Active and fallow agricultural lands may provide foraging and dispersal habitat for this species. This species is assumed present.
BIRDS			
Accipiter cooperii Cooper's hawk	--/ CSC	Resident throughout most of the wooded portion of the state. Dense stands of live oak, riparian deciduous, or other forest habitats near water used most frequently. Seldom found in areas without dense tree stands, or patchy woodland habitats.	**Low.** No CNDDB occurrences of this species within 10 miles of the project site. Appropriate nesting habitat not present within project boundaries.
Accipiter striatus sharp-shinned hawk	--/ CSC	Uses dense stands in close proximity to open areas. Roosts in intermediate to high-canopy forest. Nests in dense, even-aged, single-layered forest canopy. Winters in woodlands.	**Low.** No CNDDB occurrences of this species within 10 miles of the project site. Appropriate nesting habitat not present within project boundaries.

Species	Status (USFWS/ CDFG/ CNPS)	General Habitat	Potential Occurrence within Project Vicinity
Agelaius tricolor tricolored blackbird	--/ CSC	Nest in colonies in dense riparian vegetation, along rivers, lagoons, lakes, and ponds. Forages over grassland or aquatic habitats.	**Low.** No CNDDB occurrences within 10 miles of the project site. No tric's observed at the onsite reservoir and/or ag lands during multiple site visits by qualified biologists (Pers. Obs. David Keegan)
Aquila chrysaetos golden eagle	--/CSC	Use rolling foot-hills, mountain terrain, wide arid plateaus deeply cut by streams and canyons, open mountain slopes, cliffs, and rocky outcrops. Nest in secluded cliffs with overhanging ledges as well as large trees.	**Medium.** No CNDDB occurrences within 10 miles of the project site, however, appropriate foraging habitat is present throughout the project site. No nesting habitat present.
Athene cunicularia Western burrowing owl	FSC/ CSC	Burrows are protected. Require open grassland habitats with low-growing vegetation and abandoned burrows. Prefers these areas assoc. with some raised perches.	**Present.** No CNDDB occurrences within 10-miles of the project site, however, DD&A and Biosearch biologists have observed several burrowing owls and occupied burrows in the course of protocol-level surveys for this species.
Brachyramphus marmoratus marbled murrelet	FT/	Occur year-round in marine subtidal and pelagic habitats from the Oregon border to Point Sal. Partial to coastlines with stands of mature redwood and Douglas-fir. Requires dense mature forests of redwood and/or Douglas-fir for breeding and nesting.	**Not Present.** No appropriate habitat.
Buteo swainsoni Swainson's hawk	FSC/ ST	Generally found associate with plains, range, open hills, and sparse trees.	**Unlikley,** No CNDDB occurrences within 10-miles of the project site. This species typically forages in the vicinity of nesting habitat. No nesting habitat present within

Species	Status (USFWS/ CDFG/ CNPS)	General Habitat	Potential Occurrence within Project Vicinity
			or adjacent to the project site.
Circus cyaneus Northern harrier	--/ CSC	Generally found in flat open areas with tall, dense grasses, shrubs, and edges for cover and breeding. Use tall grasses in wetlands or at wetland borders for nesting.	**Present.** No CNDDB occurrences within 10-miles of the project site, however, appropriate foraging habitat is present, and one individual was observed foraging over foothill portions of the site.
Charadrius alexandrinus nivosus Western snowy plover	FT/ CSC	Sandy beaches on marine and estuarine shores, also salt pond levees and the shores of large alkali lakes. Requires sandy, gravelly or friable soil substrate for nesting.	**Not Present.** No habitat present.
Eremophila alpestris California horned lark	---/CSC	Variety of open habitats, usually where large trees and/or shrubs are absent. Found from grasslands along the coast to deserts at sea-level and alpine dwarf-shrub habitats are higher elevations. Builds open cup-like nests on the ground.	**Medium.** No CNDDB occurrences, but this species is often not reported. Appropriate habitat for this species is present within project boundaries, but none have been observed.
Elanus leucurus white-tailed kite	--/ CFP	Open groves, river valleys, marshes, and grasslands. Prefer such area with low roosts (fences etc.). Nest in shrubs and trees adjacent to grasslands.	**Present.** No CNDDB occurrences within 10-miles of the site, however, appropriate foraging habitat is present throughout grassland portions of the site, and DD&A and Biosearch biologists have observed this species within proposed development boundaries.
Falco columbarius Merlin	--/CSC	Uses a variety of habitats in both winter and during migration.	**Low.** No CNDDB occurrences within 10-miles of the site, however, appropriate foraging habitat is present throughout grassland portions of

Species	Status (USFWS/ CDFG/ CNPS)	General Habitat	Potential Occurrence within Project Vicinity
			the site. This species does not nest within Monterey County.
Falco peregrinus American Peregrine Falcon	FE/SE	Forages for other birds over a variety of habitats. Breeds primarily on rocky cliffs.	**Unlikely** No CNDDB occurrences within 10-miles of the site. No appropriate nesting habitat. Project site is >30 miles from the coast.
Riparian riparia bank swallow	--/ ST	Nest colonially in sand banks. Found near water; fields, marshes, streams, and lakes.	**Not Present.** Appropriate nesting habitat is not present within the project site or immediate vicinity (pers. comm. Don Roberson).
Sterna antillarum browni California least tern	FE/ SE	Sea beaches, bays; large rivers, bars.	**Not Present.** Appropriate habitat not present.
Vireo bellii pusillus Least Bell's vireo	FE/SE	Riparian habitats. Breed in willow riparian forest supporting a dense, shrubby understory. Oak woodland with a willow riparian understory is also used in some areas, and individuals sometimes enter adjacent chaparral, coastal sage scrub, or desert scrub habitats to forage.	**Not Present.** Appropriate habitat not present.
REPTILES AND AMPHIBIANS			
Ambystoma californiense California tiger salamander	FT/ CSC	Annual grassland and grassy understory of valley-foothill hardwood habitats in central and northern California. Need underground refuges and vernal pools or other seasonal water sources.	**Present.** CTS Critical Habitat is present within 5km of project boundaries. CTS occurrence records within 6 km. Project site is within historic distribution of the species, and DD&A biologists confirmed CTS breeding at the onsite Reservoir in the course of aquatic sampling for this species.
Gambelia silus blunt-nosed leopard lizard	FE/ SE	Suitable habitat for this species includes sparsely vegetated scrub and grassland habitats in areas of low topographic relief. In areas of high relief, distribution, distribution is usually confined	**Unlikely.** No CNDDB occurrences within 10-miles of the project site. Marginally appropriate habitat

Species	Status (USFWS/ CDFG/ CNPS)	General Habitat	Potential Occurrence within Project Vicinity
		to broad sandy washes. Found on alkali flats, large washes, arroyos, canyons, and low foothills from 100-3000ft.	present, but none observed during multiple site visits.
Phrynosoma coronatum frontale Coast horned lizard	--/ CSC	Associated with open patches of sandy soils in washes, chaparral, scrub, and grasslands.	**Medium.** No CNDDB occurrences within 10-miles of the site, however, appropriate habitat is present throughout the fallow and grassland portions of the site.
Rana aurora draytonii California red-legged frog	FT/ CSC	Lowlands and foothills in or near permanent or late-season sources of deep water with dense, shrubby, or emergent riparian vegetation. During late summer or fall adults are known to utilize a variety of upland habitats with leaf litter or mammal burrows.	**Low.** CRLF Critical Habitat is present within 10 km of project boundaries. CRLF occurrence records within 7 km. Project site is within historic distribution of the species, and supports appropriate aquatic breeding habitat and associated upland habitat at the "reservoir" and surrounding foothills. However, no CRLF eggs, larvae, or adults have been observed onsite in the course of multiple breeding season site visits by qualified biologists (David Keegan, Pers. Obs.).
Scaphiopus hammondii Western spadefoot	--/ CSC	Grasslands with shallow temporary pools are optimal habitats for the Western spadefoot. Occur primarily in grassland habitats, but can be found in valley and foothill woodlands. Vernal pools are essential for breeding and egg laying.	**Low.** CNDDB reports one occurrence of this species within 6 km of the site. Project site is within historic distribution of the species, and supports appropriate aquatic breeding habitat and associated upland habitat at the "reservoir" and surrounding foothills.

Species	Status (USFWS/ CDFG/ CNPS)	General Habitat	Potential Occurrence within Project Vicinity
			However, no WST eggs, larvae, or adults have been observed onsite in the course of multiple breeding season site visits by qualified biologists (David Keegan, Pers. Obs.).
Taricha torosa torosa coast range newt	CSC	Occurs mainly in valley-foothill hardwood, valley-foothill hardwood-conifer, coastal scrub, and mixed chaparral but is known to occur in grasslands and mixed conifer types. Seek cover under rocks and logs, in mammal burrows, rock fissures, or man-made structures such as wells. Breed in intermittent ponds, streams, lakes, and reservoir.	**Unlikely.** No CNDDB occurrences within 10-miles of the project site. Coast range newts are only known from locations south of Salinas River in Monterey County. Salinas River is >2.5 miles south of project site.
FISH			
Eucyclogobius newberryi tidewater goby	FE/ CSC	Brackish water habitats, found in shallow lagoons and lower stream reaches.	**Not Present.** No navigable waters present.
Oncorhynchus mykiss irideus Steelhead-Central California Coast.	FT/ CSC	Coastal perennial and near perennial streams, with suitable spawning and rearing habitat and no major barriers.	**Not Present.** No navigable waters present.
INVERTEBRATES			
Branchinecta conservatio Conservancy fairy shrimp	FE/	Require ephemeral pools with no flow. Grasslands of the northern two-thirds of the Central Valley, spanning a north-south distance of about 300 km, at elevations of 5-145 meters. Require ephemeral pools with no flow.	**Not Present.** No appropriate aquatic habitat present.
Branchinecta longiantenna longhorn fairy shrimp	FE/ none	Require ephemeral pools with no flow. Restricted distribution; Eastern edge of the Central Coast Mountains Region. Require ephemeral pools, typically associated with clear to turbid, clay and grass-bottomed pools.	**Not Present.** No appropriate aquatic habitat present.
Branchinecta lynchii vernal pool fairy shrimp	FT/ --	Require ephemeral pools with no flow. Associated with vernal pool/grasslands from near Red Bluff (Shasta County), through the central valley, and into the South Coast Mountains Region.	**Not Present.** No appropriate aquatic habitat present.

Species	Status (USFWS/ CDFG/ CNPS)	General Habitat	Potential Occurrence within Project Vicinity
		Require ephemeral pools with no flow.	
Danaus plexippus Monarch butterfly	--/--	Overwinters in coastal California using colonial roosts generally found in Eucalyptus, pine and acacia trees. Overwintering habitat for this species within the Coastal Zone represents ESHA. Local ordinances often protect this species as well.	**Not Present.** Appropriate habitat (groves and microclimate) present.
Euphilotes enoptes smithi Smith's blue butterfly	FE/--	Most commonly associated with coastal dunes and coastal sage scrub plant communities in Monterey and Santa Cruz Counties. Plant hosts are *Erigonum latifolium* and *E. Parvifolium*.	**Not Present.** Obligate host plants not present.
Linderiella occidentalis California linderiella fairy shrimp	FSC/	Ephemeral ponds with no flow. Generally associated with hardpans.	**Not Present.** No appropriate aquatic habitat present.
PLANTS			
Abies bracteata Bristlecone fir	--/1B	Endemic to the Santa Lucia Mountains.	**Not Present.** No fir present.
Arctostaphylos gabilanensis Gabilan Mountains manzanita	--/1B	Endemic to chaparral and chaparral/pine woodland habitats of the Gabilan Mountains of California, along the borders of San Benito and Monterey counties.	**Not Present.** No manzanita present.
Astragalus tener var. *tener* alkali milk-vetch	-- / SE / 1B	Playas, valley and foothill grassland (adobe clay), vernal pools/ alkaline; elevation 1-60 meters. Annual herb, blooms March-June.	**Not Present.** No appropriate habitat.
Caulanthus coulteri var. lemmoniii Lemmon's jewel flower	--/1B	Open, grassy areas; on hillside slopes and in fields, canyons, and arroyos. Soils include alkaline soils, shaley clay, sandstone talus, and decomposed serpentine. Predominantly found within Valley Grassland community, occasionally in Pinyon-Juniper Woodland. 80 - 1600 m. Annual herb; blooms March-May.	**Medium.** Marginally appropriate habitat present in the mixed grassland/rocky outcrop portions of the project site, and not identifiable at the time of the DD&A site assessments. Spring-time floristic survey or preconstruction survey recommended.
Centromadia parryi ssp. *congdonii* Congdon' tarplant	-- / -- /1B	Valley and foothill grassland (alkaline); elevation 1-230 meters.	**Not Present.** Lack of appropriate soils (lack of heavy

Species	Status (USFWS/ CDFG/ CNPS)	General Habitat	Potential Occurrence within Project Vicinity
		Annual herb, blooms June-November	soils).
Chorizanthe pungens var. pungens Monterey spineflower	FT/ 1B	Chaparral (maritime), cismontane woodland, coastal dunes, coastal scrub, valley and foothill grassland/ sandy; elevation 3-450 meters. Annual herb, blooms April-June.	**Not Present.** Lack of appropriate habitat (lack of sandy soils).
Chorizanthe robusta var. robusta robust spineflower	FE/ 1B	Cismontane woodland (openings), coastal dunes, coastal scrub/ sandy or gravelly; elevation 3-300 meters. Annual herb, blooms April-September.	**Not Present.** Lack of appropriate habitat (lack of sandy soils).
Cupressus goveniana ssp. goveniana gowen cypress	FT/ 1B	Closed cone coniferous forest, chaparral (maritime); elevation 30-300 meters. Tree (evergreen).	**Not Present.** Conspicuous species not present.
Eriogonum nortonii pinnacle buckwheat	FSC/ 1B	Chaparral, valley and foothill grassland/ sandy, often on recent burns; elevation 300-975 meters. Annual herb, blooms May-June.	**Not Present.** Conspicuous species not present.
Erysimum menziesii ssp. menziesii Menzie's wallflower	FE/ SE/ 1B	Coastal dunes. Perennial herb, blooms March-June.	**Not Present.** Appropriate habitat not present.
Holocarpha macradenia Santa Cruz tarplant	FT/ SE	Coastal prairies, valley foothill grasslands/ often clay. Annual herb, blooms June-October	**Not Present.** No mesic sites. No soils (lack of clay).
Layia carnosa Beach layia	FE/ SE/ 1B	Coastal dunes., coastal scrub (sandy; elevation 0-60 meters. Annual herb, blooms March-July.	**Not Present.** Appropriate habitat not present.
Lembertia congdonii San Joaquin wollythreads	FE/ 1B	Chenopod scrub, valley and foothill grassland (sandy); elevation 60-800 meters. Annual herb, blooms February-May	**Not Present.** No habitat. No soils (lack of sandy soils).
Lupinus tidestromii Tidestrom's lupine	FE/SE/1B	Coastal dunes; elevation 0-100 meters. Perennial herb (rhizomatous), blooms April-June.	**Not Present.** Appropriate habitat not present.

Species	Status (USFWS/ CDFG/ CNPS)	General Habitat	Potential Occurrence within Project Vicinity
Malacothamnus aboriginum indian valley bush mallow	FSC/ 1B	Chaparral, cimontane woodland/ rocky.	**Not Present.** Appropriate habitat not present.
Malacothrix saxatilis var. arachnoidea Carmel Valley macothrix	FSC/ 1B	Chaparral (rocky); elevation 25-335 meters. Perennial herb (rhizomatous), blooms March-December.	**Not Present.** Appropriate habitat not present.
Navarretia negelliformis ssp. radians shining navarretia	FSC/ 1B	Cismontane woodland, valley foothill grasslands, vernal pools	**Not Present.** Appropriate habitat not present.
Potentilla hickmanii Hickman's cinqufoil	FE/ SE / 1B	Coastal bluff scrub, closed cone coniferous forests, meadows(vernally mesic), marshes and swamps (freshwater). Perennial herb, blooms April-August.	**Not Present.** Appropriate habitat not present.
Yadon's rein orchid *Piperia yadonii*	FE/-- 1B	Sandy soils in coastal bluff scrub, closed-cone coniferous forest, and maritime chaparral. Annual.	**Not Present.** Appropriate habitat not present.
Plagiobothrys uncinatus Hooked popcorn flower	--/1B	Chaparral, Cismontane woodlands, Valley-foothill grasslands.	**Not Present.** No mesic habitat.
Texosporium sancti-jacobi woven-spored lichen	FSC/1B	Found in arid to semi-arid grasslands, shrublands, or savannas. Parent materials are noncalcareous, including basalt, granite, and mixed alluviums. Soils developed on these parent materials vary greatly, from very fine textured soils on basalt to sandy loams, to soils with a very high content of fine or coarse sand. Soil depth varies greatly.	**Not Present.** Appropriate habitat not present.

Unlikely: The project area and/or immediate vicinity do not provide suitable habitat for a part particular species. Project area is outside of the species range.

Low Potential: Project area and/or immediate vicinity provides only limited habitat for a particular species. The known range for a particular species may be outside of the project area.

Medium Potential: The project area and/or immediate vicinity provide suitable habitat for a particular species, though there are no known sightings in the area.

High potential: The project area and/or immediate vicinity provide ideal habitat conditions for a particular species and/or the species is known to occur in the area.

Key to Status Codes

CSC	CDFG Species of concern
FSC	Federal Species of concern
CFP	CDFG Fully Protected Animal
SE	State Endangered
ST	State Threatened
FE	Federal Endangered
FT	Federal Threatened
PT	Officially proposed as Threatened
PX	Proposed as critical habitat essential to species recovery
C	Candidate to be Proposed
1B	CNPS 1B Listed, Endangered, Threatened or Rare in California

APPENDIX G

City of Soledad Storm Drain Master Plan Appendix B
Engineering Results of the RM Associates, Storm Drain and HYDRA hydraulic analysis
for Miravale III

Appendix "B"
Mirevale III HYRDA Storm Water Calculation and Map of HYDRA Model

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MEMORANDUM

SENT VIA FACSIMILE & U.S. MAIL

DATE: March 2, 2007

TO: Clifton Price, Public Works Director
Department of Public Works
City Of Soledad
248 Main Street
Soledad, CA 93690

FAX: (831) 678-3965

FROM: Robert T. James, P.E.
Dan Hinojosa, P.E.

RE: Storm Water Master Plan
City of Soledad
RMA Job No. 06712

SUBJECT: Hydraulic Analysis of the proposed storm drain system for the Miravale-III Sub-division

RM-Associates (RMA) has developed a working model of the Miravale-III sub-division storm drain collection system using HYDRA software, version 6.4. HYDRA is a software product for the analysis, design, and management of storm, sanitary, and combined sewer systems. RMA employed it to analyze and critique the storm drain system being proposed by the developer. The following discusses the model's development, analysis, and conclusions:

A. Delineation of Collection System

RMA modeled the collection system from layout drawings obtained from others. For the purposes of this study, the collection system was divided into three sections (Systems 100, 200, 300; see attached drawing):

Collection System 100 encompasses the upper north-west section of the sub-division. This system is primarily catching offsite flows coming from the outside watersheds to the north. It also catches water from basins earmarked for future residential development as well as the Williamson Act property. The system outlets into a proposed intermediate 21 acre-feet (AF) basin. This basin in turn can discharge out into Collection System 200.

Collection System 200 encompasses the upper half of the sub-division. This system includes the residential areas that are in the foothill basins. This is the most difficult part of the drainage system hydraulically speaking. The system outlets into the proposed primary ponding basin (i.e., the golf course driving range) that is located at the south-west corner of the sub-division.

Collection System 300 encompasses the lower half of the sub-division. This system includes a portion of the residential areas in the foothill basins, as well as one catchment for offsite water coming in from the east. It also outlets into the proposed primary ponding basin.

The total number of pipes and manholes were quantified. Drain inlets that were in close proximity to each other and also drain into common manholes were ignored to simplify the modeling process (i.e, clustered drain inlets modeled as one). Manhole inlet rim and invert elevations were determined. Pipe lengths and size were also quantified. A uniform pipe roughness factor of 0.013 (concrete pipe) was used. Also, the maximum allowable flow through the pipe, (d/D) was set at 0.90.

B. Delineation of Drainage Basins

RMA developed the model's drainage basins by studying the drainage patterns of the collection system, land usage, and the Hydraulic Soil Group Classifications. Per city standard, the Modified SCS Method (Santa Barbara Urban Hydrograph Method) was deployed. HYDRA requires the following drainage basin data to execute the SCS Method:

- Basin area (acres)
- Time-of-concentration (Tc): For each individual basin, the time of concentration was measured from the most remote location, then along the gutter flow-line back to the catch basin.
- Runoff Curve Numbers: This was assigned after reviewing the basin's land usage in conjunction with its Hydrologic Soils Group classifications.

C. Collection System PASS/FAIL Criteria

The following specification was used to analyze the proposed storm drain collection system for the Miravale-III sub-division:

Storm Drain System Design Year Criteria:

Design storm (years)	Design Storm return period applied to:
2	(Not used)
5	(Not used)
10	Residential and "local", where local is defined as schools, parks, and the golf course.
20	(Not used)
25	Commercial/Industrial/Major trunk lines
100	Offsite runoff "Q" must be a 100-year storm event

COLLECTION SYSTEM "PASS/FAIL" CRITERIA

	PIPELINES
1	Residential: The hydraulic grade line (HGL) must be no higher than 0.5 feet below the gutter.
2	Commercial/Industrial: The HGL must be no more that 0.5' above the gutter.
3	Main Trunks: The HGL can be no more than 1.0' above the gutter.
4	Pipe velocities must be between the range of 2 to 8 fps.
5	New pipes must be less than running 100% full at the design storm.
	PONDING BASINS
6	Both the upper and lower retention basin must have enough capacity to hold runoff produced from a 100-year, 24 hour storm event.

D. Off-site Runoff "Q"

The storm flows emanating from offsite watersheds were added into the HYDRA model as a "flow injection". Based on the above specification, the primary trunk lines must be able to handle the following 100-year offsite flow:

Offsite Watershed Flows

Injection point	Peak Flow; Q_{100} (cfs)
1	82.5
2	22.6
3	87.4
4	236.0

E. Design Storm Development

Accepted engineering methodologies for a transient intensity design storm are (1) the SCS (NRCS) synthetic storm, and (2) the Alternating Block Method. RMA employed the SCS Method which is based on the following:

- The NRCS developed a series of synthetic distributions that can be used in the United States to create a 24-hour design storm. The NRCS rainfall distribution map shows Soledad as a "Type I" storm.
- The step duration (time increment) used was 15 minutes.
- The design intensity was derived from the City standard IDF curve "Soledad IDF Station". This produced the following total precipitation amounts for 24 hour storms:

Storm Intensity and Precipitation Totals

Design storm	Intensity (inches/hour)	Precipitation (inches)
10	0.09	2.16"
25	0.11	2.64"
100	0.14	3.36"

Design storm files for the 10, 25 and 100 year storm events were consequently developed to create "storm files" to be used by HYDRA. The program produces a "flow file" which links the

collection system to the drainage basins for scenario analysis. The "flow file" in turn runs along with a "storm file" to produce analysis results.

F. Results of the Model Analysis:

With all the above data entered into the HYDRA program, the following results were obtained (see attached System Summary and Reservoir Summary Results):

- Pipe Collection System 100 "**FAILS**". Using the 10-year storm criteria with 100-year offsite point injections, the pipes are all running in excess of 100% capacity (all pipes in surcharge). In addition, all pipes except one have flow velocities over 8 fps, with pipe "110-03" hitting 26.4 fps. The hydraulic grade line (HGL) for about one quarter of the line is above the ground.

- The upper 21 acre-feet (AF) pond basin "**PASSES**". Based on the 25-year storm volume criteria, the basin fills to 696,896 cf (16 AF), or 76% of capacity. The model still needs to be run with a 100-year storm, which may push the basin to capacity.

- Pipe Collection System 200 largely "**FAILS**". Per specification, Collection System 200 must pass the 10-year storm criteria with 100-year offsite point injections. In addition, the main trunk line that borders the north side of the development must be able to pass the 25-year storm criteria with 100-year point injections. The model shows the majority of the pipeline in a surcharge condition. Also, the majority of the pipes are exhibiting excessive velocities, with pipe "220-08" hitting 21.8 fps for a 10-year storm and 34.2 fps during a 25-year storm event. The majority of the HGL is above the ground except for the pipeline in the vicinity of the primary ponding basin (lower branch of collection Section 200). None of the collection system passes all the stipulated specification.

- Collection System 300 "**PASS/FAILS**". Per specification, Collection System 300 must pass the 10-year storm criteria (no offsite injections are applicable). In addition, the main trunk line that runs to the commercial area (a portion of collection system 340 and 351) as well as the main trunk line that borders the south side of the development (system 300) must be able to pass the 25-year storm criteria with the 100-year offsite point injection. About two-thirds of the system was able to pass the stipulated design storm. However, the majority of the pipes are displaying excessive velocities with pipe "300-05" hitting 19.7 fps during the 25-year storm event. The HGL is below the ground at all locations (PASS) except for pipe section "342". A portion of the pipes in Collection System 300 passed all the stipulated specification (Collection Systems 310, 330, ½ of 360, 370, 341, 343, 348, and 351).

- The primary ponding basin "**FAILS**". Using the 25-year retention specification, the basin must hold 12.2 million cubic feet (281 AF). RMA estimates the basin capacity at about 106 AF, therefore it is about 2.6 times too small. The model still needs to be run with a 100-year storm flow.

G. Observations taken from the model:

The HYDRA model also suggests the following:

- The proposed design has not adequately addressed the upper basins in the north-east portion of the proposed sub-division (foothills), including the immediate offsite up hill drainage areas. The steeper slopes are problematic; manhole turbulence, excessive velocities, street flooding, etc. Without some type of diversion to deal with water coming off the immediate offsite drainage areas, these basins must drain into the sub-division and into the proposed on-site collection system.

- The temporary drainage channel being proposed through the parcels labeled "future housing" is a concern. There is the legal issue of passing pubic water through a private development. Also, the additional water may push the upper ponding basin past its capacity.

- The overflow at the main ponding basin will be producing high overflows into the adjacent properties to the north during large storm events. The 25-year storm model calculated an extremely high "Q" overflow of 448 cfs. The potential for flooding the downstream adjacent property owner(s) needs to be addressed.

H. Model Limitations

Limitations to the computer model include:

- The model does not take into account the quality of storm water discharge in a 24-hour period into under laying soil through percolation. Please refer to the soils report which indicates perch groundwater beneath the large basin.

- The proposed design shows two "end-of-the-line" tie-in diversions into the existing San Vicente Boulevard trunk main. An upper diversion proposes to allow a maximum 60 cfs into the city system. The model as now run did not allow any water from this point. For the lower diversion, the design did not quantify a proposed maximum flow. Based on the hydraulics of a 24" diversion pipe, RMA modeled the lower diversion using a maximum flow rate of 15 cfs. (See additional discussion, Hydraulic analysis of existing storm drain system for upper San Vicente Basin.)

- The program models the hydraulic grade line starting from the invert of the pipe that outlet into the ponding basins. The HGL elevations shown on the report were calculated from this starting point. The user must manually input a higher HGL at the pipe outlet to model a ponding basin at ½ full, ¾ full, etc. A higher HGL starting point will only create even higher hydraulic grade lines upstream.

I. Conclusion/Recommendations

- The HYDRA model suggests serious problems with the proposed storm drain collection system for the Miravale-III sub-division. RMA recommends that the City ask the developer to perform additional engineering on the entire system to insure that it will perform to an acceptable standard.

- RMA requests instructions from the City on exactly what additional engineering oversight would be appropriate on this project.

Respectfully Submitted,

Robert T. James, P.E.
Project Manager

Daniel R. Hinojosa, P.E.
Staff Engineer

Cc: Ruben Moreno, Principal

Proj/Corr/Engr Files

25yPF
stem Summary

UserID / SEQ	G_ID	Type	Length	Ground Up/Dn	Invert Up/Dn	Slope	Diam	DesignQ / Vel	MaxQ / ExcessQ	HGL Up/Dn	Surchg
					200						
MV3		MAN	5.00	471.00	467.00			3.16		744.40	273.4
135	409			471.00	466.9[illegible]			0.00		744.40	
MV3-20-01		EPI	600.00	471.00	467.00	0.0667	15	3.16	16.658	744.40	Yes
136	365			432.00	427.00			6.77	13.498	742.97	
MV3		MAN	5.00	432.00	427.00			6.77		742.97	310.97
143	410			432.00	426.9[illegible]			0.00		742.97	
MV3-20-03		EPI	514.00	432.00	427.00	0.0535	15	6.77	14.923	742.97	Yes
144	366			406.70	399.50			9.92	8.855	738.46	
MV3		MAN	5.00	406.70	399.50			8.63		738.46	331.76
145	455			406.70	399.40			0.00		738.46	
MV3-20-91		EPI	276.40	406.70	399.50	0.0568	15	8.63	15.376	738.46	Yes
146	454			388.80	383.80			11.27	6.748	733.55	
MV3		MAN	5.00	406.70	399.50			9.50		733.55	326.85
149	411			406.70	399.4[illegible]			0.00		733.55	
MV3-20-03		EPI	535.00	388.80	383.80	0.0669	18	9.50	27.138	733.55	Yes
150	367			354.00	346.00			11.91	17.643	729.20	
MV3		MAN	5.00	388.80	383.60			11.37		729.20	340.4
151	412			388.80	383.70			0.00		729.20	
MV3-20-04		EPI	696.00	354.00	348.00	0.0417	18	11.37	21.415	729.20	Yes
[illegible]	368			324.00	319.0[illegible]			10.69	10.050	721.09	
[illegible]		MAN	5.00	324.00	319.00			20.99		721.09	397.09
167	413			324.00	318.90			0.00		721.09	
MV3-20-05		EPI	650.00	324.00	319.00	0.0231	15	20.99	9.801	721.09	Yes
168	369			309.00	304.0[illegible]			17.13	-11.193	652.75	
MV3		MAN	5.00	309.00	304.0[illegible]			26.76		652.75	343.75
169	414			309.00	303.90			0.00		652.75	
MV3-20-08		EPI	600.00	309.00	304.00	0.0267	15	26.76	10.535	652.75	Yes
170	370			293.00	288.0[illegible]			21.81	-16.225	550.26	
MV3		MAN	5.00	293.00	288.0[illegible]			27.77		550.26	257.26
171	415			293.00	287.9[illegible]			0.00		550.26	
MV3-20-07		EPI	650.00	293.00	288.00	0.0071	18	27.77	8.826	550.26	Yes
172	371			289.80	283.40			15.72	-18.949	505.03	
MV3		MAN	5.00	289.80	283.40			36.60		505.03	215.23
173	416			289.80	283.30			0.00		505.03	
MV3-20-08		EPI	700.00	289.80	283.40	0.007	18	38.55	8.777	505.03	Yes
174	372			283.50	278.50			21.82	-29.775	411.19	
MV3		MAN	5.00	283.50	278.50			46.25		411.19	127.69
175	417			283.50	278.4[illegible]			0.00		411.19	
MV3-20-09		EPI	140.00	263.50	278.50	0.025	21	46.25	25.021	411.19	Yes
176	373			280.20	275.00			39.23	-21.226	399.32	
MV3		MAN	5.00	280.20	275.00			46.13		399.32	119.12
177	418			280.20	274.90			0.00		399.32	
MV3-20-10		EPI	840.00	280.20	275.00	0.0244	21	46.13	24.722	399.32	Yes
178	374			259.00	254.50			19.18	-21.407	328.47	

rID / .Q	G_ID	Type	Length	Ground Up/Dn	Invert Up/Dn	Slope	Diam	DesignQ / Vel	MaxQ / ExcessQ	HGL Up/Dn	Surchg
MV3		MAN	5.00	259.00	254.50			47.29		328.47	69.47
179	419			259.00	254.40			0.00		328.47	
MV3-20-11		EPI	190.00	259.00	254.50	0.0168	24	47.29	29.322	326.47	Yes
180	375			256.00	251.30			15.05	-17.969	320.20	
MV3		MAN	5.00	256.00	251.30			49.03		320.20	64.2
181	420			256.00	251.20			0.00		320.20	
MV3-20-12		EPI	500.00	256.00	251.30	0.0174	24	49.93	29.803	320.20	Yes
182	376			247.60	242.60			15.89	-20.128	295.97	
MV3		MAN	5.00	247.60	242.60			50.07		295.97	48.36
183	421			247.60	242.50			0.00		295.97	
MV3-20-13		EPI	920.00	247.60	242.60	0.0191	24	50.07	31.250	295.97	Yes
184	377			230.00	225.00			15.94	-18.823	251.11	
MV3		MAN	5.00	230.00	225.00			54.27		251.11	21.11
185	422			230.00	224.90			0.00		251.11	
MV3-20-14		EPI	160.00	230.00	225.00	0.0144	24	54.27	27.089	251.11	Yes
186	378			227.70	222.70			17.28	-27.184	241.95	
MV3		MAN	5.00	227.70	222.70			56.04		241.95	14.25
187	423			227.70	222.60			0.00		241.95	
MV3-20-15		EPI	410.00	227.70	222.70	0.0188	27	56.04	42.389	241.95	Yes
188	379			221.10	215.00			14.09	-13.651	228.59	
MV3		MAN	5.00	221.10	215.00			62.55		228.59	7.49
189	424			221.10	214.90			0.00		228.59	
MV3-20-16		EPI	160.00	221.10	215.00	0.0094	27	62.55	29.949	228.59	Yes
[illegible]	380			219.00	213.50			15.73	-32.602	222.10	
		MAN	5.00	219.00	213.50			170.72		222.10	3.1
[illegible]	425			219.00	213.40			0.00		222.10	
MV3-20-17		EPI	540.00	219.00	213.50	0.0183	45	170.72	163.539	222.10	Yes
192	381			208.60	203.60			15.46	-7.183	211.39	
MV3		MAN	5.00	208.60	203.60			169.70		211.39	2.79
193	426			208.60	203.50			0.00		211.39	
MV3-20-18		EPI	550.00	208.60	203.60	0.0195	45	169.70	168.466	211.39	Yes
194	382			197.90	192.90			15.36	-1.231	200.62	
MV3		MAN	5.00	197.90	192.90			168.54		200.62	2.72
195	427			197.90	192.80			0.00		200.62	
MV3-20-19		EPI	470.00	197.90	192.90	0.0189	42	168.54	138.276	199.09	Yes
196	383			191.00	184.00			17.52	-30.264	187.50	
MV3		MAN	5.00	191.00	184.00			173.99		186.82	-4.18
203	428			191.00	183.90			0.00		186.82	
MV3-20-20		EPI	220.00	191.00	184.00	0.0282	48	173.99	240.841	186.82	No
204	384			188.50	177.80			18.48	66.855	181.54	
MV3		MAN	5.00	188.50	177.80			175.65		181.54	-6.96
205	429			188.50	177.70			0.00		181.54	
MV3-20-21		EPI	420.00	188.50	177.80	0.0095	54	175.65	191.673	181.54	No
206	385			190.00	173.80			12.44	16.020	177.54	
MV3		MAN	5.00	190.00	173.80			174.85		177.44	-12.56
207	430			190.00	173.70			0.00		177.44	
MV3-20-22		EPI	430.00	190.00	173.80	0.0102	54	174.85	198.677	177.44	No
208	386			181.00	169.40			12.76	23.826	173.08	
MV3		MAN	5.00	181.00	169.40			173.52		173.08	-7.92
	431			181.00	169.30			0.00		173.08	

erID / I	G_ID	Type	Length	Ground Up/Dn	Invert Up/Dn	Slope	Diam	DesignQ Vel	MaxQ ExcessQ	HGL Up/Dn	Surchg
MV3-20-23		EPI	480.00	181.00	169.40	0.0098	54	173.51	194.211	173.08	No
210	387			170.00	165.09			12.53	20.693	168.68	
MV3		MAN	5.00	190.00	165.00			172.05		165.03	-24.97
211	432			190.00	164.90			0.00		165.03	
670		EPI	233.09	190.00	162.23	0.001	500	175.84	23,476.954	165.00	No
212	670			190.00	162.00			4.50	23,301.117	165.00	
					205						
MV3		MAN	5.00	406.20	404.00			1.09		464.22	58.02
137	433			406.20	403.90			0.00		464.22	
MV3-21-01		EPI	190.00	466.20	464.00	0.1474	12	1.69	13.660	464.22	No
138	388			440.00	436.00			8.88	12.574	436.24	
MV3		MAN	5.00	440.00	436.00			1.06		436.24	-5.76
139	434			440.00	435.90			0.00		436.24	
MV3-21-02		EPI	80.00	440.00	436.00	0.1	12	1.06	11.252	436.24	Yes
140	389			432.00	428.00			7.67	10.194	432.00	
MV3		MAN	5.00	432.00	428.00			1.03		432.00	No
141	435			432.00	427.90			0.00		743.01	
MV3-21-03		EPI	30.00	432.00	428.00	0.0333	12	1.36	6.496	743.01	Yes
142	390			432.00	427.00			5.56	5.136	742.97	
					210						
MV3		MAN	5.00	404.60	400.60			1.08		733.58	328.98
147	436			404.60	400.50			0.00		733.58	
MV3-21-14		EPI	170.00	404.60	400.60	0.0988	15	1.08	20.281	733.58	Yes
	391			388.80	383.81			7.47	19.200	733.55	
					215						
MV3		MAN	5.00	367.00	363.00			1.23		724.98	357.98
157	439			367.00	362.90			0.00		724.98	
MV3-22-01		EPI	320.00	367.00	363.00	0.0531	15	1.54	14.870	724.98	Yes
158	394			351.00	346.00			6.72	13.333	724.79	
MV3		MAN	5.00	351.00	346.00			1.53		724.79	373.79
159	440			351.00	345.90			0.00		724.79	
MV3-22-02		EPI	290.00	351.00	346.00	0.0155	15	2.44	8.037	724.79	Yes
160	395			346.00	341.50			4.67	5.600	724.38	
MV3		MAN	5.00	346.00	341.50			4.32		724.38	378.38
161	441			346.00	341.40			0.00		724.38	
MV3-22-21		EPI	350.00	346.00	341.50	0.0286	18	4.32	17.733	724.38	Yes
162	396			335.00	331.50			7.01	13.411	723.81	
MV3		MAN	5.00	356.60	351.60			1.53		723.91	367.31
163	443			356.60	351.50			0.00		723.91	
MV3-22-11		EPI	600.00	356.60	351.60	0.0335	18	1.53	19.202	723.91	Yes
164	397			335.00	331.50			5.64	17.677	723.81	
MV3		MAN	5.00	335.00	331.50			9.43		723.81	388.81
165	442			335.00	331.40			0.00		723.81	
MV3-22-22		EPI	372.00	335.00	331.50	0.0336	18	9.43	19.231	723.81	Yes
166	398			324.00	319.00			9.35	9.805	721.09	

IO25yPF
System Summary

rID / G_ID	Type	Length	Ground Up/Dn	Invert Up/Dn	Slope	Diam	DesignQ Vel	MaxQ ExcessQ	HGL Up/Dn	Surchg
					220					
MV3	MAN	5.00	240.50	235.50			5.07		252.04	11.54
153 437			240.50	235.40			0.00		252.04	
MV3-23-01	EFI	350.00	240.50	235.50	0.026	18	5.07	10.403	252.04	Yes
154 392			234.00	229.00			6.30	7.331	251.48	
MV3	MAN	5.00	234.00	229.00			4.99		251.48	17.48
155 438			234.00	228.90			0.00		251.48	
MV3-23-02	EFI	170.00	234.00	229.00	0.0235	18	4.98	16.092	251.48	Yes
156 393			230.00	225.00			6.84	11.117	251.11	
					230					
MV3	MAN	5.00	288.00	271.00			105.70		290.69	2.69
121 447			288.00	270.90			0.00		290.69	
MV3-24-01	EFI	220.00	288.00	271.00	0.02	36	105.70	94.208	290.69	Yes
122 402			276.00	266.60			14.93	-11.494	285.19	
MV3	MAN	5.00	276.00	266.60			105.70		285.19	9.19
123 448			276.00	266.50			0.00		285.19	
MV3-24-02	EFI	520.00	276.00	266.60	0.0137	36	105.70	77.839	283.92	Yes
124 403			263.20	259.11			14.93	-27.860	273.30	
MV3	MAN	5.00	283.20	259.50			110.03		273.30	-9.9
125 449			283.20	259.40			0.00		273.30	
MV3-24-03	EFI	750.00	263.20	259.50	0.0127	36	110.03	74.973	263.41	Yes
126 404			254.00	250.00			15.56	-35.046	253.00	
MV3	MAN	5.00	254.00	250.00			109.75		252.22	-1.78
45.			254.00	249.9			0.00		252.22	
-24-04	EFI	500.00	254.00	250.00	0.032	42	109.75	179.752	252.16	Yes
128 405			241.00	234.00			17.16	69.998	236.32	
MV3	MAN	5.00	241.00	234.00			109.44		238.32	-2.68
129 453			241.00	233.90			0.00		238.32	
MV3-24-05	EFI	450.00	241.00	234.00	0.0111	42	109.40	105.920	238.32	Yes
130 406			235.00	229.00			11.38	-3.537	233.24	
MV3	MAN	5.00	235.00	229.00			108.91		233.24	-1.76
131 452			235.00	226.90			0.00		233.24	
MV3-24-06	EFI	510.00	235.00	229.00	0.0173	42	108.91	131.994	233.24	Yes
132 407			227.80	220.20			13.78	23.085	227.43	
MV3	MAN	5.00	227.80	220.20			108.35		227.43	-0.37
133 453			227.80	220.10			0.00		227.43	
MV3-24-07	EFI	470.00	227.80	220.20	0.0143	42	108.35	119.974	227.43	Yes
134 408			219.00	213.50			12.83	11.620	222.10	

erID I	G_ID	Type	Length	Ground Up/Dn	Invert Up/Dn	Slope	Diam	DesignQ Vel	MaxQ ExcessQ	HGL Up/Dn	Surchg
					240						
MV3		MAN	5.00	194.0(	190.0(			2.23		190.48	-3.52
197	444			194.00	189.90			0.00		190.48	
MV3-25-01		EPI	180.00	194.00	190.09	0.0222	15	2.23	9.617	190.48	No
198	399			190.00	186.00			5.46	7.385	186.91	
MV3		MAN	5.00	190.0(	186.0(			2.20		186.91	-3.09
199	445			190.0(	185.90			0.00		186.91	
MV3-25-02		EPI	40.00	190.00	186.00	0.0125	15	2.20	7.213	186.91	Yes
200	400			190.00	185.50			4.37	5.016	186.87	
MV3		MAN	5.00	190.0(	185.50			2.18		186.87	-3.14
201	446			190.0(	185.4(			0.00		186.87	
MV3-25-03		EPI	40.00	190.00	185.50	0.0375	15	2.18	12.493	186.87	Yes
202	401			191.00	184.00			6.58	10.316	186.82	

erID J	G_ID	Type	Length	Ground Up/Dn	Invert Up/Dn	Slope	Diam	DesignQ Vel	MaxQ ExcessQ	HGL Up/Dn	Surchg
						300					
MV3 1	273	MAN	5.00	333.00 333.00	328.00 327.90			236.60 0.00		331.46 331.46	-1.54
MV300-03 2	198	EPI	140.00	333.00 332.00	328.00 325.00	0.0214	54	236.60 16.11	287.509 50.909	331.46 328.46	No
MV3 15	274	MAN	5.00	332.00 332.00	325.00 324.90			236.60 0.00		328.28 328.28	-3.72
MV300-03 16	199	EPI	240.00	332.00 327.00	325.00 319.00	0.025	54	236.60 19.12	310.545 73.945	328.28 322.60	No
MV3 17	275	MAN	5.00	327.00 327.00	319.00 318.90			236.60 0.00		322.60 322.60	-4.4
MV300-04 18	200	EPI	520.00	327.00 318.30	319.00 309.00	0.0192	54	236.60 17.42	272.366 35.768	322.60 312.60	No
MV3 45	276	MAN	5.00	318.30 318.30	309.00 308.90			236.62 0.00		312.20 312.20	-6.1
MV300-05 46	201	EPI	990.00	318.30 291.00	309.00 282.00	0.0273	54	236.62 19.74	324.354 87.738	312.20 285.36	No
MV3 47	277	MAN	5.00	291.00 291.00	282.00 281.90			236.44 0.00		285.36 285.36	-5.64
MV300-06 48	202	EPI	980.00	291.00 267.00	282.00 259.20	0.0233	54	236.44 18.64	299.577 63.140	285.36 262.56	No
MV3 67	278	MAN	5.00	267.00 267.00	259.20 259.10			236.08 0.00		261.20 261.20	-5.8
MV300-07	203	EPI	1,090.00	267.00 239.60	258.00 226.70	0.0269	54	236.08 19.60	322.014 85.936	261.20 231.90	No
MV3 73	335	MAN	5.00	232.90 232.90	228.50 228.40			3.28 0.00		230.40 230.40	-2.5
MV330-04 74	259	EPI	220.00	232.90 232.00	229.90 218.00	0.0541	32	3.28 8.48	8.276 4.993	229.90 221.64	No
MV3 247	279	MAN	5.00	239.60 239.60	228.70 228.60			236.61 0.00		231.56 231.56	-8.04
MV300-08 248	204	EPI	400.00	239.60 232.00	228.70 218.00	0.0267	66	236.61 19.01	548.555 311.947	231.56 221.64	No
MV3 249	280	MAN	5.00	232.00 232.00	218.00 217.90			236.24 0.00		221.64 221.64	-10.36
MV300-09 250	205	EPI	840.00	232.00 215.00	218.00 208.30	0.0115	66	236.24 14.22	360.416 124.173	221.64 211.94	No
MV3 251	281	MAN	5.00	215.00 215.00	208.30 208.20			235.80 0.00		211.32 211.32	-3.68
MV300-10 252	206	EPI	550.00	215.00 208.00	208.30 197.90	0.0189	72	235.80 16.61	581.653 345.849	208.30 201.20	No
MV3 253	282	MAN	5.00	208.00 208.00	201.30 201.20			235.27 0.00		201.20 201.20	-6.8
MV300-11 254	207	EPI	530.00	208.00 202.20	197.90 184.50	0.0253	72	235.27 18.38	672.579 437.310	200.68 187.42	No
MV3 255	283	MAN	5.00	202.00 202.00	184.50 184.40			234.80 0.00		187.42 187.42	-14.58
MV300-12 256	208	EPI	520.00	202.00 190.00	184.50 173.40	0.0213	72	234.86 17.34	618.000 383.135	187.40 177.00	No

erID /	G_ID	Type	Length	Ground Up/Dn	Invert Up/Dn	Slope	Diam	DesignQ Vel	MaxQ ExcessQ	HGL Up/Dn	Surchg
MV3		MAN	5.00	190.00	173.40			237.27		177.00	-13
257	284			190.00	173.30			0.00		177.00	
MV300-12b		EPI	920.00	190.00	173.40	0.0091	76	237.27	466.865	177.00	Nc
258	209			179.50	165.00			12.85	229.597	168.60	
MV3		RES	0.00	165.00	165.00			15.29		165.00	Nc
259	285			165.00	165.00			0.00		165.00	
671		EPI	372.92	190.00	185.30	0.0008	300	15.29	5,393.522	190.00	Nc
260	671			190.00	185.00			2.19	5,378.231	190.00	
677		MAN	5.00	190.00	185.30			15.29		190.00	Nc
261	677			190.00	185.20			0.00		191.98	
673		EPI	426.99	190.00	185.30	0.003	24	15.44	12.467	191.84	Yes
262	673			190.00	184.00			4.91	-2.973	190.00	
678		MAN	5.00	190.00	184.00			15.43		190.00	No
263	678			190.00	183.90			0.00		593.29	
675		EPI	227.24	190.00	184.00	0.0031	24	272.56	12.540	593.29	Yes
264	675			194.80	183.30			86.76	-260.020	265.05	
						310					
MV3		MAN	5.00	382.30	258.30			1.03		358.56	-23.74
13	302			382.30	258.20			0.00		358.56	
MV310-02		EPI	600.00	362.30	358.30	0.0555	18	1.03	18.053	358.30	No
14	226			332.00	325.00			6.18	17.027	328.28	
						320					
MV3		MAN	5.00	476.00	472.00			0.99		472.18	-3.82
	319			476.00	471.90			0.00		472.18	
20-02		EPI	320.00	476.00	472.00	0.3	12	0.99	19.489	472.18	No
40	243			380.00	376.00			11.35	18.503	376.22	
MV3		MAN	5.00	380.00	376.00			1.26		376.22	-3.78
41	320			380.00	375.90			0.00		376.22	
MV320-03		EPI	190.00	380.00	376.00	0.2053	12	1.26	16.121	376.22	No
42	244			342.00	337.00			10.48	14.864	337.46	
MV3		MAN	5.00	342.00	337.00			2.64		337.46	-4.54
43	321			342.00	336.90			0.00		337.46	
MV320-04		EPI	730.00	342.00	337.00	0.0384	15	2.64	12.635	337.04	Yes
44	245			318.00	309.00			7.00	9.997	312.20	
						330					
MV3		MAN	5.00	287.00	282.00			0.45		282.50	-4.5
61	328			287.00	281.90			0.00		282.50	
MV330-03		EPI	830.00	287.00	282.00	0.0229	15	2.44	9.761	282.50	Nc
62	252			268.00	263.00			5.66	7.324	263.88	
MV3		MAN	5.00	268.00	263.00			3.80		263.88	-4.12
63	329			268.00	262.90			0.00		263.88	
MV330-04		EPI	550.00	268.00	263.00	0.0069	15	3.80	5.363	263.00	Nc
64	253			267.00	259.20			4.21	1.567	261.20	
MV3		MAN	5.00	266.00	260.00			4.34		262.78	-3.22
65	330			266.00	259.90			0.00		262.78	
MV330-05		EPI	370.00	266.00	260.00	0.0041	12	4.34	2.441	261.20	Nc
66	254			267.00	259.20			5.52	-1.898	261.20	

rID / G_ID	Type	Length	Ground Up/Dn	Invert Up/Dn	Slope	Diam	DesignQ Vel	MaxQ ExcessQ	HGL Up/Dn	Surchg
				340						
MV3	MAN	5.00	573.00	569.00			2.12		569.28	-3.72
19 303			573.00	568.90			0.00		569.28	
MV340-02	EPI	340.00	573.00	569.00	0.3676	8	2.12	7.318	569.28	No
20 23?			448.00	444.00			15.34	5.195	444.36	
MV3	MAN	5.00	448.00	444.00			2.11		444.36	-3.64
21 304			448.00	443.90			0.00		444.36	
MV340-03	EPI	480.00	448.00	444.00	0.1583	8	2.11	4.802	444.36	No
22 228			371.00	368.00			11.56	2.690	368.56	
MV3	MAN	5.00	371.00	368.00			2.09		368.56	-2.44
23 30?			371.00	367.90			0.00		368.56	
MV340-04	EPI	200.00	371.00	368.00	0.0375	8	2.08	2.337	368.56	No
24 229			364.00	360.50			6.94	0.255	361.06	
MV3	MAN	5.00	364.00	360.00			4.41		360.46	-3.54
219 306			364.00	359.90			0.00		360.46	
MV340-05	EPI	900.00	364.00	360.00	0.0744	18	4.41	28.624	360.46	No
220 230			297.50	293.00			9.95	24.215	293.62	
MV3	MAN	5.00	297.50	293.00			5.22		293.62	-3.88
221 307			297.50	292.90			0.00		293.62	
MV340-06	EPI	380.00	297.50	293.00	0.0342	18	5.22	19.404	293.60	Yes
222 231			284.00	280.00			7.97	14.186	285.30	
MV3	MAN	5.00	384.00	280.00			17.88		285.30	-98.7
223 308			384.00	279.90			0.00		285.30	
40-07	EPI	200.00	284.00	280.00	0.02	18	20.74	14.837	285.30	Yes
232			282.00	276.00			11.74	-5.905	277.54	
MV3	MAN	5.00	282.00	276.00			31.13		277.54	-4.46
225 293			282.00	275.90			0.00		277.54	
MV340-08	EPI	370.00	282.00	276.00	0.0122	48	38.29	158.216	277.50	No
226 235			277.00	271.50			8.78	119.931	275.13	-
MV3	MAN	5.00	277.00	271.50			40.70		275.13	-1.87
227 292			277.00	271.40			0.00		275.13	
MV340-09	EPI	1,000.00	277.00	271.50	0.002	48	41.54	64.160	275.13	Yes
228 216			281.00	269.50			4.76	22.623	274.30	
MV3	MAN	5.00	281.00	271.50			45.56		274.30	-6.7
229 293			281.00	271.40			0.00		274.30	
MV340-10	EPI	280.00	281.00	272.20	0.0093	36	45.56	64.192	274.30	No
230 217			274.60	269.60			8.73	18.631	271.70	
MV3	MAN	5.00	274.60	269.60			50.50		271.12	-3.48
231 294			274.60	269.50			0.00		271.12	
MV340-11	EPI	250.00	274.60	269.60	0.0264	42	50.50	163.268	271.12	No
232 218			268.80	263.00			12.65	112.769	264.58	
MV3	MAN	5.00	268.80	263.00			55.84		264.58	-4.22
233 295			268.80	262.90			0.00		264.58	
MV340-12	EPI	180.00	268.80	263.00	0.0278	42	55.84	167.474	264.58	No
234 219			264.60	258.00			13.26	111.639	259.94	
MV3	MAN	5.00	264.60	258.00			56.55		259.94	-4.66
235 29?			264.60	257.90			0.00		259.94	
MV340-13	EPI	250.00	264.60	258.00	0.0148	42	56.96	122.245	259.94	No
236 220			262.00	254.30			10.86	63.286	256.36	

I025yPF
System Summary

rID / .Q	G_ID	Type	Length	Ground Up/Dn	Invert Up/Dn	Slope	Diam	DesignQ / Vel	MaxQ / ExcessQ	HGL Up/Dn	Surchg
MV3		MAN	5.00	262.00	254.30			58.57		256.36	-5.64
237	297			262.00	254.20			0.00		256.36	
MV340-14		EPI	280.00	262.00	254.30	0.0118	42	58.57	109.088	256.36	No
238	221			262.00	251.00			10.02	50.517	253.06	
MV3		MAN	5.00	262.00	251.00			58.16		252.94	-9.06
239	298			262.00	250.90			0.00		252.94	
MV340-15		EPI	150.00	262.00	251.00	0.0147	42	58.16	121.693	252.94	No
240	222			264.90	248.80			10.81	63.534	250.74	
MV3		MAN	5.00	264.90	248.90			59.50		250.68	-14.22
241	299			264.90	248.80			0.00		250.68	
MV340-16		EPI	340.00	264.90	248.80	0.0135	48	59.50	166.873	250.68	No
242	223			262.50	244.20			10.34	107.368	246.16	
MV3		MAN	5.00	262.50	244.20			58.51		246.16	-16.34
243	300			262.50	244.10			0.00		246.16	
MV340-17		EPI	830.00	262.50	244.20	0.0143	42	58.51	120.319	246.16	No
244	224			241.00	232.30			10.75	61.809	234.74	
MV3		MAN	5.00	241.00	232.30			72.33		234.74	-6.26
245	301			241.00	232.20			0.00		234.74	
MV340-18		EPI	540.00	241.00	232.30	0.0067	54	74.36	160.365	232.58	No
246	225			239.60	226.70			8.51	86.004	231.56	
							341				
MV341-02		EPI	280.00	388.70	382.70	0.0811	15	0.00	18.370	382.70	No
218	235			364.00	360.00			0.20	18.370	360.46	
							342				
MV3		MAN	5.00	312.00	307.00			2.70		307.50	-4.5
25	311			312.00	306.90			0.00		307.50	
MV342-02		EPI	320.00	312.00	307.00	0.025	15	2.70	10.201	307.50	No
26	236			304.00	299.00			5.92	7.500	299.50	
MV3		MAN	5.00	304.00	299.00			2.54		299.50	-4.5
27	312			304.00	298.90			0.00		299.50	
MV342-03		EPI	270.00	304.00	299.00	0.0222	15	2.54	9.617	299.17	Yes
28	237			298.00	293.00			5.58	7.078	298.75	
							343				
MV343-02		EPI	970.00	388.70	382.70	0.0925	15	0.00	19.619	382.70	No
213	233			298.00	293.00			0.20	19.619	298.75	
MV3		MAN	5.00	298.00	293.00			4.68		298.75	0.75
214	310			298.00	292.90			0.00		298.75	
MV343-03		EPI	395.00	298.00	293.00	0.0253	18	4.68	16.692	298.75	Yes
215	349			288.00	283.00			6.85	12.011	297.97	
							344				
MV3		MAN	5.00	301.50	295.50			7.05		303.55	2.05
29	313			301.50	295.40			0.00		303.55	
MV344-02		EPI	470.00	301.50	295.50	0.0266	15	7.05	10.521	303.55	Yes
30	238			288.00	283.00			8.09	3.470	297.97	
MV3		MAN	5.00	288.00	283.00			11.82		297.97	9.97
216	314			288.00	282.90			0.00		297.97	
MV342-05		EPI	380.00	288.00	283.00	0.0079	15	11.82	5.732	297.97	Yes
7	234			284.00	280.00			9.63	-6.093	285.30	

I025yPF
System Summary

rID /	G_ID	Type	Length	Ground Up/Dn	Invert Up/Dn	Slope	Diam	DesignQ Vel	MaxQ ExcessQ	HGL Up/Dn	Surchg
					345						
MV3		MAN	5.00	548.00	542.00			0.33		542.16	-5.84
3	266			548.00	541.90			0.00		542.16	
MV345-02		EPI	630.00	548.00	542.00	0.0603	18	0.33	8.739	542.16	No
4	210			510.00	504.00			4.77	8.413	504.34	
MV3		MAN	5.00	510.00	504.00			0.32		504.34	-5.66
5	0			510.00	503.90			0.00		504.34	
MV345-03		EPI	580.00	510.00	504.00	0.1702	12	2.79	14.678	504.34	No
6	211			411.30	405.30			12.16	11.885	405.66	
MV3		MAN	5.00	411.30	405.30			2.90		405.66	-5.64
7	288			411.30	405.20			0.00		405.66	
MV345-04		EPI	370.00	411.30	405.30	0.163	12	3.12	14.365	405.66	No
8	212			352.00	345.00			12.29	11.245	345.46	
MV3		MAN	5.00	352.00	345.00			2.94		345.46	-6.54
9	289			352.00	344.90			0.00		345.46	
MV345-05		EPI	400.00	352.00	345.00	0.1	12	3.59	11.252	345.46	No
10	213			312.50	305.00			11.03	7.663	305.74	
MV3		MAN	5.00	312.50	305.00			3.55		305.74	-6.76
11	290			312.50	304.90			0.00		305.74	
MV345-06		EPI	420.00	312.50	305.00	0.069	15	8.88	16.953	305.74	Yes
12	214			282.00	276.00			12.25	8.071	277.54	
					346						
MV3		MAN	5.00	331.00	326.00			0.57		326.18	-4.82
	315			331.00	325.90			0.00		326.18	
346-02		EPI	300.00	331.00	326.00	0.0743	18	0.57	28.603	326.16	No
32	239			306.70	303.70			5.99	28.036	303.96	
MV3		MAN	5.00	306.70	303.70			1.49		303.96	-2.74
35	316			306.70	303.60			0.00		303.96	
MV346-03		EPI	350.00	306.70	303.70	0.0763	18	1.49	28.976	303.94	No
36	240			283.00	277.00			7.35	27.483	277.74	
MV3		MAN	5.00	283.00	277.00			2.71		277.74	-5.26
37	317			283.00	276.90			0.00		277.74	
MV346-04		EPI	350.00	283.00	277.00	0.0029	18	2.71	5.608	277.74	Yes
38	241			282.00	276.00			2.73	2.897	277.54	
					347						
MV3		MAN	5.00	340.00	336.00			0.97		336.20	-3.8
33	318			340.00	335.90			0.00		336.20	
MV347-02		EPI	190.00	340.00	336.00	0.17	12	0.97	14.671	336.20	No
34	242			306.70	303.70			9.05	13.698	303.96	

erID / G_ID	Type	Length	Ground Up/Dn	Invert Up/Dn	Slope	Diam	DesignQ Vel	MaxQ ExcessQ	HGL Up/Dn	Surchg
				348						
MV3	MAN	5.00	305.10	300.00			1.24		300.46	-4.64
55 326			305.10	299.90			0.00		300.46	
MV348-02	EPI	250.00	305.10	300.00	0.008	15	1.24	5.770	300.46	Nc
56 250			301.00	298.00			3.20	4.527	298.46	
MV3	MAN	5.00	301.00	298.00			1.77		298.40	-2.6
57 327			301.00	297.90			0.00		298.40	
MV3	EPI	500.00	301.00	298.00	0.00	15	1.77	11.174	298.40	Nc
58 251			287.00	283.00			5.73	9.403	283.66	
MV3	MAN	5.00	287.00	283.00			5.03		283.66	-3.34
59 325			287.00	282.90			0.00		283.66	
MV348-04	EPI	460.00	287.00	283.00	0.0235	18	5.03	16.075	283.64	Yes
60 249			281.00	272.20			6.83	11.046	274.30	
				349						
MV3	MAN	5.00	290.90	285.00			1.14		285.44	-5.46
53 324			290.90	284.90			0.00		285.44	
MV349-02	EPI	260.00	290.90	285.00	0.007	15	1.14	5.658	285.44	Nc
54 248			287.00	283.00			3.06	4.518	283.66	
				350						
MV3	MAN	5.00	272.60	266.60			1.21		269.12	-3.48
49 322			272.60	266.50			0.00		269.12	
MV350-02	EPI	250.00	272.60	266.60	0.002	15	2.08	2.885	269.12	Yes
246			272.10	266.10			2.27	0.805	268.86	
MV3	MAN	5.00	272.10	266.10			4.56		268.86	-3.24
323			272.10	266.00			0.00		268.86	
MV350-03	EPI	870.00	272.10	266.10	0.003	15	4.56	3.851	267.99	Yes
52 247			268.80	263.00			3.74	-0.734	264.56	
				351						
MV3	MAN	5.00	257.00	252.00			4.79		252.80	-4.2
69 331			257.00	251.90			0.00		252.80	
MV351-02	EPI	450.00	257.00	252.00	0.015	18	5.90	13.085	252.80	Nc
70 255			250.00	245.00			6.19	7.183	246.10	
MV3	MAN	5.00	250.00	245.00			10.28		246.10	-3.9
71 332			250.00	244.90			0.00		246.10	
MV351-03	EPI	260.00	250.00	245.00	0.014	21	11.37	18.914	246.10	Nc
72 256			246.00	241.00			7.19	7.544	242.34	
MV3	MAN	5.00	246.00	241.00			12.96		242.34	-3.66
73 333			246.00	240.90			0.00		242.34	
MV351-04	EPI	410.00	246.00	241.00	0.007	24	12.96	19.327	242.34	Nc
74 257			241.00	238.00			5.80	6.366	239.34	
MV3	MAN	5.00	241.00	238.00			15.59		239.08	-1.92
75 334			241.00	237.90			0.00		239.08	
MV351-05	EPI	250.00	241.00	238.00	0.022	24	15.59	34.116	239.08	Yes
76 256			241.00	232.50			9.14	18.529	234.74	

1025yPF
System Summary

rID / G_ID	Type	Length	Ground Up/Dn	Invert Up/Dn	Slope	Diam	DesignQ / Vel	MaxQ / ExcessQ	HGL Up/Dn	Surchg
				360						
MV3	MAN	5.00	255.60	250.60			5.46		251.20	-4.4
79 336			255.60	250.50			0.00		251.20	
MV360-02	EPI	280.00	255.60	250.60	0.0264	24	5.46	36.731	251.20	No
80 260			248.50	243.20			7.09	31.274	243.80	
MV3	MAN	5.00	248.50	243.00			7.63		243.76	-4.74
81 33?			248.50	242.90			0.00		243.76	
MV360-03	EPI	190.00	248.50	243.00	0.0216	24	7.63	33.190	243.76	No
82 261			244.00	238.90			7.33	25.559	239.68	
MV3	MAN	5.00	244.00	238.90			8.49		239.68	-4.32
83 338			244.00	238.80			0.00		239.68	
MV360-04	EPI	260.00	244.00	238.90	0.0231	24	8.48	34.323	239.68	No
84 262			238.00	232.90			7.67	25.839	233.76	
MV3	MAN	5.00	238.00	232.90			10.19		233.76	-4.24
85 339			238.00	232.80			0.00		233.76	
MV360-05	EPI	260.00	238.00	232.90	0.0227	24	10.19	34.035	233.76	No
86 263			232.00	227.00			8.03	23.846	228.00	
MV3	MAN	5.00	232.00	227.00			13.05		228.00	-4
87 340			232.00	226.90			0.00		228.00	
MV360-06	EPI	40.00	232.00	227.00	0.0175	27	13.05	40.918	228.00	No
88 264			231.60	226.30			7.77	27.869	227.32	
MV3	MAN	5.00	231.60	226.30			12.98		227.32	-4.28
89 341			231.60	226.20			0.00		227.32	
360-07	EPI	140.00	231.60	226.30	0.0164	27	12.98	39.646	227.32	No
265			230.00	224.00			7.63	26.671	225.02	
MV3	MAN	5.00	230.00	224.00			12.94		224.98	-5.02
91 342			230.00	223.90			0.00		224.98	
MV360-08	EPI	340.00	230.00	224.00	0.0150	30	12.94	51.147	224.98	No
92 266			223.60	218.70			7.34	38.207	219.68	
MV3	MAN	5.00	223.60	218.70			12.84		219.50	-4.1
93 343			223.60	218.60			0.00		219.50	
MV360-09	EPI	220.00	223.60	218.70	0.0327	30	12.84	74.110	219.50	No
94 267			220.00	211.50			9.50	61.266	212.30	
MV3	MAN	5.00	220.00	211.50			14.70		212.26	-7.74
97 344			220.00	211.40			0.00		212.26	
MV360-10	EPI	250.00	220.00	211.50	0.0128	30	16.08	46.347	211.50	No
98 268			215.00	208.30			7.30	30.263	211.32	
				361						
MV3	MAN	5.00	221.60	216.60			2.17		217.24	-4.36
95 345			221.60	216.50			0.00		217.24	
MV360-11	EPI	320.00	221.60	216.60	0.0066	15	2.17	5.226	217.24	No
96 269			220.00	214.50			3.47	3.060	215.14	

I025yPF
System Summary

rID /	G_ID	Type	Length	Ground Up/Dn	Invert Up/Dn	Slope	Diam	DesignQ Vel	MaxQ ExcessQ	HGL Up/Dn	Surchg
					370						
MV3		MAN	5.00	215.80	210.00			2.67		210.66	-5.14
99	346			215.80	209.90			0.00		210.66	
MV370-2		EPI	220.00	215.80	210.00	0.0045	24	2.67	15.233	210.66	Nc
100	270			214.00	209.00			3.10	12.564	209.86	
MV3		MAN	5.00	214.00	209.00			7.82		209.86	-4.14
101	347			214.00	208.90			0.00		209.86	
MV370-03		EPI	380.00	214.00	209.00	0.0132	24	7.82	25.917	209.86	Nc
102	271			208.00	204.00			6.13	18.093	204.86	
MV3		MAN	5.00	208.00	204.00			7.36		204.78	-3.22
103	348			208.00	203.90			0.00		204.78	
MV370-04		EPI	150.00	208.00	204.00	0.018	24	7.36	30.313	204.78	Nc
104	272			208.00	201.30			6.78	22.954	202.08	
					Lateral Starting at Entity 357						
2		MAN	5.00	366.00	365.00			83.01		366.00	No
105	357			366.00	364.90			0.00		367.46	
MV3-100-01		EPI	362.09	368.00	365.00	0.0193	36	83.01	92.622	366.72	Yes
106	350			362.00	358.00			13.46	9.612	361.15	
3		MAN	5.00	362.00	358.00			83.01		361.15	-0.85
107	358			362.00	357.90			0.00		361.15	
MV3-100-02		EPI	399.19	362.00	358.00	0.02	36	83.01	94.304	360.58	Yes
108	351			355.00	350.00			13.62	11.294	355.00	
5		MAN	5.00	355.00	350.00			83.01		355.00	Nc
	359			355.00	349.90			0.00		355.00	
3-100-03		EPI	457.43	355.00	350.00	0.1071	24	83.01	73.948	351.52	Yes
110	352			306.00	301.00			26.42	-9.062	305.18	
7		MAN	5.00	306.00	301.00			85.84		305.18	-0.82
111	360			306.00	300.90			0.00		305.18	
MV3-100-04		EPI	978.64	306.00	301.00	0.0041	48	85.84	91.720	305.18	Yes
112	353			302.00	297.00			7.58	5.878	302.00	
					Lateral Starting at Entity 364						
15		MAN	5.00	305.50	301.00			87.24		305.50	No
113	364			305.50	300.90			0.00		314.66	
MV3-100-10		EPI	281.25	305.50	301.00	0.0142	30	87.24	48.854	314.66	Yes
114	356			302.00	297.00			17.77	-38.366	302.00	
9		MAN	5.00	302.00	297.00			169.29		302.00	Nc
115	361			302.00	296.90			0.00		303.39	
MV3-100-23		EPI	706.22	302.00	297.00	0.0241	42	169.29	155.902	302.66	Yes
116	354			288.20	280.00			17.60	-13.387	283.50	
11		MAN	5.00	288.20	280.00			169.68		282.12	-6.08
117	362			288.20	279.90			0.00		282.12	
MV3-100-22		EPI	106.08	288.20	280.00	0.0896	42	169.68	300.705	282.12	Nc
118	355			288.20	270.50			28.06	131.022	272.62	
13		RES	0.00	270.50	270.50			105.84		270.50	Nc
119	363			270.50	270.41			0.00		270.50	
676		EPI	506.46	288.00	274.00	0.001	500	105.84	23,470.612	290.69	Nc
120	676			288.00	273.49			3.87	23,364.768	290.69	

25y100PF
System Summary

UserID / SEQ	G_ID	Type	Length	Ground Up/Dn	Invert Up/Dn	Slope	Diam	DesignQ / Vel	MaxQ / ExcessQ	HGL Up/Dn	Surchg
					200						
MV3		MAN	5.00	471.00	467.00			6.06		1,500.25	1029.25
135	409			471.00	466.90			0.00		1,500.25	
MV3-20-02		EPI	600.00	471.00	467.00	0.0667	18	6.06	16.658	1,500.25	Yes
136	365			432.00	427.00			10.69	10.594	1,494.98	
MV3		MAN	5.00	432.00	427.00			10.63		1,494.98	1062.98
143	410			432.00	426.90			0.00		1,494.98	
MV3-20-01		EPI	514.00	432.00	427.00	0.0535	21	10.63	14.923	1,494.98	Yes
144	366			406.70	399.50			11.72	4.290	1,481.12	
MV3		MAN	5.00	406.70	399.50			14.81		1,481.12	1074.42
145	455			406.70	399.40			0.00		1,481.12	
MV3-20-93		EPI	276.40	406.70	399.50	0.0568	15	14.81	15.376	1,481.12	Yes
146	454			388.80	383.80			13.16	0.570	1,466.67	
MV3		MAN	5.00	406.70	399.50			16.06		1,466.67	1059.97
149	411			406.70	399.40			0.00		1,466.67	
MV3-20-03		EPI	535.00	388.80	383.80	0.0669	18	16.06	27.138	1,466.67	Yes
150	367			354.00	348.00			14.02	11.080	1,454.22	
MV3		MAN	5.00	388.80	383.80			18.83		1,454.22	1065.42
151	412			388.80	383.70			0.00		1,454.22	
MV3-20-04		EPI	696.00	354.00	348.00	0.0417	18	18.83	21.415	1,454.22	Yes
[illegible]	368			324.00	319.00			12.41	2.587	1,431.97	
		MAN	5.00	324.00	319.00			33.37		1,431.97	1107.97
[illegible]	413			324.00	318.90			0.00		1,431.97	
MV3-20-05		EPI	650.00	324.00	319.00	0.0231	25	33.37	9.801	1,431.97	Yes
168	369			309.00	304.00			27.20	-23.573	1,259.27	
MV3		MAN	5.00	309.00	304.00			41.73		1,259.27	950.27
169	414			309.00	303.90			0.00		1,259.27	
MV3-20-06		EPI	600.00	309.00	304.00	0.0267	15	41.73	10.535	1,257.28	Yes
170	370			293.00	288.00			34.00	-31.195	1,010.04	
MV3		MAN	5.00	293.00	288.00			43.27		1,010.04	717.04
171	415			293.00	287.90			0.00		1,010.04	
MV3-20-07		EPI	650.00	293.00	288.00	0.0077	18	43.27	8.826	1,009.03	Yes
172	371			289.80	283.40			24.48	-34.441	902.76	
MV3		MAN	5.00	289.80	283.40			57.12		902.76	612.96
173	416			289.80	283.30			0.00		902.76	
MV3-20-08		EPI	700.00	289.80	283.40	0.007	18	60.47	8.777	899.69	Yes
174	372			283.50	278.50			34.22	-51.688	681.59	
MV3		MAN	5.00	283.50	278.50			72.45		681.59	398.09
175	417			283.50	278.40			0.00		681.59	
MV3-20-09		EPI	140.00	283.50	278.50	0.025	21	72.45	25.021	681.59	Yes
176	373			280.20	275.00			30.12	-47.430	654.74	
MV3		MAN	5.00	280.20	275.00			70.86		654.74	374.54
177	418			280.20	274.90			0.00		654.74	
MV3-20-10		EPI	840.00	280.20	275.00	0.0244	21	70.86	24.722	654.74	Yes
178	374			259.00	254.50			29.40	-46.143	494.16	

erID / G_ID	Type	Length	Ground Up/Dn	Invert Up/Dn	Slope	Diam	DesignQ Vel	MaxQ ExcessQ	HGL Up/Dn	Surchg
MV3	MAN	5.00	259.00	254.50			71.97		494.16	235.16
179 419			259.00	254.40			0.00		494.16	
MV3-20-11	EPI	190.00	259.00	254.50	0.0168	24	71.97	29.322	494.16	Yes
180 375			256.00	251.30			22.91	-42.645	475.18	
MV3	MAN	5.00	256.00	251.30			74.40		475.18	219.18
181 420			256.00	251.20			0.00		475.18	
MV3-20-12	EPI	500.00	256.00	251.30	0.0174	24	75.86	29.803	475.18	Yes
182 376			247.60	242.60			24.15	-46.059	419.23	
MV3	MAN	5.00	247.60	242.60			76.68		419.23	171.63
183 421			247.60	242.50			0.00		419.23	
MV3-20-13	EPI	920.00	247.60	242.60	0.0191	24	76.68	31.256	419.23	Yes
184 377			230.00	225.00			24.41	-45.433	314.04	
MV3	MAN	5.00	230.00	225.00			83.67		314.04	84.04
185 422			230.00	224.90			0.00		314.04	
MV3-20-14	EPI	160.00	230.00	225.00	0.0144	24	83.67	27.089	314.04	Yes
186 378			227.70	222.70			26.63	-56.576	292.26	
MV3	MAN	5.00	227.70	222.70			86.44		292.26	64.56
187 423			227.70	222.60			0.00		292.26	
MV3-20-15	EPI	410.00	227.70	222.70	0.0188	27	86.44	42.389	292.26	Yes
188 379			221.10	215.00			21.74	-44.049	260.48	
MV3	MAN	5.00	221.10	215.00			96.22		260.48	39.38
189 424			221.10	214.90			0.00		260.48	
MV3-20-16	EPI	160.00	221.10	215.00	0.0094	27	96.22	29.949	260.48	Yes
190 380			219.00	213.50			24.20	-66.270	245.12	
	MAN	5.00	219.00	213.50			212.85		245.12	26.12
425			219.00	213.40			0.00		245.12	
MV3-20-17	EPI	540.00	219.00	213.50	0.0183	45	212.85	163.539	245.12	Yes
192 381			208.60	203.60			19.27	-49.308	228.48	
MV3	MAN	5.00	208.60	203.60			212.24		228.48	19.88
193 426			208.60	203.50			0.00		228.48	
MV3-20-18	EPI	550.00	208.60	203.60	0.0195	45	212.24	166.466	228.48	Yes
194 382			197.90	192.90			19.22	-43.778	211.63	
MV3	MAN	5.00	197.90	192.90			211.61		211.63	13.72
195 427			197.90	192.80			0.00		211.63	
MV3-20-19	EPI	470.00	197.90	192.90	0.0189	42	211.61	138.276	211.63	Yes
196 383			191.00	184.00			21.99	-73.330	190.94	
MV3	MAN	5.00	191.00	184.00			220.12		190.94	-0.06
203 428			191.00	183.90			0.00		190.94	
MV3-20-20	EPI	220.00	191.00	184.00	0.0261	48	220.12	240.841	190.94	Yes
204 384			188.50	177.80			19.78	20.723	185.81	
MV3	MAN	5.00	188.50	177.80			222.35		185.81	-2.69
205 429			188.50	177.70			0.00		185.81	
MV3-20-21	EPI	420.00	188.50	177.80	0.0095	54	222.35	191.673	185.81	Yes
206 385			190.00	173.80			13.98	-30.680	180.47	
MV3	MAN	5.00	190.00	173.80			221.47		180.47	-9.54
207 430			190.00	173.70			0.00		180.47	
MV3-20-22	EPI	430.00	190.00	173.80	0.0100	54	221.47	198.677	180.47	Yes
208 386			181.00	169.40			13.93	-22.797	175.04	
MV3	MAN	5.00	181.00	169.40			218.80		175.04	-5.96
209 431			181.00	169.30			0.00		175.04	

UserID / ID	G_ID	Type	Length	Ground Up/Dn	Invert Up/Dn	Slope	Diam	DesignQ / Vel	MaxQ / ExcessQ	HGL Up/Dn	Surchg
MV3-20-23		EPI	450.00	181.00	169.40	0.0098	54	218.80	194.211	174.31	Yes
210	387			170.00	165.00			13.76	-24.590	169.50	
MV3		MAN	5.00	190.00	165.00			215.95		165.35	-24.65
211	432			190.00	164.90			0.00		165.35	
670		EPI	233.09	190.00	162.23	0.001	500	221.44	23,476.954	165.35	No
212	670			190.00	162.00			4.80	23,255.514	165.12	
					205						
MV3		MAN	5.00	406.20	404.00			1.54		464.26	58.06
137	433			406.20	403.90			0.00		464.26	
MV3-21-01		EPI	190.00	466.20	464.00	0.1474	12	1.54	13.660	464.26	No
138	388			440.00	436.00			9.74	12.117	436.28	
MV3		MAN	5.00	440.00	436.00			1.50		436.28	-3.72
139	434			440.00	435.90			0.00		436.28	
MV3-21-02		EPI	80.00	440.00	436.00	0.1	12	1.50	11.252	436.22	Yes
140	389			432.00	428.00			8.36	9.748	432.00	
MV3		MAN	5.00	432.00	428.00			1.47		432.00	No
141	435			432.00	427.90			0.00		1,495.09	
MV3-21-03		EPI	30.00	432.00	428.00	0.0333	12	2.26	6.496	1,495.09	Yes
142	390			432.00	427.00			6.53	4.238	1,494.98	
					210						
MV3		MAN	5.00	404.60	400.60			1.56		1,466.73	1062.13
147	436			404.60	400.50			0.00		1,466.73	
MV3-21-14		EPI	170.00	404.60	400.60	0.0988	15	1.56	20.281	1,466.73	Yes
[illegible]	391			388.80	383.83			8.53	18.720	1,466.67	
					215						
MV3		MAN	5.00	367.00	363.00			2.07		1,441.22	1074.22
157	439			367.00	362.90			0.00		1,441.22	
MV3-22-01		EPI	320.00	367.00	363.00	0.0531	15	2.77	14.870	1,441.22	Yes
156	394			351.00	346.00			7.83	12.103	1,440.72	
MV3		MAN	5.00	351.00	346.00			2.59		1,440.72	1089.71
159	440			351.00	345.90			0.00		1,440.72	
MV3-22-02		EPI	290.00	351.00	346.00	0.0155	15	4.23	8.037	1,440.72	Yes
160	395			346.00	341.50			5.83	3.826	1,439.57	
MV3		MAN	5.00	346.00	341.50			7.07		1,439.57	1093.57
161	441			346.00	341.40			0.00		1,439.57	
MV3-22-21		EPI	350.00	346.00	341.50	0.0286	18	7.07	17.733	1,439.57	Yes
162	396			335.00	331.50			8.14	10.659	1,438.15	
MV3		MAN	5.00	356.60	351.60			2.28		1,438.35	1081.75
163	443			356.60	351.50			0.00		1,438.35	
MV3-22-11		EPI	600.00	356.60	351.60	0.0335	18	2.28	19.202	1,438.35	Yes
164	397			335.00	331.50			6.17	16.918	1,438.15	
MV3		MAN	5.00	335.00	331.50			14.56		1,438.15	1103.15
165	442			335.00	331.40			0.00		1,438.15	
MV3-22-22		EPI	372.00	335.00	331.50	0.0336	18	14.56	19.231	1,438.15	Yes
166	398			324.00	319.00			10.69	4.672	1,431.97	

erID l G_ID	Type	Length	Ground Up/Dn	Invert Up/Dn	Slope	Diam	DesignQ Vel	MaxQ ExcessQ	HGL Up/Dn	Surchg
				220						
MV3 153 437	MAN	5.00	240.50 240.50	235.50 235.40			4.88 0.00		316.21 316.21	75.71
MV3-23-01 154 392	EPI	250.00	240.50 234.00	235.50 229.00	0.026	15	4.88 7.17	10.403 5.518	316.21 314.88	Yes
MV3 155 438	MAN	5.00	234.00 234.00	229.00 228.90			7.76 0.00		314.88 314.88	80.88
MV3-23-02 156 393	EPI	170.00	234.00 230.00	229.00 225.00	0.0235	18	7.76 7.83	16.092 8.333	314.88 314.04	Yes
				230						
MV3 121 447	MAN	5.00	288.00 288.00	271.00 270.90			106.12 0.00		306.97 306.97	18.97
MV3-24-01 122 402	EPI	220.00	288.00 276.00	271.00 266.60	0.02	36	106.12 15.01	94.206 -11.915	306.97 302.32	Yes
MV3 123 448	MAN	5.00	276.00 276.00	266.60 266.50			106.12 0.00		302.32 302.32	26.32
MV3-24-02 124 403	EPI	520.00	276.00 263.20	266.60 259.50	0.0137	36	106.12 15.01	77.839 -28.281	302.32 291.33	Yes
MV3 125 449	MAN	5.00	283.20 283.20	259.50 259.40			116.44 0.00		291.33 291.33	8.13
MV3-24-03 126 404	EPI	750.00	263.20 254.00	259.50 250.00	0.0127	36	116.44 16.47	74.973 -41.466	291.33 270.38	Yes
MV3 450	MAN	5.00	254.00 254.00	250.00 249.90			117.19 0.00		270.38 270.38	16.38
-24-04 128 405	EPI	500.00	254.00 241.00	250.00 234.00	0.032	42	117.19 17.52	179.752 62.558	270.38 263.84	Yes
MV3 129 451	MAN	5.00	241.00 241.00	234.00 233.90			116.72 0.00		263.84 263.84	22.84
MV3-24-05 130 406	EPI	450.00	241.00 235.00	234.00 229.00	0.0111	42	116.72 12.13	105.920 -10.798	263.84 257.96	Yes
MV3 131 452	MAN	5.00	235.00 235.00	229.00 228.90			115.96 0.00		257.96 257.96	22.96
MV3-24-06 132 407	EPI	510.00	235.00 227.80	229.00 220.20	0.0173	42	115.96 14.00	131.994 16.032	257.96 251.28	Yes
MV3 133 453	MAN	5.00	227.80 227.80	220.20 220.10			115.49 0.00		251.28 251.28	23.48
MV3-24-07 134 408	EPI	470.00	227.80 219.00	220.20 213.50	0.0143	42	115.49 13.06	119.974 4.488	251.28 245.12	Yes

erID)	G_ID	Type	Length	Ground Up/Dn	Invert Up/Dn	Slope	Diam	DesignQ Vel	MaxQ ExcessQ	HGL Up/Dn	Surchg
					240						
MV3 197	444	MAN	5.00	194.00 194.00	190.00 189.90			3.64 0.00		191.76 191.76	-2.24
MV3-25-01 198	399	EPI	180.00	194.00 190.00	190.00 186.00	0.0222	18	3.64 6.28	9.617 5.980	191.76 191.19	Yes
MV3 199	445	MAN	5.00	190.00 190.00	186.00 185.90			3.62 0.00		191.19 191.19	1.19
MV3-25-02 200	400	EPI	40.00	190.00 190.00	186.00 185.50	0.0125	18	3.62 5.13	7.213 3.592	191.19 191.07	Yes
MV3 201	446	MAN	5.00	190.00 190.00	185.50 185.40			3.60 0.00		191.07 191.07	1.07
MV3-25-03 202	401	EPI	40.00	190.00 191.00	185.50 184.00	0.0375	18	3.60 7.57	12.493 8.891	191.07 190.94	Yes

erID)	G_ID	Type	Length	Ground Up/Dn	Invert Up/Dn	Slope	Diam	DesignQ Vel	MaxQ ExcessQ	HGL Up/Dn	Surchg
					300						
MV3 1	273	MAN	5.00	333.00 333.00	328.00 327.90			236.60 0.00		331.46 331.46	-1.54
MV300-02 2	198	EPI	140.00	333.00 332.00	328.00 325.00	0.0214	54	236.60 18.11	287.509 50.909	331.46 328.46	No
MV3 15	274	MAN	5.00	332.00 332.00	325.00 324.90			236.60 0.00		328.28 328.28	-3.72
MV300-03 16	199	EPI	240.00	332.00 327.00	325.00 319.00	0.025	54	236.60 19.12	310.545 73.942	328.28 322.60	No
MV3 17	275	MAN	5.00	327.00 327.00	319.00 318.90			236.60 0.00		322.60 322.60	-4.4
MV300-04 18	200	EPI	520.00	327.00 318.30	319.00 309.00	0.0192	54	236.60 17.42	272.366 35.765	322.60 312.60	No
MV3 45	276	MAN	5.00	318.30 318.30	309.00 308.90			236.68 0.00		312.20 312.20	-6.1
MV300-05 46	201	EPI	990.00	318.30 291.00	309.00 282.00	0.0273	54	236.68 19.74	324.354 87.671	312.20 285.36	No
MV3 47	277	MAN	5.00	291.00 291.00	282.00 281.90			236.50 0.00		285.36 285.36	-5.64
MV300-06 48	202	EPI	980.00	291.00 267.00	282.00 259.20	0.0233	54	236.50 18.64	299.577 63.073	285.36 262.56	No
MV3 67	278	MAN	5.00	267.00 267.00	259.20 259.10			236.19 0.00		261.20 261.20	-5.8
[illegible]300-07	203	EPI	1,090.00	267.00 239.60	258.00 228.70	0.0269	54	236.19 19.60	322.014 85.825	261.20 231.90	No
[illegible]3 77	335	MAN	5.00	232.90 232.90	228.50 228.40			4.92 0.00		230.54 230.54	-2.36
MV330-04 76	259	EPI	220.00	232.90 232.00	229.90 218.00	0.0541	12	4.92 9.72	8.276 3.359	230.48 221.82	Yes
MV3 247	279	MAN	5.00	239.60 239.60	228.70 228.60			251.20 0.00		231.66 231.66	-7.94
MV300-08 248	204	EPI	400.00	239.60 232.00	228.70 218.00	0.0267	66	251.20 19.40	548.555 297.350	231.66 221.82	No
MV3 249	280	MAN	5.00	232.00 232.00	218.00 217.90			254.66 0.00		221.82 221.82	-10.18
MV300-09 250	205	EPI	840.00	232.00 215.00	218.00 208.30	0.0115	66	254.66 14.53	360.416 105.752	221.82 212.12	No
MV3 251	281	MAN	5.00	215.00 215.00	208.30 208.20			281.18 0.00		211.62 211.62	-3.38
MV300-10 252	206	EPI	550.00	215.00 208.00	208.30 197.90	0.0189	72	281.18 17.56	581.653 300.473	211.62 201.22	No
MV3 253	282	MAN	5.00	208.00 208.00	201.30 201.20			293.31 0.00		201.20 201.20	-6.8
MV300-11 254	207	EPI	530.00	208.00 202.20	197.90 184.50	0.0253	72	294.86 19.73	672.579 377.715	201.06 187.80	No
MV3 255	283	MAN	5.00	202.00 202.00	184.50 184.40			293.80 0.00		187.80 187.80	-14.2
MV300-12 256	208	EPI	520.00	202.00 190.00	184.50 173.40	0.0213	72	293.80 18.59	618.000 324.201	187.80 177.56	No

erID d	G_ID	Type	Length	Ground Up/Dn	Invert Up/Dn	Slope	Diam	DesignQ Vel	MaxQ ExcessQ	HGL Up/Dn	Surchg
MV3		MAN	5.00	190.00	173.40			301.31		177.56	-12.44
257	284			190.00	173.30			0.00		177.56	
MV300-12b		EFI	920.00	190.00	173.40	0.0091	76	301.31	466.865	177.56	No
258	209			179.50	165.00			13.84	165.558	169.16	
MV3		RES	0.00	165.00	165.00			15.29		165.00	No
259	285			165.00	165.00			0.00		165.00	
671		EFI	372.92	190.00	185.30	0.0008	300	15.29	5,393.522	190.00	No
260	671			190.00	185.00			2.19	5,378.231	190.00	
677		MAN	5.00	190.00	185.30			15.29		190.00	No
261	677			190.00	185.20			0.00		192.01	
673		EFI	426.99	190.00	185.30	0.003	24	15.54	12.467	191.77	Yes
262	673			190.00	164.00			4.95	-3.077	190.00	
678		MAN	5.00	190.00	184.00			15.53		190.00	No
263	678			190.00	183.90			0.00		891.75	
675		EFI	227.24	190.00	184.00	0.0031	24	352.79	12.540	891.75	Yes
264	675			194.80	183.30			112.30	-340.253	341.81	
						310					
MV3		MAN	5.00	382.30	258.30			1.85		358.64	-23.66
13	302			382.30	258.20			0.00		358.64	
MV310-02		EFI	600.00	362.30	358.30	0.0555	16	1.85	18.053	358.30	No
14	226			332.00	325.00			7.16	16.202	328.28	
						320					
MV3		MAN	5.00	476.00	472.00			1.34		472.20	-3.8
	319			476.00	471.90			0.00		472.20	
20-02		EFI	320.00	476.00	472.00	0.3	12	1.34	19.489	472.20	No
40	243			380.00	376.00			12.02	18.152	376.28	
MV3		MAN	5.00	380.00	376.00			2.02		376.28	-3.72
41	320			380.00	375.90			0.00		376.28	
MV320-03		EFI	190.00	380.00	376.00	0.2053	12	2.02	16.121	376.28	No
42	244			342.00	337.00			11.98	14.104	337.56	
MV3		MAN	5.00	342.00	337.00			4.08		337.56	-4.44
43	321			342.00	336.90			0.00		337.56	
MV320-04		EFI	730.00	342.00	337.00	0.0384	15	4.08	12.635	337.06	Yes
44	245			318.00	309.00			7.83	8.553	312.20	
						330					
MV3		MAN	5.00	287.00	282.00			0.77		282.62	-4.38
61	328			287.00	281.90			0.00		282.62	
MV330-03		EFI	830.00	287.00	282.00	0.0229	15	3.74	9.761	282.62	Yes
62	252			268.00	263.00			6.37	6.020	264.84	
MV3		MAN	5.00	268.00	263.00			5.78		264.84	-3.16
63	329			268.00	262.90			0.00		264.84	
MV330-04		EFI	550.00	268.00	263.00	0.0069	15	5.78	5.363	263.00	No
64	253			267.00	259.20			4.71	-0.422	261.20	
MV3		MAN	5.00	266.00	260.00			6.56		266.01	0.01
65	330			266.00	259.90			0.00		266.01	
MV330-05		EFI	170.00	266.00	260.00	0.0047	12	6.56	2.441	261.20	No
66	254			267.00	259.20			8.27	-4.057	261.20	

erID / I	G_ID	Type	Length	Ground Up/Dn	Invert Up/Dn	Slope	Diam	DesignQ Vel	MaxQ ExcessQ	HGL Up/Dn	Surchg
					340						
MV3		MAN	5.00	573.00	569.00			3.83		569.40	-3.6
19	303			573.00	568.90			0.00		569.40	
MV340-02		EPI	340.00	573.00	569.00	0.3676	8	3.83	7.318	569.40	No
20	227			448.00	444.00			18.73	3.490	444.50	
MV3		MAN	5.00	446.00	444.00			3.72		444.50	-3.5
21	304			448.00	443.90			0.00		444.50	
MV340-03		EPI	480.00	448.00	444.00	0.1583	8	3.72	4.802	444.50	Yes
22	228			371.00	368.00			13.64	1.087	379.73	
MV3		MAN	5.00	371.00	368.00			3.69		379.73	8.73
23	305			371.00	367.90			0.00		379.73	
MV340-04		EPI	200.00	371.00	368.00	0.0375	8	3.69	2.337	377.71	Yes
24	229			364.00	360.50			10.57	-1.352	361.17	
MV3		MAN	5.00	364.00	360.00			7.06		360.58	-3.42
219	306			364.00	359.90			0.00		360.58	
MV340-05		EPI	900.00	364.00	360.00	0.0744	16	7.06	28.624	360.58	Yes
220	230			297.50	293.00			11.32	21.560	297.62	
MV3		MAN	5.00	297.50	293.00			8.32		297.62	0.12
221	307			297.50	292.90			0.00		297.62	
MV340-06		EPI	380.00	297.50	293.00	0.0342	16	8.32	19.404	297.62	Yes
222	231			284.00	280.00			9.04	11.087	295.25	
MV3		MAN	5.00	384.00	280.00			27.08		295.25	-88.76
223	308			384.00	279.90			0.00		295.25	
[illegible]340-07		EPI	200.00	284.00	280.00	0.02	18	31.36	14.837	293.13	Yes
	232			282.00	276.00			17.75	-16.526	277.71	
[illegible]3		MAN	5.00	282.00	276.00			47.57		277.71	-4.29
225	291			282.00	275.90			0.00		277.71	
MV340-08		EPI	370.00	282.00	276.00	0.0122	48	57.76	158.216	277.71	Yes
226	235			277.00	271.50			9.86	100.456	277.19	
MV3		MAN	5.00	277.00	271.50			60.70		277.19	0.19
227	292			277.00	271.40			0.00		277.19	
MV340-09		EPI	1,000.00	277.00	271.50	0.002	48	62.14	64.160	277.19	Yes
228	216			281.00	269.50			5.36	2.022	275.43	
MV3		MAN	5.00	281.00	271.50			67.27		275.43	-5.57
229	293			281.00	271.40			0.00		275.43	
MV340-10		EPI	280.00	281.00	272.20	0.0093	36	67.27	64.192	275.43	Yes
230	217			274.60	269.60			9.52	-3.082	272.60	
MV3		MAN	5.00	274.60	269.60			74.49		271.48	-3.12
231	294			274.60	269.50			0.00		271.48	
MV340-11		EPI	250.00	274.60	269.60	0.0264	42	74.49	163.266	271.48	No
232	218			268.80	263.00			14.24	88.777	264.96	
MV3		MAN	5.00	268.80	263.00			82.17		264.96	-3.84
233	295			268.80	262.90			0.00		264.96	
MV340-12		EPI	180.00	268.80	263.00	0.0278	42	82.17	167.474	264.96	No
234	219			264.60	258.00			14.96	85.301	260.46	
MV3		MAN	5.00	264.60	258.00			83.21		260.46	-4.14
235	296			264.60	257.90			0.00		260.46	
MV340-13		EPI	250.00	264.60	258.00	0.0148	42	87.35	122.245	260.46	No
236	220			262.00	254.30			12.23	34.867	256.94	

UserID / ID	G_ID	Type	Length	Ground Up/Dn	Invert Up/Dn	Slope	Diam	DesignQ Vel	MaxQ ExcessQ	HGL Up/Dn	Surchg
MV3		MAN	5.00	262.00	254.30			86.94		256.94	-5.06
237	297			262.00	254.20			0.00		256.94	
MV340-14		EPI	280.00	262.00	254.30	0.0118	42	86.94	109.088	256.94	No
238	221			262.00	251.00			11.27	22.147	253.64	
MV3		MAN	5.00	262.00	251.00			86.45		253.44	-8.56
239	298			262.00	250.90			0.00		253.44	
MV340-15		EPI	150.00	262.00	251.00	0.0147	42	86.45	121.693	253.44	No
240	222			264.90	248.80			12.13	35.242	251.24	
MV3		MAN	5.00	264.90	248.90			88.83		251.14	-13.76
241	299			264.90	248.80			0.00		251.14	
MV340-16		EPI	340.00	264.90	248.80	0.0135	48	88.83	166.873	251.14	No
242	223			262.50	244.20			11.70	78.045	246.70	
MV3		MAN	5.00	262.50	244.20			88.26		246.70	-15.8
243	300			262.50	244.10			0.00		246.70	
MV340-17		EPI	830.00	262.50	244.20	0.0143	42	88.26	120.319	246.70	No
244	224			241.00	232.30			12.13	32.060	235.38	
MV3		MAN	5.00	241.00	232.30			107.82		235.38	-5.62
245	301			241.00	232.20			0.00		235.38	
MV340-18		EPI	540.00	241.00	232.30	0.0067	54	110.77	160.365	235.38	No
246	225			239.60	228.70			9.59	49.593	231.78	
						341					
MV341-02		EPI	280.00	368.70	382.70	0.0811	15	0.00	18.370	382.70	No
218	235			364.00	360.00			0.20	18.370	360.58	
						342					
		MAN	5.00	312.00	307.00			4.05		324.79	12.79
25	311			312.00	306.90			0.00		324.79	
MV342-02		EPI	320.00	312.00	307.00	0.025	15	4.05	10.201	324.79	Yes
26	236			304.00	299.00			6.76	6.156	323.54	
MV3		MAN	5.00	304.00	299.00			3.81		323.54	19.54
27	312			304.00	298.90			0.00		323.54	
MV342-03		EPI	270.00	304.00	299.00	0.0222	15	3.81	9.617	323.54	Yes
28	237			298.00	293.00			6.39	5.804	322.60	
						343					
MV343-02		EPI	970.00	368.70	382.70	0.0925	15	0.00	19.619	382.70	No
233	233			298.00	293.00			0.20	19.619	322.60	
MV3		MAN	5.00	298.00	293.00			7.13		322.60	24.6
214	310			298.00	292.90			0.00		322.60	
MV343-03		EPI	395.00	298.00	293.00	0.0253	18	7.13	16.692	322.60	Yes
215	349			288.00	283.00			7.78	9.562	320.79	
						344					
MV3		MAN	5.00	301.50	295.50			9.29		330.48	28.98
29	313			301.50	295.40			0.00		330.48	
MV344-02		EPI	470.00	301.50	295.50	0.0266	15	9.29	10.521	330.48	Yes
30	238			288.00	283.00			6.79	1.227	320.79	
MV3		MAN	5.00	288.00	283.00			16.79		320.79	32.79
204	314			288.00	282.90			0.00		320.79	
MV342-05		EPI	380.00	288.00	283.00	0.0079	15	16.79	5.732	320.79	Yes
217	234			284.00	280.00			13.68	-11.055	295.25	

rID / G_ID	Type	Length	Ground Up/Dn	Invert Up/Dn	Slope	Diam	DesignQ Vel	MaxQ ExcessQ	HGL Up/Dn	Surchg
				345						
MV3	MAN	5.00	548.00	542.00			0.57		542.20	-5.8
3 286			548.00	541.90			0.00		542.20	
MV345-02	EPI	630.00	548.00	542.00	0.0603	12	0.57	8.739	542.20	No
4 210			510.00	504.00			5.39	8.165	504.42	
MV3	MAN	5.00	510.00	504.00			0.53		504.42	-5.58
5 0			510.00	503.90			0.00		504.42	
MV345-03	EPI	580.00	510.00	504.00	0.1702	12	3.96	14.678	504.42	No
6 211			411.30	405.30			13.68	10.723	405.76	
MV3	MAN	5.00	411.30	405.30			4.36		405.76	-5.54
7 288			411.30	405.20			0.00		405.76	
MV345-04	EPI	370.00	411.30	405.30	0.163	12	4.74	14.365	405.76	No
8 212			352.00	345.00			14.07	9.621	345.58	
MV3	MAN	5.00	352.00	345.00			4.63		345.58	-6.42
9 289			352.00	344.90			0.00		345.58	
MV345-05	EPI	400.00	352.00	345.00	0.1	12	5.71	11.252	345.58	No
10 213			312.50	305.00			12.56	5.544	305.94	
MV3	MAN	5.00	312.50	305.00			5.39		305.94	-6.56
11 290			312.50	304.90			0.00		305.94	
MV345-06	EPI	420.00	312.50	305.00	0.069	15	13.45	16.953	305.88	Yes
12 214			282.00	276.00			13.71	3.503	277.71	
				346						
MV3	MAN	5.00	331.00	326.00			0.93		326.22	-4.78
315			331.00	325.90			0.00		326.22	
346-02	EPI	300.00	331.00	326.00	0.0743	18	0.93	28.603	326.22	No
32 239			306.70	303.70			6.62	27.671	304.06	
MV3	MAN	5.00	306.70	303.70			2.73		304.06	-2.64
35 316			306.70	303.60			0.00		304.06	
MV346-03	EPI	350.00	306.70	303.70	0.0763	18	2.73	28.976	304.06	No
36 240			283.00	277.00			8.78	26.241	278.40	
MV3	MAN	5.00	283.00	277.00			4.68		278.40	-4.6
37 317			283.00	276.90			0.00		278.40	
MV346-04	EPI	350.00	283.00	277.00	0.0029	36	4.68	5.608	278.40	Yes
38 241			282.00	276.00			3.21	0.928	277.71	
				347						
MV3	MAN	5.00	340.00	336.00			1.91		336.28	-3.72
33 318			340.00	335.90			0.00		336.28	
MV347-02	EPI	190.00	340.00	336.00	0.17	12	1.91	14.671	336.28	No
34 242			306.70	303.70			10.90	12.763	304.06	

rID / G_ID	Type	Length	Ground Up/Dn	Invert Up/Dn	Slope	Diam	DesignQ / Vel	MaxQ / ExcessQ	HGL Up/Dn	Surchg
				348						
MV3	MAN	5.00	305.10	300.00			1.66		300.56	-4.54
55 326			305.10	299.90			0.00		300.56	
MV348-02	EPI	250.00	305.10	300.00	0.008	15	1.66	5.770	300.56	No
56 350			301.00	298.00			3.57	3.909	298.56	
MV3	MAI	5.00	301.00	296.00			2.66		296.46	-2.52
57 327			301.00	297.90			0.00		298.48	
MV3	EPI	500.00	301.00	298.00	0.03	15	2.66	11.174	298.48	No
58 251			287.00	283.00			6.34	8.516	283.82	
MV3	MAI	5.00	287.00	283.00			7.55		283.82	-3.18
59 331			287.00	282.90			0.00		283.82	
MV348-04	EPI	460.00	287.00	283.00	0.0235	18	7.55	16.075	283.78	Yes
60 249			281.00	272.20			7.71	8.529	275.43	
				349						
MV3	MAN	5.00	290.90	285.00			1.71		285.54	-5.36
53 324			290.90	284.90			0.00		285.54	
MV349-02	EPI	260.00	290.90	285.00	0.0077	15	1.71	5.658	285.54	No
54 248			287.00	283.00			3.43	3.951	283.82	
				350						
MV3	MAN	5.00	272.60	266.60			1.75		274.40	1.8
49 322			272.60	266.50			0.00		274.40	
MV350-02	EPI	250.00	272.60	266.60	0.002	15	2.98	2.885	274.40	Yes
50 246			272.10	266.10			2.43	-0.098	273.86	
	MAN	5.00	272.10	266.10			6.57		273.86	1.76
323			272.10	266.00			0.00		273.86	
MV350-03	EPI	870.00	272.10	266.10	0.0036	15	6.57	3.851	271.65	Yes
52 247			268.80	263.00			5.36	-2.722	264.96	
				351						
MV3	MAN	5.00	257.00	252.00			6.40		252.96	-4.04
69 331			257.00	251.90			0.00		252.96	
MV351-02	EPI	450.00	257.00	252.00	0.0156	18	8.07	13.085	252.96	No
70 255			250.00	245.00			6.83	5.016	246.36	
MV3	MAN	5.00	250.00	245.00			13.91		246.36	-3.64
71 332			250.00	244.90			0.00		246.36	
MV351-03	EPI	280.00	250.00	245.00	0.0143	21	15.55	18.914	246.36	No
72 256			246.00	241.00			7.91	3.361	242.70	
MV3	MAN	5.00	246.00	241.00			16.03		242.70	-3.3
73 333			246.00	240.90			0.00		242.70	
MV351-04	EPI	410.00	246.00	241.00	0.0073	24	18.03	19.327	242.70	No
74 257			241.00	238.00			6.40	1.297	239.70	
MV3	MAN	5.00	241.00	238.00			22.32		239.00	-2
75 334			241.00	237.90			0.00		239.00	
MV351-05	EPI	250.00	241.00	238.00	0.0228	24	22.32	34.116	237.50	Yes
76 258			241.00	232.30			10.16	11.794	235.36	

rID /	G_ID	Type	Length	Ground Up/Dn	Invert Up/Dn	Slope	Diam	DesignQ Vel	MaxQ ExcessQ	HGL Up/Dn	Surchg
					360						
MV3		MAN	5.00	255.60	250.60			8.17		251.34	-4.26
79	336			255.60	250.50			0.00		251.34	
MV360-02		EPI	280.00	255.60	250.60	0.0264	24	8.17	36.731	251.34	No
80	260			248.50	243.20			7.98	28.559	243.94	
MV3		MAN	5.00	248.50	243.00			11.43		243.92	-4.58
81	337			248.50	242.90			0.00		243.92	
MV360-03		EPI	190.00	248.50	243.00	0.0216	24	11.43	33.190	243.92	No
82	261			244.00	238.90			8.13	21.740	239.86	
MV3		MAN	5.00	244.00	238.90			12.76		239.86	-4.14
83	338			244.00	238.80			0.00		239.86	
MV360-04		EPI	260.00	244.00	238.90	0.0231	24	12.76	34.323	239.66	No
84	262			238.00	232.90			8.60	21.564	233.98	
MV3		MAN	5.00	238.00	232.90			15.35		233.98	-4.02
85	339			238.00	232.80			0.00		233.98	
MV360-05		EPI	260.00	238.00	232.90	0.0227	24	15.35	34.035	233.98	No
86	263			232.00	227.00			9.12	18.681	228.26	
MV3		MAN	5.00	232.00	227.00			20.09		228.26	-3.74
87	340			232.00	226.90			0.00		228.26	
MV360-06		EPI	40.00	232.00	227.00	0.0175	27	20.09	40.918	228.26	No
88	264			231.60	226.30			8.85	20.829	227.56	
MV3		MAN	5.00	231.60	226.30			19.62		227.56	-4.04
89	341			231.60	226.20			0.00		227.56	
360-07		EPI	140.00	231.60	226.30	0.0164	27	19.62	39.646	227.56	No
	265			230.00	224.00			8.57	20.022	225.20	
MV3		MAN	5.00	230.00	224.00			19.19		225.22	-4.78
91	342			230.00	223.90			0.00		225.22	
MV360-08		EPI	340.00	230.00	224.00	0.0156	30	19.19	51.147	225.22	No
92	266			223.60	218.70			8.28	31.957	219.97	
MV3		MAN	5.00	223.60	218.70			18.79		219.68	-3.92
93	343			223.60	218.60			0.00		219.68	
MV360-09		EPI	220.00	223.60	218.70	0.0327	30	18.79	74.110	219.68	No
94	267			220.00	211.50			10.63	55.319	212.48	
MV3		MAN	5.00	220.00	211.50			21.50		212.46	-7.54
97	344			220.00	211.40			0.00		212.46	
MV360-10		EPI	250.00	220.00	211.50	0.0126	30	23.83	46.347	212.46	Yes
98	268			215.00	208.30			8.25	22.538	211.62	
					361						
MV3		MAN	5.00	221.60	216.60			3.24		217.40	-4.2
95	345			221.60	216.50			0.00		217.40	
MV360-11		EPI	320.00	221.60	216.60	0.0066	15	3.24	5.226	217.40	No
96	269			220.00	214.50			3.93	1.982	215.30	

rID / G_ID	Type	Length	Ground Up/Dn	Invert Up/Dn	Slope	Diam	DesignQ Vel	MaxQ ExcessQ	HGL Up/Dn	Surchg
				370						
MV3	MAN	5.00	215.80	210.00			4.00		210.80	-5
99 346			215.80	209.90			0.00		210.80	
MV370-3	EPI	220.00	215.80	210.00	0.0045	24	4.00	15.233	210.80	No
100 270			214.00	209.00			3.45	11.236	210.08	
MV3	MAN	5.00	214.00	209.00			11.73		210.08	-3.92
101 347			214.00	208.90			0.00		210.08	
MV370-03	EPI	380.00	214.00	209.00	0.0132	24	11.73	25.917	210.08	No
102 271			208.00	204.00			6.94	14.189	205.08	
MV3	MAN	5.00	208.00	204.00			11.06		204.96	-3.04
103 348			206.00	203.90			0.00		204.96	
MV370-04	EPI	150.00	208.00	204.00	0.018	24	11.06	30.313	204.96	No
104 272			206.00	201.30			7.60	19.252	202.26	
				Lateral Starting at Entity 357						
2	MAN	5.00	366.00	365.00			83.01		366.00	No
105 357			366.00	364.90			0.00		367.46	
MV3-100-01	EPI	362.09	368.00	365.00	0.0193	36	83.01	92.622	366.73	Yes
106 350			362.00	358.00			13.46	9.612	361.15	
3	MAN	5.00	362.00	358.00			83.01		361.15	-0.85
107 358			362.00	357.90			0.00		361.15	
MV3-100-02	EPI	399.19	362.00	358.00	0.02	36	83.01	94.304	360.58	Yes
108 351			355.00	350.00			13.62	11.294	355.00	
4	MAN	5.00	355.00	350.00			83.01		355.00	No
359			355.00	349.90			0.00		365.66	
MV3-100-03	EPI	457.43	355.00	350.00	0.1071	24	83.01	73.948	351.52	Yes
110 352			306.00	301.00			26.42	-9.062	305.18	
7	MAN	5.00	306.00	301.00			85.84		305.18	-0.82
111 360			306.00	300.90			0.00		305.18	
MV3-100-04	EPI	978.64	306.00	301.00	0.0041	48	85.84	91.720	305.18	Yes
112 353			302.00	297.00			7.58	5.878	302.00	
				Lateral Starting at Entity 364						
35	MAN	5.00	305.50	301.00			87.24		305.50	No
113 364			305.50	300.90			0.00		314.66	
MV3-100-10	EPI	281.25	305.50	301.00	0.0142	30	87.24	48.854	314.66	Yes
114 356			302.00	297.00			17.77	-38.386	302.00	
9	MAN	5.00	302.00	297.00			169.30		302.00	No
115 361			302.00	296.90			0.00		303.39	
MV3-100-21	EPI	706.22	302.00	297.00	0.0241	42	169.30	155.902	302.60	Yes
116 354			288.20	280.00			17.60	-13.393	283.50	
10	MAN	5.00	288.20	280.00			170.01		282.12	-6.08
117 362			288.20	279.90			0.00		282.12	
MV3-100-22	EPI	106.08	288.20	280.00	0.0896	42	170.01	300.705	282.12	No
118 355			288.20	270.50			28.06	130.692	272.62	
13	RES	0.00	270.50	270.50			106.21		270.50	No
119 363			270.50	270.40			0.00		270.50	
67	EPI	506.46	288.00	274.00	0.002	50	106.21	23,470.612	306.97	No
120 676			288.00	273.49			3.87	23,364.400	306.97	

25yPF2

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Reservoirs - Sorted by User's ID

UserID / SEQ	G_ID	Rim Elev	Inverts In/Over/Out	Over ID	DesignQ In/Over/Out	Reservoir Cap Max/Stored	HGL Up/Dn	Surcharge
Pond 1		270.50	270.50	0	169.97	,000,000,000.00	270.50	No
119	161		274.00		0.00	696,895.58	270.50	
			274.00		106.21			
Pond2 3		165.00	165.00	0	518.34	,000,000,000.00	165.00	No
259	285		185.30		0.00	12,242,606.00	165.00	
			185.30		75.92			

25yPF3

2/28/2007 4:03:51 PM

Reservoirs - Sorted by User's ID

UserID SEQ	G_ID	Rim Elev	Inverts In/Over/Out	Over ID	DesignQ In/Over/Out	Reservoir Cap Max/Stored	HGL Up/Dn	Surcharge
Pond 1		270.50	270.50	127	160.97	914,760.00	270.50	No
119	363		274.00		0.00	696,895.58	270.50	
			274.00		106.21			
Pond2 3		165.00	165.00	263	518.34	4,600,000.00	165.00	No
259	285		185.30		447.85	4,600,000.00	165.00	
			185.30		11.48			

APPENDIX H

Miravale Phase III Development Standards

Table 2-4

LDR & LDR-H / M3-R-1 Development Standards

Category	Regulation	Interpretation
Land Use	Low Density Residential (LDR) Hillside Low Density Residential (LDR - H)	
Zoning District	M3-R-1	
Density Range	1 to 10	This zone is primarily 1-6 du/ac. Density above 6 du/ac is allowed in order to accommodate affordable duplex and triplex units.
Permitted Uses		
The following uses shall be permitted in the R-1 district:		
Single family dwellings Accessory Buildings (including garage) Churches	Duets, duplexes, or triplexes. Refer also to Section 17.10.020 of the Municipal Code	Home occupations, subject to Section 17.38.140 of the Municipal Code
Lot Configuration		
Lot Area	5,000sf minimum	
Corner Lot	6,000sf minimum	
Width		
Interior Lot	50 feet minimum	
Corner Lot	60 feet minimum	
Depth		
Local Street frontage	100 feet minimum	
Collector Street frontage	100 feet minimum	
Curved / Cul-de-sac Frontage	40 feet minimum	
Building Massing		
Lot Coverage	40% maximum	Roof overhangs, patio overhangs, unenclosed shade structures and the like are exempt from the building covereage calculation.
Building Height	2 stories maximum	
Accessory Building*	14 feet maximum	1 story maximum
	**Accessory structures contingent on appropriate design as defined in the CC&R's.*	
Setbacks		
Front Yard		
Living Space	15 feet minimum	Architectural features may extend up to 2.5' into the adjacent setback.
Porch	9 feet minimum	Porches and balconies may extend 6' into required front and rear yards, 2' into side yards.
Garage	20 feet minimum	
Side Yards		
Interior	5 feet minimum	
Exterior	10 feet minimum	
Side Loaded Garage	25 feet minimum	
Rear Yard		
Primary Building	20 feet minimum	A minimum of 1,000 sf open space/yard shall be provided to the side or rear of the main dwelling or in an "L" or "U" design.
Accessory Building	5 feet minimum	
Off Street Parking		
Parking Requirements	2 spaces/ unit minimum	Minimum two covered spaces within a garage or carport

Table 2-5 VR/ M3-VR Development Standards

VR/ M3-VR		
Category	**Restriction**	**Interpretation**
Land Use	Village Residential (VR)	
Zoning	Village Residential (M3-VR)	
Density Range	12-30 dwelling units / gross acre	
Permitted Uses		
Single-Family dwellings, duplexes, triplexes, apartments, clustered "pack" style homes, townhouses, condominiums, accessory buildings, neighborhood serving uses - including garages, and day nurseries. Any other uses that the Planning Commission finds to be consistent with the purpose of this section and the Specific Plan.		
Lot Configuration		
Lot Area	2,000 sf minimum 6,000 sf minimum for apartments	Lot area may be reduce up to 10% in constrained locations provided all setback and usable rear yard area requirements are met.
Width		
Interior Lot	35' feet minimum	
Exterior Lot	40' feet minimum	
Depth	65' feet minimum	
Curve / Cul-De-Sac Frontage	30' feet minimum	Measured at property line. May have a lot frontage less than specified provided all setback and rear yard area requirements are met.
Building Massing		
Lot Coverage	65% of lot maximum	Roof overhangs, patio covers, unenclosed shade structures and the like are exempt from the building coverage calculation.
Height	3 stories maximum	
Setbacks		
Front		
Living Space	10' minimum	Architectural features may extend up to 2.5' into the adjacent setback.
Porch	5' minimum	Porches and balconies may extend 5' into required front and rear yards, 2' into side yards.
Garage	20' minimum	

Side		
Interior	5' minimum	
Exterior	10' minimum	
Rear		
Residential	10' minimum	A 100' wide landsscaped buffer strip irrigated with recycled water is required measured from the structure on the lot closest to the open space.
Accessory Structure	5' minimum per story	Rear loading attached garages shall provide a 5' minimum setback.
Distance Between Buildings		
Residential Buildings	10' minimum	
Accessory Structures	6' minimum	
Fencing	Refer to Section 17.36.010 of the Municipal Code	
Landscaping & Open Space		
Private/Common Open Space		
Townhomes / Condos	500 sf minimum	
Apartments	300 sf minimum for studio 350 sf minimum for 1 bedroom 50 sf additional per bedroom > 1 bedroom	A portion of the required usable open space shall be private*, otherwise it shall be shared in common space *Private open space includes: patios, porches, balconies, terraces, and decks. A minimum of 80 sf for ground floor units and 48 sf for units located on the second level or above.
4+ Units	Provide a landscaped 4' wide minimum strip along the periphery of the project site. The front yard setback shall contain a varying landscaped strip varying in width from 6' wide to 10' wide.	
Parking	Refer to Section 17.36.020 of the Municipal Code	
Signage	Refer to Section 17.36.030 of the Municipal Code	

Table 2-6

C / M3-GC & M3-CC Development Standards

Category	Restriction	Interpretation
Land Use Zoning	Commercial (C) (M3-GC & M3-VC)	Includes Village Commercial and Gateway Commercial
Permitted Uses		
Village Commercial (VC) Bakery goods, barbershop, beauty shop, bicycle shop, books, clothing store, deli, department store, drug store, dry cleaner, florist shop, furniture store, garden supplies, gift shops, grocery store, hardware store, health foods, hobby shops, ice cream, laundromats, meat market, music store, newspaper stand, pet shop, photographic supplies, electronic stores, restaurants, shoe repair store, sporting goods, stationary store, toy store, any other use which the planning commission finds to be consistent with the purposes of this section		Gateway Commercial (GC) Auto parts, bakery goods, barbershop, beauty shop, bicycle shop, books, clothing store, community center, day care, deli, department store, drug store, dry cleaner, florist shop, furniture store, garden supplies, gift shops, grocery store, gym, hardware store, health foods, hobby shops, ice cream, laundromats, meat market, music store, newspaper stand, pet shop, photographic supplies, electronic stores, restaurants, spa, shoe repair store, sporting goods, stationary store, toy store, specialty retail, art gallery, any other use which the planning commission finds to be consistent with the purposes of this section
Conditional Uses		
Village Commercial (VC)		Gateway Commercial (GC)
Banks and other financial institutions, buildings with more than 50,000sf of gross floor area (75,000 sf for two or more stories), bowling alleys, cocktail lounges, liquor products, pool and billiards, any use the planning commission determines consistent with the provisions of this section.		Antiques and the sales of used items, banks and other financial institutions, buildings with more than 10,000sf of gross floor area (15,000 sf for two or more stories), bowling alleys, cocktail lounges, liquor products, office, pool and billiards, hotel, wine tasting room, live music venues, all drive throughs, used items including furniture and clothing where owned and operated by a non-profit organization, and any use the planning commission determines consistent with the provisions of this section.
Prohibited Uses VC & GC		
Liquor stores as a principal use, bars, automobile body and paint shop, exclusive automobile repair; sheet metal shop; fortune tellers, adult entertainment; gambling; pawn shops, thrift shops, and flea markets. All drive throughs are prohibited in Village Commercial.		
Lot Configuration VC & GC		
Landscape Area Coverage	10% of lot minimum	Area between front/street side property line and the building, excluding driveways, shall be landscaped. Parking lot areas shall be planted to reduce the impact of large paving areas.

Building Massing			
Village Commercial (VC)		Gateway Commercial (GC)	
Lot Coverage	No limitation	Lot Coverage	No Limitation
Height	3 stories maximum	Height	4 stories maximum
		Hotel	7 stories maximum
Setbacks		Setbacks	
Front	sidewalk	Front	0' for buildings fronting sidewalk
Side		Side	
Streetside	10' minimum	Streetside	10' minimum
Interior	0' minimum	Interior	0' minimum
Rear		Rear	0' minimum
Commercial	0' minimum		
Residential	20' minimum		
Distance Between Buildings	10' minimum	Distance Between Buildings	10' minimum
Parking	Refer to Section 17.36.020 of the Municipal Code		
Signage	Refer to Section 17.36.030 of the Municipal Code		

APPENDIX I

LAFCO Compatibility Table

Project Compatibility with Relevant Monterey County LAFCO Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Compatibility**
Monterey County LAFCO			
Adopted Sphere of Influence Policies			
1	LAFCO intends that its sphere of influence determination will serve as a master plan for the future organization of local government within the County. The spheres shall be used to discourage urban sprawl; limit proliferation of local governmental agencies; encourage efficiency, economy and orderly changes in local government; promote compact, community centered urban development; and minimize adverse impacts on lands classified as prime agriculture.	N/A	As outlined within Program 2.1 of the 2005 City of Soledad General Plan the City intends to apply to LAFCO for a comprehensive amendment of its sphere of influence that will be consistent with the 2005 General Plan and compatible with the City's ability to provide the full range of public services, including water supply; wastewater collection and treatment; storm drainage; and police and fire protection to the proposed Specific Plan area. The Miravale III Specific Plan will be included within this proposal.
2	The sphere of influence lines shall be a declaration of policy which shall be a primary guide to LAFCO in the decision on any proposal under its jurisdiction. Every determination made by the Commission shall be consistent with the spheres of influence of the agencies affected by those determinations.	N/A	The Miravale III Specific Plan incorporates city centered growth principles; project approval would ultimately allow for the expansion of the urbanized area of the City of Soledad where urban services are available to support such development.
3	Any proposal which is inconsistent with an agency's adopted sphere of influence shall not be approved until the Commission, at a noticed public hearing, has considered an amendment or revision to that agency's sphere of influence.	N/A	The proposed project is located outside of the City's current Sphere of Influence. Development of the project site would require an application to amend the City's Sphere of Influence to include the project area, which is identified in the Soledad General Plan as an area of future urban expansion.
4	Inclusion within an agency's sphere of influence does not assure annexation to that agency. The Commission shall evaluate boundary change proposals as they relate to all of the relevant factors listed in the Cortese-Knox Local Government Reorganization Act of 1985 (Government Code	N/A	Not applicable.

Project Compatibility with Relevant Monterey County LAFCO Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Compatibility**
	Section 56841 et seq.).		
5	When possible, a single larger general purpose agency, rather than a number of adjacent smaller ones, established for a given service in the same general area will be preferred. Where an area could be assigned to the sphere of influence of more than one agency providing a particular needed service, the following hierarchy shall apply dependent upon ability to serve. a. Inclusion within a City sphere of influence. b. Inclusion within a multi-purpose district sphere of influence. c. Inclusion within a single-purpose district sphere of influence. In deciding which of two or more equally ranked agencies shall include an area within its sphere of influence, LAFCO shall consider the agencies' service and financial capabilities, social and economic interdependence, topographic factors, and the effect that eventual service extension will have on adjacent agencies.	N/A	When the outward urban expansion of the City occurs as contemplated by the General Plan and detailed within the Miravale Phase III Specific Plan, the City will petition LAFCO to detach the Specific Plan area from all underlying service providers and for the area to be served by the City. A comprehensive service plan for the Specific Plan area will be available concurrently or in advance of such reorganization.
6	Duplication of authority to perform similar functions in the same territory will be avoided. Sphere of influence boundaries shall not create islands or corridors unless it can be demonstrated that the irregular boundaries represent the most logical and orderly service area of an agency.	N/A	The extension of the City of Soledad's Sphere of Influence would not create any "islands" and/or corridors. The proposed project site is contiguous to the existing City.
7	The adopted sphere of influence shall reflect City and County General Plans, plans of regional agencies, growth management policies, annexation policies, resource management policies, and any other policies related to ultimate boundary or service area of an affected agency unless those plans or policies conflict with the legislative	N/A	The Miravale Specific Plan is intended to implement the City of Soledad's General Plan land use and development provisions pertaining to designated Expansion Areas in an orderly and comprehensive manner. The Specific Plan accomplishes this through the establishment of land use, infrastructure, public services and financing provisions and

Project Compatibility with Relevant Monterey County LAFCO Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Compatibility**
	intent of the Cortese-Knox Act of 1985 (Government Code Section 56000 et seq.). Where inconsistencies between plans exist, LAFCO shall rely upon that plan which most closely follows the Legislature's directive to discourage urban sprawl, direct development away from prime agricultural land and open-space lands, and encourage the orderly formation and development of local governmental agencies based upon local conditions and circumstances.		programs to direct future development. The Specific Plan ensures a balance between growth and public infrastructure and services by ensuring that development pays its fair share of infrastructure and pubic service and facility costs, and that such infrastructure and services are in place as needed by each planned phase of development.
8	Extension of urban type services promotes urban development and such development belongs in cities or areas of development concentration in the unincorporated area of Monterey County. In evaluating proposals involving urban development requiring an urban level of governmental services, the Commission will discourage the formation of new special districts or premature annexation of territory within existing city spheres of influence or logical expansion area. The Commission will discourage boundary change proposals involving urban development outside adopted city spheres of influence that have the potential to negatively impact prime agriculture or open space lands, public service capacity, existing local governmental agencies, or generally represents illogical growth patterns.	Policies 5.1.1.1-5.1.3 5.1.2.1-5.1.2-2 5.1.3.1-5.1.3.5 5.1.4.1-5.1.4.11 5.2.1.1-5.2.1.4 5.2.2.1-5.2.2-8	The proposed project site is located adjacent to existing residential development within the City of Soledad and is identified as a future expansion area under the City's General Plan. As demonstrated in **Sections 4.12 Public Services** and **4.14 Utilities and Service Systems** adequate services and utilities are available or would be provided to serve the proposed development. While the project would result in the loss of agricultural lands classified as "prime farmland" the project site is identified as a future area of urban expansion. Moreover, development and annexation of the project site would not create any "islands" and/or corridors.
9	This Commission, in recognition of the mandated requirements for considering impacts on open space lands and agricultural lands, will develop and determine spheres of influence for Cities and urban service districts in such a manner as to promote the long-term preservation and protection of this County's "Resources." The Commission believes the public interest will be best served by considering "Resources" in a broad sense to include open space,	Policies 4.1.2.1-4.1.2.12	According to the City of Soledad General Plan, the project site is located within an area identified for future expansion. The proposed project, which includes residential, commercial, recreational, and public uses, would be consistent with the City's General Plan upon project approval. As identified in **Section 4.12 Public Services** development of the proposed project would provide open space opportunities for area residents, in addition to improved public parkland. While the

Project Compatibility with Relevant Monterey County LAFCO Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Compatibility**
	recreational opportunities, wildlife, and agricultural land. Sphere of influence determinations must conform with the Commission's Agricultural Preservation Policy adopted in November, 1979.		proposed project would result in the permanent conversion of agricultural land into an urban use, this area was contemplated under the 2005 General Plan as a future area of commercial and residential development. For more information regarding the project's impacts on agricultural resources, please refer to **Section 4.2 Agricultural Resources.**
Draft Sphere of Influence Policies			
1	For annexations and Spheres of Influence applications, LAFCO of Monterey County shall consider as part of its decision whether the proposal mitigates its regional traffic impacts by, for example, monetary contribution to regional transportation improvement fund as established by the Transportation Agency of Monterey County or otherwise:	Please refer to Section 3.1 of the Miravale Phase III Specific Plan	As indicated in **Section 4.13 Traffic and Circulation,** development of the proposed project would be required to mitigate regional transportation impacts through the payment of regional impact fees.
2	For annexations and Sphere of Influence applications, LAFCO of Monterey County shall consider as part of its decision whether the city in which the annexation or Sphere of Influence amendment is proposed has included certain goals, policies, and objectives into its General Plan that encourage mixed uses, mixed densities, and development patterns that will result in increased efficiency of land use, and that encourage and provide planned, well-ordered, efficient urban development patterns.	Policies 2.6.a-2.6.j 2.7.a-2.7.g 2.8.a-2.8.o	The City's adopted General Plan, as well as, the Miravale Phase III Specific Plan contain specific policies and measures to insure that development of the project site provides a mix of densities types, and development patterns to increase the efficiency of land use by providing commercial, recreational, residential, and public land uses within the project area.
Government Code Section 56668 "Factors to be considered in the review of a proposal"			
a	Population and population density; land area and land use; per capita assessed valuation; topography, natural boundaries, and drainage basins; proximity to other populated areas; the likelihood of significant growth in the area, and in adjacent incorporated and unincorporated areas, during the next 10 years.	Policies 4.1.2.1-4.1.2.12 2.6.a-2.6.j 2.7.a-2.7.g 2.8.a-2.8.o	The proposed project site is adjacent to existing residential neighborhoods located within the City of Soledad. For more information regarding population, land use, topography, natural boundaries, drainage basins, and other information,, please refer to **Sections 4.4 Biological Resources, 4.8 Hydrology and Water Quality,** and **4.11 Population and Housing.**

Project Compatibility with Relevant Monterey County LAFCO Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Compatibility**
b	Need for organized community services; the present cost and adequacy of governmental services and controls in the area; probable future needs for those services and controls; probable effect of the proposed incorporation, formation, annexation, or exclusion and of alternative courses of action on the cost and adequacy of services and controls in the area and adjacent areas. "Services," as used in this subdivision, refers to governmental services whether or not the services are services which would be provided by local agencies subject to this division, and includes the public facilities necessary to provide those services.	Policies 5.1.1.1-5.1.3 5.1.2.1-5.1.2-2 5.1.3.1-5.1.3.5 5.1.4.1-5.1.4.11 5.2.1.1-5.2.1.4 5.2.2.1-5.2.2-8	As discussed in **Section 4.12 Public Services** and **Section 4.14 Utilities and Services Systems** the proposed project would be served by adequate facilities. Existing services would be extended to the project site and final design of all project infrastructure would be subject to the review and approval of the City of Soledad.
c	The effect of the proposed action and of alternative actions, on adjacent areas, on mutual social and economic interests, and on the local governmental structure of the county.	N/A	Information currently not available.
d	The conformity of both the proposal and its anticipated effects with both the adopted commission policies on providing planned, orderly, efficient patterns of urban development, and the policies and priorities set forth in Section 56377.	N/A	The project site is located within an area identified in the Soledad General Plan as a future expansion area. This area is intended to accommodate projected growth as identified in the General Plan. Adequate services and public facilities would be provided as part of project development. Further, the Miravale Phase III Specific Plan identifies policies and guidelines to insure the orderly and efficient development of the project site consistent with the needs of the City.
e	The effect of the proposal on maintaining the physical and economic integrity of agricultural lands, as defined by Section 56016.	See Section 6.0 of the Miravale Phase III Specific Plan.	Development of the proposed project would occur in approximately four phases over approximately 20 years. The project site has been identified as a future expansion area under the City's General Plan. Portions of the project site currently under a Williamson Act contract would remain undeveloped until such time that the contract expires. For more information regarding the projects impact on agricultural resources, please refer to **Section 4.2 Agricultural Resources.**

Project Compatibility with Relevant Monterey County LAFCO Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Compatibility**
f	The definiteness and certainty of the boundaries of the territory, the nonconformance of proposed boundaries with lines of assessment or ownership, the creation of islands or corridors of unincorporated territory, and other similar matters affecting the proposed boundaries.	N/A	The proposed project site is adjacent to and contiguous with existing residential development within the City of Soledad. Amending the City's Sphere of Influence to include the project site would not result in the creation of any islands and/or corridors that would not be contiguous to the existing City. Moreover, adequate services would be extended to the project site to accommodate project development.
g	Consistency with city or county general and specific plans.	N/A	The project, as proposed, would be consistent with the City's General Plan. More specifically, the proposed project includes several General Plan amendments to insure that development of the site is consistent with the City's vision of the project area. The Miravale Phase III Specific Plan was prepared to insure a consistent and orderly vision of development within the project area.
h	The sphere of influence of any local agency which may be applicable to the proposal being reviewed.	N/A	The project site is immediately adjacent to the City of Soledad and is located within an area identified for future expansion.
i	The comments of any affected local agency or other public agency.	N/A	Not applicable at this time.
J	The ability of the newly formed or receiving entity to provide the services which are the subject of the application to the area, including the sufficiency of revenues for those services following the proposed boundary change.	N/A	As discussed in **Section 4.12 Public Services** and **Section 4.14 Utilities and Services Systems** the proposed project would be served by adequate facilities. Existing services would be extended to the project site and final design of all project infrastructure would be subject to the review and approval of the City of Soledad.
k	Timely availability of water supplies adequate for projected needs as specified in Section 65352.5.	N/A	As discussed in **Section 4.14 Utilities and Services Systems** the City has adequate water supply available to support full buildout of the General Plan, including the proposed project. According to the Water Supply Assessment prepared for the project, adequate water is available to accommodate project

Project Compatibility with Relevant Monterey County LAFCO Policies			
Policy Number	**Policy Summary**	**Applicable Specific Plan Policy Number**	**Compatibility**
			development.
l	The extent to which the proposal will affect a city or cities and the county in achieving their respective fair shares of the regional housing needs as determined by the appropriate council of governments consistent with Article 10.6 (commencing with Section 65580) of Chapter 3 of Division 1 of Title 7.	N/A	Development of the proposed project would provide approximately 4,200 residential units, including low, medium, and high density units. As identified in **Section 4.11 Population and Housing,** development of the proposed project would allow the City to achieve their fair share of the regional housing needs. Please refer to that section for further discussion.
m	Any information or comments from the landowner or owners.	N/A	Not applicable at this time.
n	Any information relating to existing land use designations.	N/A	According to the Monterey County General Plan, the project site is currently designated as Farmland and Permanent Grazing. Upon annexation, the project site would be designated for commercial, residential, recreational, and open space uses. Please see **Section 4.9 Land Use and Planning** for further information.

APPENDIX J

Traffic Impact Analysis

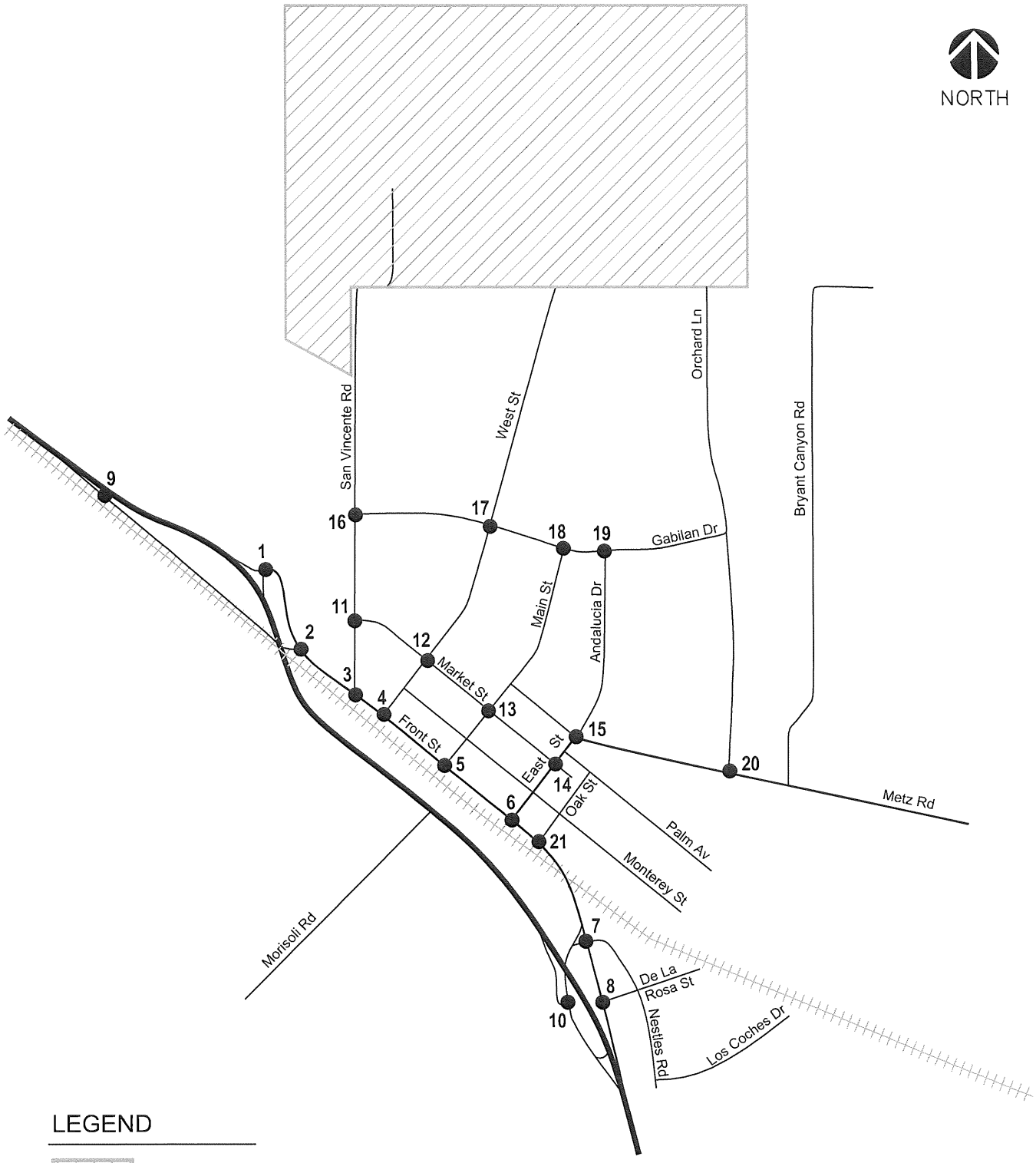


Figure 1

SITE LOCATION AND STUDY INTERSECTIONS

Soledad Miravale

Hexagon
Transportation Consultants, Inc.

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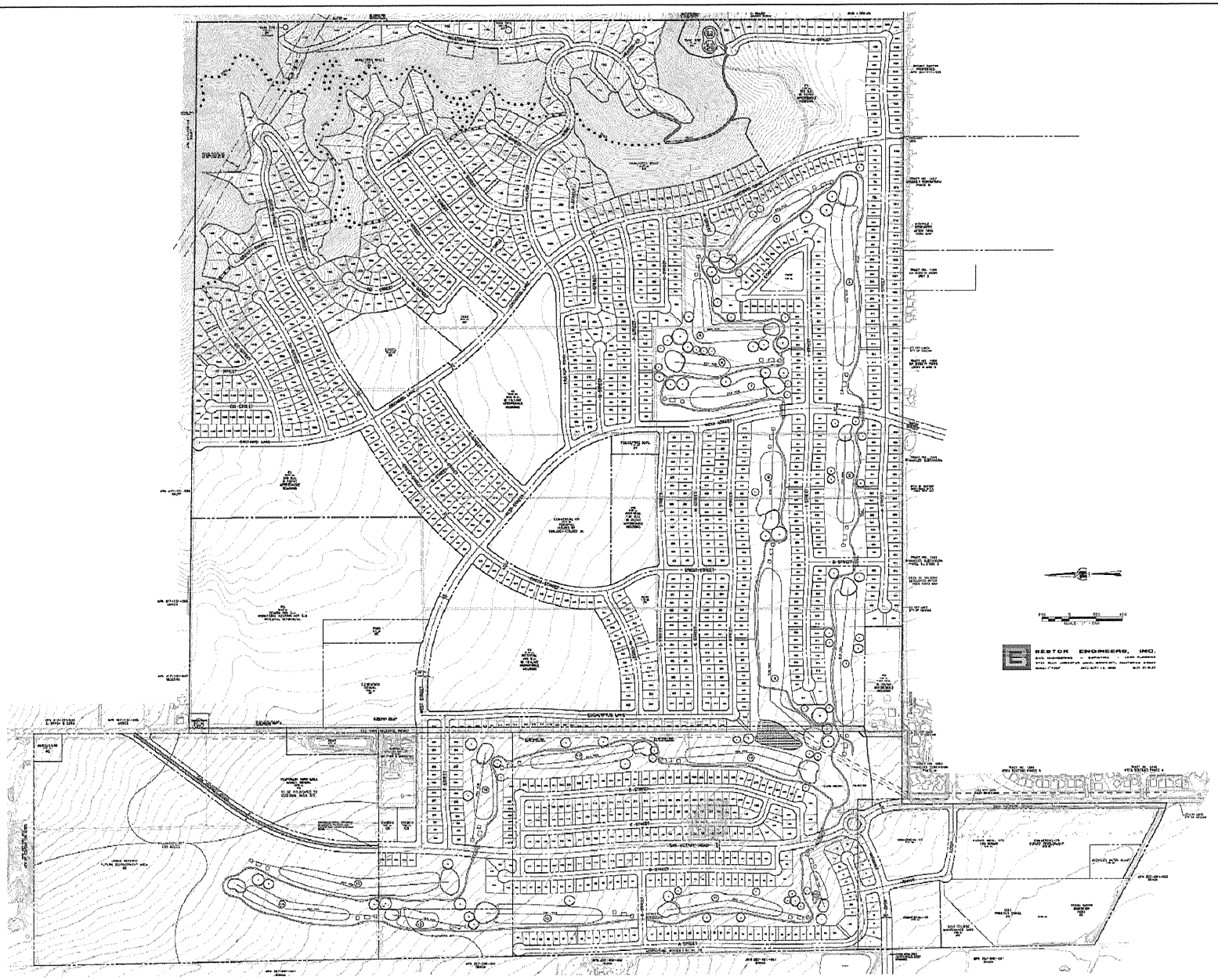


Figure 2

SITE PLAN

Soledad Miravale

Hexagon
Transportation Consultants, Inc.

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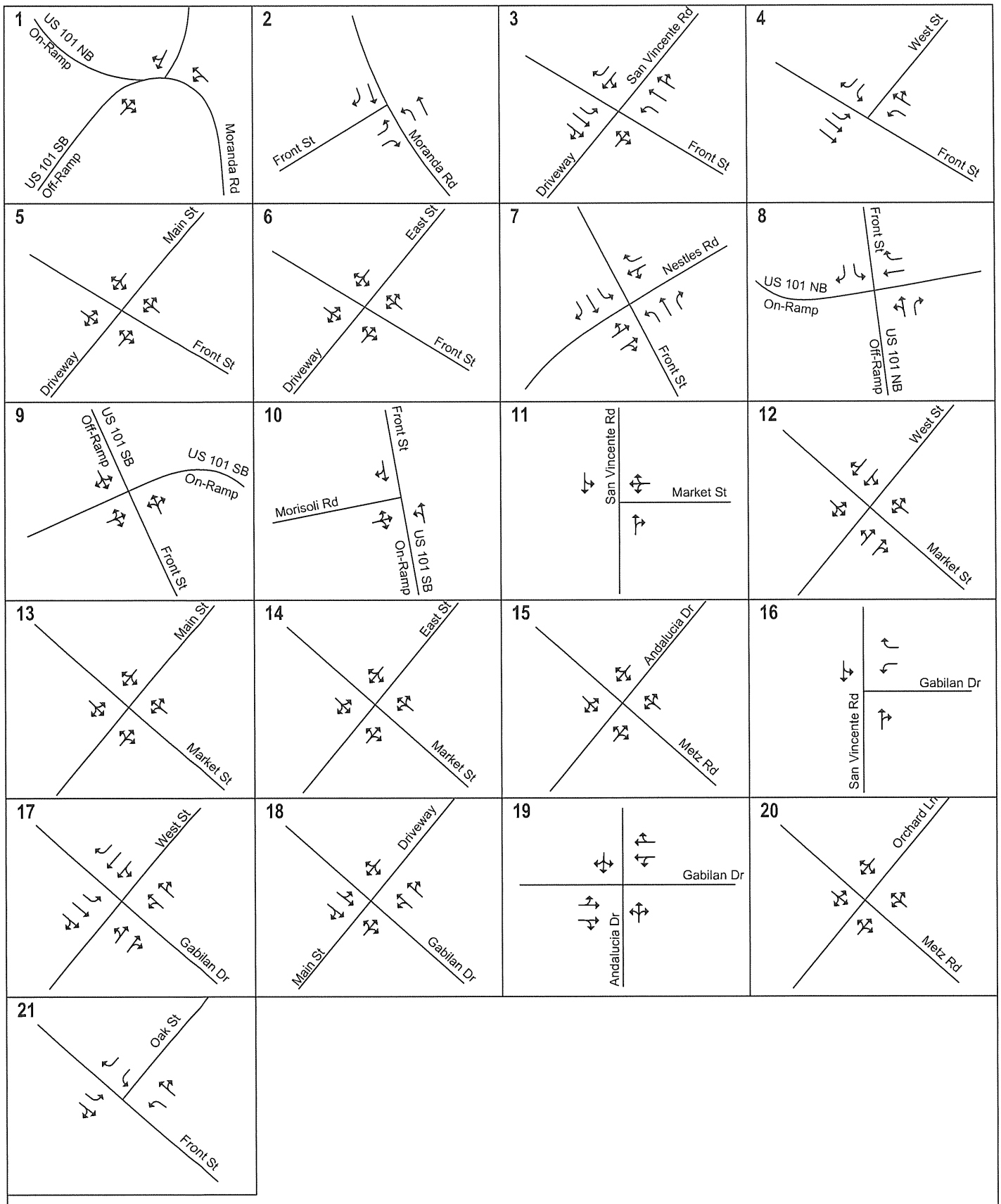


Figure 3

EXISTING LANE CONFIGURATIONS

Soledad Miravale

Hexagon
Transportation Consultants, Inc.

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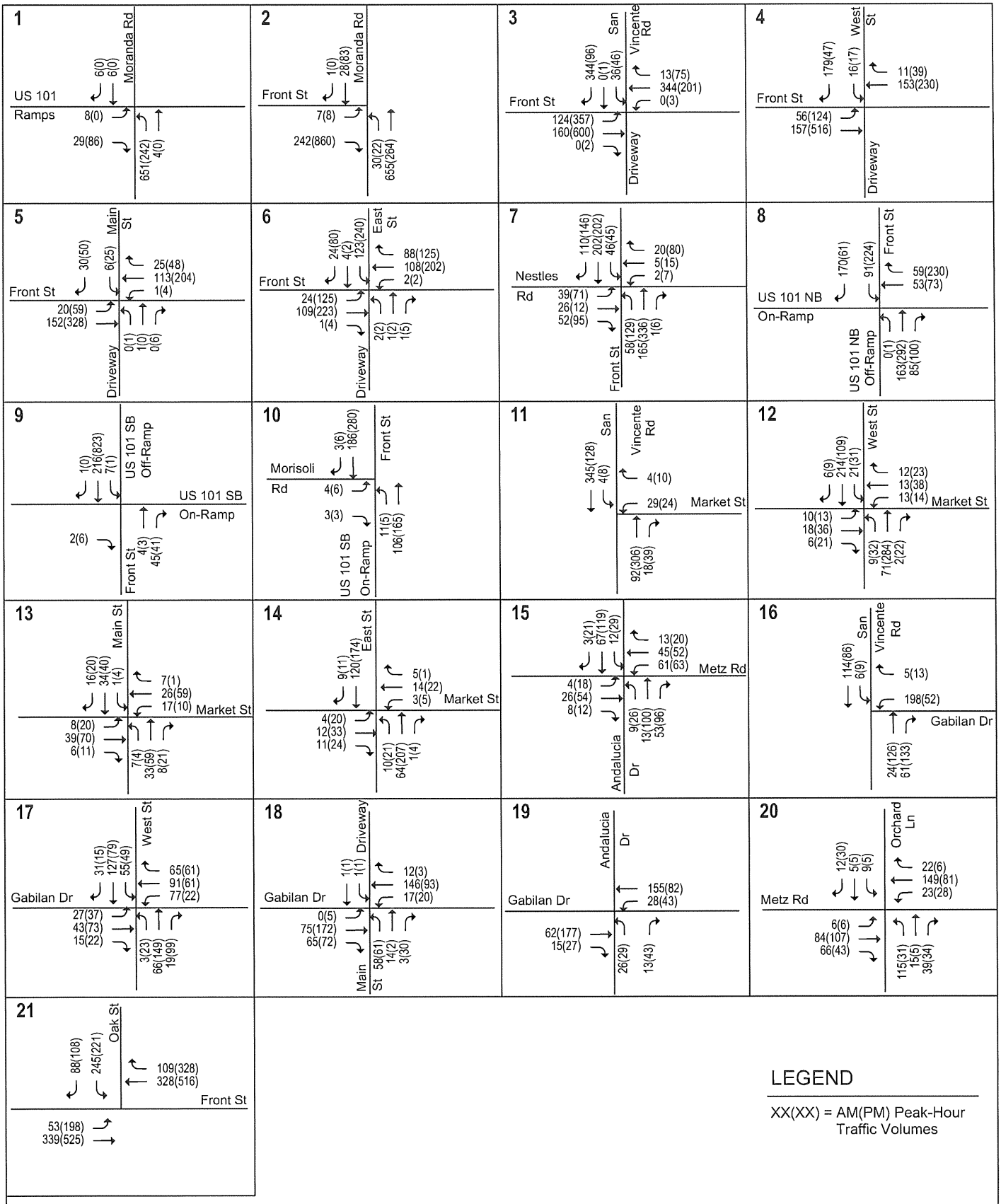


Figure 4

EXISTING TRAFFIC VOLUMES

Soledad Miravale

Hexagon
Transportation Consultants, Inc.

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Table ES 1
Intersection Levels of Service Summary

	Intersection	Intersection Control	Peak Hour	Count Date	Existing Conditions Ave. Delay	Existing Conditions LOS	Background Conditions Ave. Delay	Background Conditions LOS	Background with Improvements Ave. Delay	Background with Improvements LOS	Project Conditions Ave. Delay	Project Conditions LOS	Project Mitigated Ave. Delay	Project Mitigated LOS	Project With Gabilan Ext. Ave. Delay	Project With Gabilan Ext. LOS	No Project Cumulative Conditions Ave. Delay	No Project Cumulative Conditions LOS	With Project Cumulative Conditions Ave. Delay	With Project Cumulative Conditions LOS	With Project Cumulative With Gabilan Ext. Ave. Delay	With Project Cumulative With Gabilan Ext. LOS
1	Moranda Road and US 101 NB Ramps	TWSC	AM	7/26/06	16	C	33	D			**425**	**F**	13	B	18	B	8	A	14	B	18	B
			PM	7/26/06	11	B	14	B			**72**	**F**	12	B	10	B	15	B	16	B	10	B
2	Moranda Road and Front Street	TWSC	AM	7/26/06	10	A	***11***	***B***	14	B	**172**	**F**	7	A	14	B	10	A	5	A	15	B
			PM	7/26/06	28	D	***102***	***F***	21	C	**189**	**F**	6	A	13	B	18	B	11	B	14	B
3	San Vicente Road and Front Street	AWSC	AM	7/26/06	12	B	***22***	***C***	19	B	**143**	**F**	12	B	16	B	19	B	13	B	16	B
			PM	7/26/06	14	B	***40***	***E***	18	B	**146**	**F**	15	B	16	B	20	C	17	B	19	B
4	West Street and Front Street	AWSC	AM	7/26/06	9	A	10	A			***18***	***C***	18	B	15	B	11	B	19	B	14	B
			PM	7/26/06	11	B	13	B			***34***	***D***	20	B	12	B	25	C	34	C	13	B
5	Main Street and Front Street	AWSC	AM	7/27/06	8	A	9	A			11	B	19	B	10	B	9	A	23	C	21	C
			PM	7/27/06	10	B	12	B			***28***	***D***	23	C	17	C	24	C	22	C	23	C
6	East Street and Front Street	AWSC	AM	7/27/06	9	A	***14***	***B***	19	B	22	C			22	C	20	B	24	C	23	C
			PM	7/27/06	14	B	***73***	***F***	23	C	27	C			24	C	25	C	38	D	32	C
7	Front Street and Nestles Road	TWSC	AM	7/26/06	14	B	23	C	14	B	14	B			19	B	17	B	20	B	21	C
			PM	7/26/06	23	C	***300***	***F***	16	B	26	C			22	C	24	C	42	D	42	D
8	Front Street and US 101 NB Ramps	AWSC	AM	7/26/06	9	A	9	A	20	C	10	B			11	B	20	C	10	A	12	B
			PM	7/26/06	12	B	***14***	***B***	20	B	25	C			23	C	19	B	25	C	23	C
9	Front Street and US 101 SB Ramps	TWSC	AM	7/26/06	9	A	11	B			13	B	7	A	7	A	11	B	7	A	7	A
			PM	7/26/06	15	B	19	C			**62**	**F**	8	A	8	A	21	C	12	B	13	B
10	Front Street and Morisoli Road	TWSC	AM	7/27/06	10	A	11	B			14	B			14	B	11	B	14	B	14	B
			PM	7/27/06	11	B	13	B			17	C			16	C	14	B	18	C	18	C
11	San Vicente Road and Market Street	TWSC	AM	7/26/06	11	B	15	B			**47**	**E**	7	A	12	B	14	B	8	A	11	B
			PM	7/26/06	11	B	16	C			**114**	**F**	8	A	15	B	34	D	10	B	11	B
12	West Street and Market Street	AWSC	AM	7/27/06	8	A	8	A			12	B	5	A	10	A	9	A	6	A	10	A
			PM	7/27/06	9	A	9	A			***15***	***C***	7	A	11	B	11	B	9	A	11	B
13	Main Street and Market Street	AWSC	AM	7/25/06	7	A	8	A			9	A			8	A	8	A	9	A	8	A
			PM	7/26/06	8	A	8	A			10	A			9	A	9	A	11	B	9	A
14	East Street and Market Street	AWSC	AM	7/27/06	8	A	10	B			25	C	5	A	5	A	11	B	5	A	5	A
			PM	7/27/06	9	A	16	C			***95***	***F***	6	A	6	A	34	D	9	A	8	A
15	East Street and North Street/Metz Road	AWSC	AM	7/27/06	8	A	11	B	13	B	16	B			14	B	13	B	16	B	14	B
			PM	7/27/06	9	A	***21***	***C***	15	B	15	B			15	B	15	B	16	B	16	B
16	San Vicente Road and Gabilan Drive	TWSC	AM	7/26/06	11	B	13	B			***375***	***F***	15	B	15	B	18	B	21	C	16	B
			PM	7/26/06	10	B	13	B			***395***	***F***	12	B	18	B	19	B	23	C	27	C
17	West Street and Gabilan Drive	AWSC	AM	7/27/06	9	A	10	B			***26***	***D***	26	C	29	C	11	B	27	C	30	C
			PM	7/27/06	9	A	11	B			***58***	***F***	37	D	37	D	13	B	39	D	38	D
18	Main Street and Gabilan Drive	AWSC	AM	7/27/06	8	A	9	A			10	A	12	B	11	B	9	A	12	B	10	A
			PM	7/27/06	8	A	9	A			***12***	***B***	16	B	13	B	10	B	16	B	15	B
19	Andalucia Drive and Gabilan Drive	TWSC	AM	7/27/06	10	A	14	B			15	B	20	B	20	B	12	B	20	B	20	B
			PM	7/27/06	10	B	16	C			***18***	***C***	23	C	22	C	16	C	23	C	23	C
20	Orchard Lane and Metz Road	TWSC	AM	N/A	6	B	15	C			**37**	**E**	14	B	18	B	17	C	36	D	18	B
			PM	N/A	4	A	9	B			***17***	***C***	24	C	18	B	11	C	32	C	20	B
21	Front Street and Oak Street	TWSC	AM	N/A	***33***	***D***	***134***	***F***	12	B	20	B	12	B	12	B	12	B	12	B	12	B
			PM	N/A	***473***	***F***	***1247***	***F***	14	B	**74**	**E**	12	B	12	B	26	C	13	B	12	B

Notes:
1. Intersection control based on existing conditions
   -TWSC = Two-way stop-controlled intersection
   -AWSC = Four-way stop-controlled intersection
2. Significant impacts are shown in **BOLD** and boxed.
3. *Italics* and **BOLD** indicates signal warrant met.

Table ES 2

Signal Warrant Results Summary

Study Number	Intersection Name	Scenario: Existing Conditions AM	Existing Conditions PM	Background Conditions AM	Background Conditions PM	Project Conditions AM	Project Conditions PM	Cumulative Conditions AM	Cumulative Conditions PM
Existing Unsignalized Intersections									
1	Moranda Road & US 101 NB Ramps	No	No	No	No	No	No	**Yes**	**Yes**
2	Moranda Road & Front Street	No	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
3	San Vicente Road & Front Street	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
4	West Street & Front Street	No	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**
5	Main Street & Front Street	No	No	No	No	No	**Yes**	No	**Yes**
6	East Street & Front Street	No	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
7	Front Street & Nestles Road	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
8	Front Street & US 101 NB Ramps	No	No	No	**Yes**	No	**Yes**	No	**Yes**
9	Front Street & US 101 SB Ramps	No	No	No	No	No	No	No	No
10	Front Street & Morisoli Road	No	No	No	No	No	No	No	No
11	San Vicente Road & Market Street	No	No	No	No	No	No	No	**Yes**
12	West Street & Market Street	No	No	No	No	No	**Yes**	No	**Yes**
13	Main Street & Market Street	No	No	No	No	No	No	No	No
14	East Street & Market Street	No	No	No	No	No	**Yes**	No	**Yes**
15	East Street & North Street/Metz Road	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
16	San Vicente Road & Gabilan Drive	No	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**
17	West Street & Gabilan Drive	No	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**
18	Main Street & Gabilan Drive	No	No	No	No	No	**Yes**	No	**Yes**
19	Andalucia Drive & Gabilan Drive	No	No	No	No	No	**Yes**	No	**Yes**
20	Orchard Street & Metz Road	No	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**
21	Oak Street & Front Street	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**

Notes:
1. Signal warrant analysis based on Caltrans Peak Hour Signal Warrant #11.

Table ES 3
Project Freeway Segment Level of Service Summary

Segment	Direction	# Of Lanes	Capacity (vph) /a/	Background Conditions						Project Trips				Project Conditions					
				AM Peak-Hour			PM Peak-Hour			AM Peak-Hour		PM Peak-Hour		AM Peak-Hour			PM Peak-Hour		
				Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
US 101																			
North Gonzales and Gonzales-5th Street	Both	4	9,600	4,791	0.499	B	4,903	0.511	B	1,837	38.34%	1,688	34.44%	6,628	0.690	C	6,591	0.687	C
	NB	2	4,800	2,863	0.597	C	1,985	0.413	B	**1,019**	**35.60%**	1,266	63.80%	**3,883**	**0.809**	**D**	3,251	0.677	C
	SB	2	4,800	1,928	0.402	B	2,918	0.608	C	818	42.41%	422	14.47%	2,746	0.572	C	3,340	0.696	C
Gonzales-5th Street and Gloria Road	Both	4	9,600	4,697	0.489	B	4,824	0.503	B	2,099	44.69%	1,930	40.00%	6,796	0.708	C	6,754	0.704	C
	NB	2	4,800	2,805	0.584	C	1,957	0.408	B	**1,165**	**41.52%**	1,447	73.96%	**3,970**	**0.827**	**D**	3,404	0.709	C
	SB	2	4,800	1,892	0.394	B	2,868	0.597	C	934	49.39%	482	16.82%	2,826	0.589	C	3,350	0.698	C
Gloria Road and Soledad Prison	Both	4	9,600	3,853	0.401	B	3,996	0.416	B	2,362	61.29%	2,171	54.32%	6,215	0.647	C	6,167	0.642	C
	NB	2	4,800	2,297	0.479	B	1,629	0.339	A	1,310	57.05%	1,628	99.95%	3,608	0.752	C	3,257	0.679	C
	SB	2	4,800	1,556	0.324	A	2,367	0.493	B	1,051	67.56%	543	22.92%	2,607	0.543	B	2,910	0.606	C
Soledad Prison and Camphora	Both	4	9,600	3,681	0.383	B	3,832	0.399	B	2,493	67.72%	2,291	59.79%	6,174	0.643	C	6,124	0.638	C
	NB	2	4,800	2,193	0.457	B	1,565	0.326	A	1,383	63.07%	1,719	109.82%	3,576	0.745	C	3,284	0.684	C
	SB	2	4,800	1,488	0.310	A	2,267	0.472	B	1,110	74.57%	573	25.27%	2,598	0.541	B	2,840	0.592	C
Camphora and North Soledad	Both	4	9,600	4,859	0.506	B	5,018	0.523	B	1,456	29.97%	1,809	36.05%	6,315	0.658	C	6,827	0.711	C
	NB	2	4,800	2,899	0.604	C	2,041	0.425	B	**1,168**	**40.29%**	603	29.54%	**4,067**	**0.847**	**D**	2,644	0.551	C
	SB	2	4,800	1,960	0.408	B	2,977	0.620	C	288	14.69%	**1,206**	**40.51%**	2,248	0.468	B	**4,183**	**0.871**	**D**
North Soledad and South Soledad	Both	4	9,600	3,954	0.412	B	3,994	0.416	B	374	9.46%	465	11.64%	4,328	0.451	B	4,459	0.464	B
	NB	2	4,800	2,379	0.496	B	1,601	0.334	A	250	10.51%	189	11.81%	2,629	0.548	B	1,790	0.373	B
	SB	2	4,800	1,575	0.328	A	2,393	0.499	B	124	7.87%	276	11.53%	1,699	0.354	A	2,669	0.556	C
South Soledad and Arroyo Seco Road	Both	4	9,600	3,861	0.402	B	3,909	0.407	B	416	10.77%	517	13.23%	4,277	0.446	B	4,426	0.461	B
	NB	2	4,800	2,104	0.438	B	1,780	0.371	B	82	3.90%	345	19.38%	2,186	0.455	B	2,125	0.443	B
	SB	2	4,800	1,757	0.366	B	2,129	0.444	B	334	19.01%	172	8.08%	2,091	0.436	B	2,301	0.479	B
Arroyo Seco Road and North Greenfield	Both	4	9,600	3,703	0.386	B	3,749	0.390	B	395	10.67%	491	13.10%	4,098	0.427	B	4,240	0.442	B
	NB	2	4,800	2,018	0.420	B	1,707	0.356	A	78	3.86%	328	19.20%	2,096	0.437	B	2,035	0.424	B
	SB	2	4,800	1,685	0.351	A	2,042	0.425	B	317	18.83%	163	8.00%	2,002	0.417	B	2,205	0.459	B
North Greenfield and Walnut Avenue	Both	4	9,600	3,187	0.332	A	3,228	0.336	A	354	11.10%	439	13.62%	3,540	0.369	B	3,667	0.382	B
	NB	2	4,800	1,736	0.362	B	1,470	0.306	A	70	4.01%	293	19.95%	1,806	0.376	B	1,764	0.367	B
	SB	2	4,800	1,451	0.302	A	1,757	0.366	B	284	19.57%	146	8.32%	1,735	0.361	B	1,904	0.397	B
Walnut Avenue and Oak Avenue	Both	4	9,600	2,971	0.309	A	3,007	0.313	A	312	10.50%	388	12.90%	3,283	0.342	A	3,395	0.354	A
	NB	2	4,800	1,619	0.337	A	1,369	0.285	A	62	3.80%	259	18.90%	1,681	0.350	A	1,628	0.339	A
	SB	2	4,800	1,352	0.282	A	1,638	0.341	A	251	18.53%	129	7.88%	1,602	0.334	A	1,767	0.368	B
South Greenfield and Oak Avenue	Both	4	9,600	2,455	0.256	A	2,486	0.259	A	270	11.02%	336	13.52%	2,725	0.284	A	2,822	0.294	A
	NB	2	4,800	1,337	0.279	A	1,132	0.236	A	53	3.99%	224	19.81%	1,391	0.290	A	1,357	0.283	A
	SB	2	4,800	1,117	0.233	A	1,354	0.282	A	217	19.43%	112	8.26%	1,334	0.278	A	1,465	0.305	A

Notes:
/a/ Capacity of freeway lanes based on assumed capacity of 2,400 vphpl, as prescribed by the Highway Capacity Manual
/b/ Data provided by Caltrans Data System Unit 2005, Route 101 District 5.

Table ES 4

Freeway Ramp Analysis Summary

Interchange	Direction	# Of Lanes	Type	Capacity (vph)	Background Conditions						Project Trips				Project Conditions					
					AM Peak-Hour			PM Peak-Hour			AM Peak-Hour		PM Peak-Hour		AM Peak-Hour			PM Peak-Hour		
					Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
US 101																				
Camphora Road	SB to Camphora Road	1	Diagonal	1,500	24	0.016	A	30	0.020	A	0	0.00%	0	0.00%	24	0.016	A	30	0.020	A
	NB from Camphora Road	1	Diagonal	1,500	40	0.027	A	32	0.021	A	0	0.00%	0	0.00%	40	0.027	A	32	0.021	A
	SB from Camphora Road	1	Diagonal	1,500	88	0.059	A	115	0.077	A	14	15.91%	60	52.17%	102	0.068	A	175	0.117	A
	NB to Camphora Road	1	Diagonal	1,500	96	0.064	A	80	0.053	A	58	60.42%	30	37.50%	154	0.103	A	110	0.073	A
Moranda Road	SB to Moranda Road	1	Diagonal	1,500	408	0.272	A	1107	0.738	C	230	56.37%	**965**	**87.17%**	638	0.425	B	**2072**	**1.381**	**F**
	NB from Moranda Road	1	Loop	1,500	877	0.585	C	482	0.321	A	**935**	**106.61%**	482	100.00%	**1812**	**1.208**	**F**	964	0.643	C
	SB from Moranda Road	1	Loop	1,500	52	0.035	A	42	0.028	A	67	128.85%	34	80.95%	119	0.079	A	76	0.051	A
	NB to Moranda Road	1	Loop	1,500	37	0.025	A	86	0.057	A	16	43.24%	69	80.23%	53	0.035	A	155	0.103	A
Front Street	SB to Front Street	1	Loop	1,500	162	0.108	A	283	0.189	A	58	35.80%	241	85.16%	220	0.147	A	524	0.349	A
	NB from Front Street	1	Loop	1,500	322	0.215	A	216	0.144	A	234	72.67%	121	56.02%	556	0.371	B	337	0.225	A
	SB from Front Street	1	Diagonal	1,500	281	0.187	A	376	0.251	A	267	95.02%	138	36.70%	548	0.365	B	514	0.343	A
	NB to Front Street	1	Diagonal	1,500	317	0.211	A	508	0.339	A	66	20.82%	276	54.33%	383	0.255	A	784	0.523	B
Arroyo Seco Road	SB to Arroyo Seco Road	1	Diagonal	1,500	75	0.050	A	93	0.062	A	17	22.67%	9	9.68%	92	0.061	A	102	0.068	A
	NB from Arroyo Seco Road	1	Diagonal	1,500	91	0.061	A	76	0.051	A	4	4.40%	17	22.37%	95	0.063	A	93	0.062	A

Notes:
1. Capacity for all ramps based on assumed capacity of 1,500 vphpl, as prescribed by the Highway Capacity Manual

Table ES 5
Year 2030 Freeway Segment Analysis Summary

Segment	Direction	# Of Lanes	Capacity (vph)	Year 2030 Conditions						Miravale Phase III Project Trips			
				AM Peak-Hour			PM Peak-Hour			AM Peak-Hour		PM Peak-Hour	
				Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase
US 101													
Soledad Prison and Camphora	NB	2	4,800	**4,170**	**0.869**	**D**	2,920	0.608	C	**770**	**18%**	150	5%
	SB	2	4,800	2,920	0.608	C	**4,170**	**0.869**	**D**	150	5%	**770**	**18%**
Camphora and North Soledad	NB	2	4,800	3,300	0.688	C	2,310	0.481	B	250	8%	50	2%
	SB	2	4,800	2,190	0.456	B	3,130	0.652	C	0	0%	0	0%
North Soledad and South Soledad	NB	2	4,800	2,760	0.575	C	1,930	0.402	B	40	1%	200	10%
	SB	2	4,800	1,880	0.392	B	2,690	0.560	C	0	0%	0	0%
South Soledad and Arroyo Seco Road	NB	2	4,800	2,750	0.573	C	1,930	0.402	B	60	2%	320	17%
	SB	2	4,800	1,930	0.402	B	2,750	0.573	C	320	17%	60	2%
Arroyo Seco Road and North Greenfield	NB	2	4,800	2,700	0.563	C	1,890	0.394	B	60	2%	290	15%
	SB	2	4,800	1,890	0.394	B	2,700	0.563	C	290	15%	60	2%

Notes:
1. Capacity of freeway lanes based on assumed capacity of 2,400 vphpl, as prescribed by the Highway Capacity Manual
2. Year 2030 traffic volumes based on projections produced by Omni Means, March 27, 2007
3. Miravale Phase III project trips based on Year 2030 projections produced by Omni Means, Miravale III Future Traffic Volume, March 27, 2007

Table ES 6
Year 2030 Freeway Ramp Analysis Summary

Interchange	Direction	# Of Lanes	Type	Capacity (vph)	Year 2030 Conditions						Miravale Phase III Year 2030 Project Trips			
					AM Peak-Hour			PM Peak-Hour			AM Peak-Hour		PM Peak-Hour	
					Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase
US 101														
Camphora Road	SB to Camphora Road	1	Diagonal	1,500	900	0.600	C	**1290**	**0.860**	**D**	150	17%	**770**	**60%**
	NB from Camphora Road	1	Diagonal	1,500	970	0.647	C	680	0.453	B	520	54%	100	15%
	SB from Camphora Road	1	Diagonal	1,500	180	0.120	A	250	0.167	A	0	0%	0	0%
	NB to Camphora Road	1	Diagonal	1,500	100	0.067	A	70	0.047	A	0	0%	0	0%
Moranda Road	SB to Moranda Road	1	Diagonal	1,500	390	0.260	A	550	0.367	B	0	0%	0	0%
	NB from Moranda Road	1	Loop	1,500	830	0.553	C	580	0.387	B	250	30%	50	9%
	SB from Moranda Road	1	Loop	1,500	80	0.053	A	110	0.073	A	0	0%	0	0%
	NB to Moranda Road	1	Loop	1,500	290	0.193	A	200	0.133	A	40	14%	200	100%
Front Street	SB to Front Street	1	Loop	1,500	220	0.147	A	320	0.213	A	0	0%	0	0%
	NB from Front Street	1	Loop	1,500	360	0.240	A	250	0.167	A	0	0%	20	8%
	SB from Front Street	1	Diagonal	1,500	270	0.180	A	380	0.253	A	320	119%	60	16%
	NB to Front Street	1	Diagonal	1,500	350	0.233	A	250	0.167	A	30	9%	140	56%
Arroyo Seco Road	SB to Arroyo Seco Road	1	Diagonal	1,500	110	0.073	A	150	0.100	A	30	27%	10	7%
	NB from Arroyo Seco Road	1	Diagonal	1,500	150	0.100	A	110	0.073	A	10	7%	30	27%

Notes:
1. Capacity of freeway lanes based on assumed capacity of 1,500 vphpl for all ramps, as prescribed by the Highway Capacity Manual
2. Year 2030 traffic volumes based on projections produced by Omni Means, March 27, 2007
3. Miravale Phase III project trips based on Year 2030 projections produced by Omni Means, Miravale III Future Traffic Volume, March 27, 2007

Table 4
Existing Intersection Levels of Service

	Intersection	Intersection Control	Peak Hour	Count Date	Ave. Delay	LOS
1	Moranda Road and US 101 NB Ramps	TWSC	AM	07/26/06	16	C
			PM	07/26/06	11	B
2	Moranda Road and Front Street	TWSC	AM	07/26/06	10	A
			PM	07/26/06	28	D
3	San Vicente Road and Front Street	AWSC	AM	07/26/06	12	B
			PM	07/26/06	14	B
4	West Street and Front Street	AWSC	AM	07/26/06	9	A
			PM	07/26/06	11	B
5	Main Street and Front Street	AWSC	AM	07/27/06	8	A
			PM	07/27/06	10	B
6	East Street and Front Street	AWSC	AM	07/27/06	9	A
			PM	07/27/06	14	B
7	Front Street and Nestles Road	TWSC	AM	07/26/06	14	B
			PM	07/26/06	23	C
8	Front Street and US 101 NB Ramps	AWSC	AM	07/26/06	9	A
			PM	07/26/06	12	B
9	Front Street and US 101 SB Ramps	TWSC	AM	07/26/06	9	A
			PM	07/26/06	15	B
10	Front Street and Morisoli Road	TWSC	AM	07/27/06	10	A
			PM	07/27/06	11	B
11	San Vicente Road and Market Street	TWSC	AM	07/26/06	11	B
			PM	07/26/06	11	B
12	West Street and Market Street	AWSC	AM	07/27/06	8	A
			PM	07/27/06	9	A
13	Main Street and Market Street	AWSC	AM	07/25/06	7	A
			PM	07/26/06	8	A
14	East Street and Market Street	AWSC	AM	07/27/06	8	A
			PM	07/27/06	9	A
15	East Street and North Street/Metz Road	AWSC	AM	07/27/06	8	A
			PM	07/27/06	9	A
16	San Vicente Road and Gabilan Drive	TWSC	AM	07/26/06	11	B
			PM	07/26/06	10	B
17	West Street and Gabilan Drive	AWSC	AM	07/27/06	9	A
			PM	07/27/06	9	A
18	Main Street and Gabilan Drive	AWSC	AM	07/27/06	8	A
			PM	07/27/06	8	A
19	Andalucia Drive and Gabilan Drive	TWSC	AM	07/27/06	10	A
			PM	07/27/06	10	B
20	Orchard Lane and Metz Road	TWSC	AM	N/A	6	B
			PM	N/A	4	A
21	Front Street and Oak Street	TWSC	AM	N/A	***33***	***D***
			PM	N/A	***473***	***F***

Notes:
TWSC = Two-way stop-controlled intersection
AWSC = Four-way stop-controlled intersection

Table 5
Signal Warrant Results Summary

Study Number	Intersection Name	Existing Conditions AM	Existing Conditions PM
Existing Unsignalized Intersections			
1	Moranda Road & US 101 NB Ramps	No	No
2	Moranda Road & Front Street	No	**Yes**
3	San Vicente Road & Front Street	**Yes**	**Yes**
4	West Street & Front Street	No	No
5	Main Street & Front Street	No	No
6	East Street & Front Street	No	**Yes**
7	Front Street & Nestles Road	No	No
8	Front Street & US 101 NB Ramps	No	No
9	Front Street & US 101 SB Ramps	No	No
10	Front Street & Morisoli Road	No	No
11	San Vicente Road & Market Street	No	No
12	West Street & Market Street	No	No
13	Main Street & Market Street	No	No
14	East Street & Market Street	No	No
15	East Street & North Street/Metz Road	No	No
16	San Vicente Road & Gabilan Drive	No	No
17	West Street & Gabilan Drive	No	No
18	Main Street & Gabilan Drive	No	No
19	Andalucia Drive & Gabilan Drive	No	No
20	Orchard Street & Metz Road	No	No
21	Oak Street & Front Street	**Yes**	**Yes**

Notes:
1. Signal warrant analysis based on Caltrans Peak Hour Signal Warrant #11.

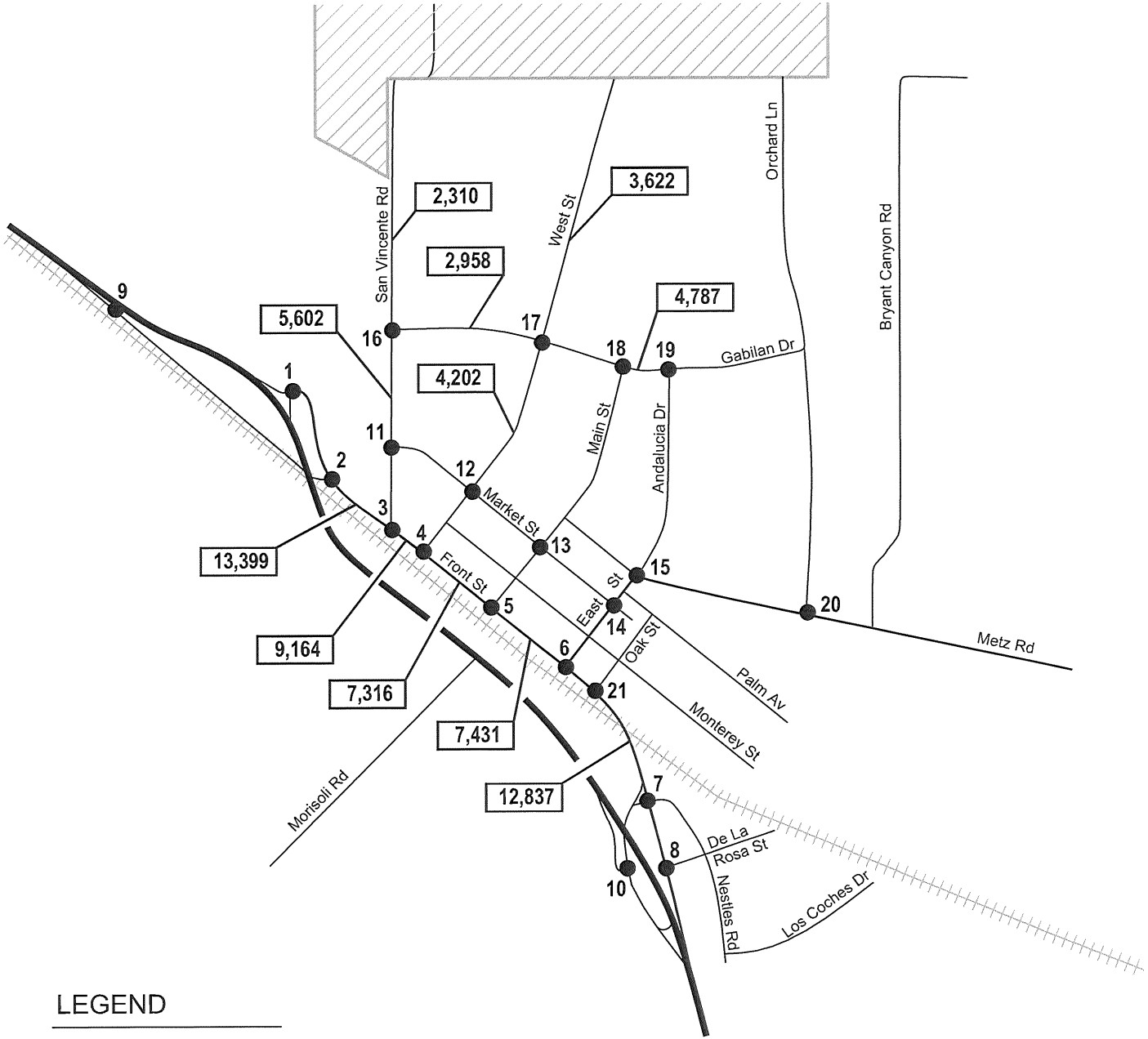

San Vincente Rd
West St
Orchard Ln
Bryant Canyon Rd
Gabilan Dr
Main St
Andalucia Dr
Market St
Front St
East St
Oak St
Palm Av
Monterey St
Metz Rd
Morisoli Rd
De La Rosa St
Nesties Rd
Los Coches Dr
2,310
3,622
2,958
4,787
5,602
4,202
13,399
9,164
7,316
7,431
12,837
1
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LEGEND
= Site Location

Table 6
Existing Roadway Segment Analysis

Segment	Direction	# Of Lanes	Capacity (vph)	24-Hr Tot. Volume	AM Peak-Hr Volume	AM Peak-Hr V/C	AM Peak-Hr LOS	PM Peak-Hr Volume	PM Peak-Hr V/C	PM Peak-Hr LOS
Front St										
Moranda Rd and San Vicente Rd	EB	2	2,400	7,335	289	0.120	A	971	0.405	A
	WB	2	2,400	6,064	756	0.315	A	360	0.150	A
San Vicente Rd and West St	EB	2	2,400	4,981	211	0.088	A	635	0.265	A
	WB	2	2,400	4,183	436	0.182	A	278	0.116	A
West St and Main St	EB	1	1,200	3,888	197	0.164	A	476	0.397	A
	WB	1	1,200	3,428	195	0.163	A	283	0.236	A
Main St and East St	EB	1	1,200	3,767	237	0.198	A	408	0.340	A
	WB	1	1,200	3,664	260	0.217	A	352	0.293	A
East St and Nestles Rd	EB	1	1,200	6,686	470	0.392	A	495	0.413	A
	WB	1	1,200	6,151	393	0.328	A	568	0.473	A
Gabilan Dr										
San Vicente Rd and West St	EB	2	2,400	1,339	79	0.033	A	146	0.061	A
	WB	2	2,400	1,619	201	0.084	A	93	0.039	A
West St and Andalucia Dr	EB	2	2,400	2,308	146	0.061	A	231	0.096	A
	WB	2	2,400	2,479	261	0.109	A	196	0.082	A
San Vicente Rd										
Market St and Gabilan Dr	NB	1	1,200	2,698	109	0.091	A	341	0.284	A
	SB	1	1,200	2,904	355	0.296	A	165	0.138	A
North of Gabilan Dr	NB	1	1,200	1,189	61	0.051	A	134	0.112	A
	SB	1	1,200	1,121	127	0.106	A	77	0.064	A
West St										
Market St and Gabilan Dr	NB	2	2,400	2,168	101	0.042	A	253	0.105	A
	SB	2	2,400	2,034	215	0.090	A	125	0.052	A
North of Gabilan Dr	NB	2	2,400	1,834	151	0.063	A	200	0.083	A
	SB	2	2,400	1,788	205	0.085	A	134	0.056	A

Notes:
1. Capacity of roadways based on assumed capacity of 1,200 vphpl and existing lanes on roadways.
2. Volumes based on 24 hour tube counts collected in July 2006

Table 7
Existing Freeway Segment Analysis

Segment	Direction	# Of Lanes	Capacity (vph) /a/	24-Hr Tot. Volume /b/	AM Peak-Hr Volume /b/	AM Peak-Hr V/C	AM Peak-Hr LOS	PM Peak-Hr Volume /b/	PM Peak-Hr V/C	PM Peak-Hr LOS
US 101										
North Gonzales and Gonzales-5th Street	Both	4	9,600	40,500	4,400	0.458	B	4,400	0.458	B
	NB	2	4,800	20,250	2,640	0.550	C	1,760	0.367	B
	SB	2	4,800	20,250	1,760	0.367	B	2,640	0.550	C
Gonzales-5th Street and Gloria Road	Both	4	9,600	38,000	4,250	0.443	B	4,250	0.443	B
	NB	2	4,800	19,000	2,550	0.531	B	1,700	0.354	A
	SB	2	4,800	19,000	1,700	0.354	A	2,550	0.531	B
Gloria Road and Soledad Prison	Both	4	9,600	40,500	3,350	0.349	A	3,350	0.349	A
	NB	2	4,800	20,250	2,010	0.419	B	1,340	0.279	A
	SB	2	4,800	20,250	1,340	0.279	A	2,010	0.419	B
Soledad Prison and Camphora	Both	4	9,600	38,000	3,150	0.328	A	3,150	0.328	A
	NB	2	4,800	19,000	1,890	0.394	B	1,260	0.263	A
	SB	2	4,800	19,000	1,260	0.263	A	1,890	0.394	B
Camphora and North Soledad	Both	4	9,600	39,000	4,300	0.448	B	4,300	0.448	B
	NB	2	4,800	19,500	2,580	0.538	B	1,720	0.358	A
	SB	2	4,800	19,500	1,720	0.358	A	2,580	0.538	B
North Soledad and South Soledad	Both	4	9,600	34,000	3,800	0.396	B	3,800	0.396	B
	NB	2	4800	17,000	2,280	0.475	B	1,520	0.317	A
	SB	2	4,800	17,000	1,520	0.317	A	2,280	0.475	B
South Soledad and Arroyo Seco Road	Both	4	9,600	34,000	3,700	0.385	B	3,700	0.385	B
	NB	2	4,800	17,000	2,035	0.424	B	1,665	0.347	A
	SB	2	4,800	17,000	1,665	0.347	A	2,035	0.424	B
Arroyo Seco Road and North Greenfield	Both	4	9,600	33,000	3,550	0.370	B	3,550	0.370	B
	NB	2	4,800	16,500	1,953	0.407	B	1,598	0.333	A
	SB	2	4,800	16,500	1,598	0.333	A	1,953	0.407	B
North Greenfield and Walnut Avenue	Both	4	9,600	30,000	3,050	0.318	A	3,050	0.318	A
	NB	2	4,800	15,000	1,678	0.349	A	1,373	0.286	A
	SB	2	4,800	15,000	1,373	0.286	A	1,678	0.349	A
Walnut Avenue and Oak Avenue	Both	4	9,600	28,000	2,850	0.297	A	2,850	0.297	A
	NB	2	4,800	14,000	1,568	0.327	A	1,283	0.267	A
	SB	2	4,800	14,000	1,283	0.267	A	1,568	0.327	A
South Greenfield and Oak Avenue	Both	4	9,600	23,500	2,350	0.245	A	2,350	0.245	A
	NB	2	4,800	11,750	1,293	0.269	A	1,058	0.220	A
	SB	2	4,800	11,750	1,058	0.220	A	1,293	0.269	A

Notes:
/a/ Capacity of freeway lanes based on assumed capacity of 2,400 vphpl, as prescribed by the Highway Capacity Manual
/b/ Data provided by Caltrans Data System Unit 2005, Route 101 District 5.

Table 8
Existing Freeway Ramp Analysis

Interchange	Direction	# Of Lanes	Type	Capacity (vph)	Existing					
					AM Peak-Hour			PM Peak-Hour		
					Volume	V/C	LOS	Volume	V/C	LOS
US 101										
Camphora Road	SB to Camphora Road	1	Diagonal	1,500	24	0.016	A	30	0.020	A
	NB from Camphora Road	1	Diagonal	1,500	40	0.027	A	32	0.021	A
	SB from Camphora Road	1	Diagonal	1,500	76	0.051	A	95	0.063	A
	NB to Camphora Road	1	Diagonal	1,500	80	0.053	A	64	0.043	A
Moranda Road	SB to Moranda Road	1	Diagonal	1,500	224	0.149	A	824	0.549	B
	NB from Moranda Road	1	Loop	1,500	657	0.438	B	242	0.161	A
	SB from Moranda Road	1	Loop	1,500	52	0.035	A	42	0.028	A
	NB to Moranda Road	1	Loop	1,500	37	0.025	A	86	0.057	A
Front Street	SB to Front Street	1	Loop	1,500	107	0.071	A	170	0.113	A
	NB from Front Street	1	Loop	1,500	223	0.149	A	135	0.090	A
	SB from Front Street	1	Diagonal	1,500	189	0.126	A	283	0.189	A
	NB to Front Street	1	Diagonal	1,500	248	0.165	A	393	0.262	A
Arroyo Seco Road	SB to Arroyo Seco Road	1	Diagonal	1,500	70	0.047	A	88	0.059	A
	NB from Arroyo Seco Road	1	Diagonal	1,500	88	0.059	A	70	0.047	A

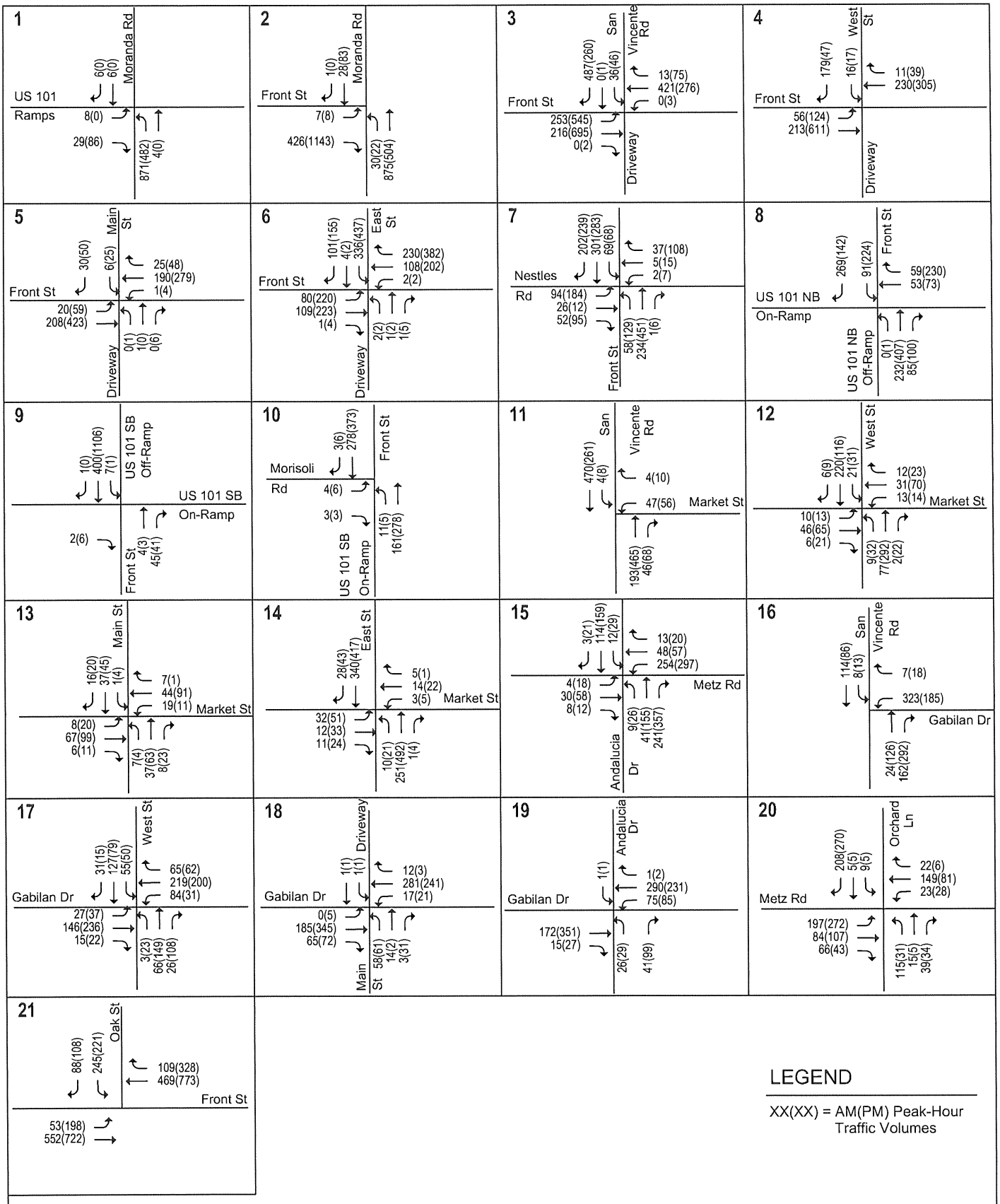
Notes:
1. Capacity for all ramps based on assumed capacity of 1,500 vphpl, as prescribed by the Highway Capacity Manual

Table 9
Approved Project Trip Generation Estimates

		Daily		AM Peak Hour				PM Peak Hour			
Land Use	Size	Rate /a/	Trips	Rate /a/	In	Out	Total	Rate /a/	In	Out	Total
Miravale II											
Residential - Homes /b/	453 sfdu's	9.57	4,335	0.75	207	133	340	1.01	220	238	458
Residential - Townhomes /c/	323 units	5.86	1,893	0.44	24	118	142	0.52	113	55	168
Totals			6,228		231	250	482		332	293	625
Gabilan											
Gabilan Square Commercial /d/	9,960 s.f.	44.32	441	1.35	6	7	13	2.71	12	15	27
Gabilan Square Town Homes /c/	15 units	5.86	88	0.44	1	5	7	0.52	5	3	8
Gabilan Apartments /e/	88 units	6.72	591	0.51	8	37	45	0.62	37	18	55
Gabilan Townhomes /c/	80 units	5.86	469	0.44	6	29	35	0.52	28	14	42
Totals			1,589		21	79	100		82	49	131
Orchard Villas											
Residential /b/	172 sfdu's	9.57	1,646	0.75	79	50	129	1.01	83	90	174
Monterey Street Public Housing Facility											
Residential /e/	143 units	6.72	961	0.51	12	61	73	0.62	59	29	89
Residential /e/	52 units	6.72	349	0.51	5	22	27	0.62	22	11	32
Totals			1,310		17	83	99		81	40	121
Total All Approved Projects			**10,774**		**348**	**462**	**810**		**578**	**473**	**1,051**

Notes:
/a/ Rates expressed in trips per dwelling units.
/b/ Trip Generation rates for single-family detached housing (ITE Land Use #210) used for this project.
/c/ Trip Generation rates for residential condominium/townhouse (ITE Land Use #230) used for this project.
/d/ Trip Generation rates for specialty retail center (ITE Land Use #814) used for this project.
/e/ Trip Generation rates for apartment (ITE Land Use #220) used for this project.

Source for rates: *ITE Trip Generation, Seventh Edition.*



LEGEND

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Figure 6

BACKGROUND TRAFFIC VOLUMES

Soledad Miravale

Hexagon Transportation Consultants, Inc.

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Table 10
Background Intersection Levels of Service

	Intersection	Intersection Control	Peak Hour	Count Date	Existing Conditions Ave. Delay	Existing Conditions LOS	Background Conditions Ave. Delay	Background Conditions LOS
1	Moranda Road and US 101 NB Ramps	TWSC	AM	07/26/06	16	C	33	D
			PM	07/26/06	11	B	14	B
2	Moranda Road and Front Street	TWSC	AM	07/26/06	10	A	***11***	***B***
			PM	07/26/06	28	D	**102**	**F**
3	San Vicente Road and Front Street	AWSC	AM	07/26/06	12	B	***22***	***C***
			PM	07/26/06	14	B	**40**	**E**
4	West Street and Front Street	AWSC	AM	07/26/06	9	A	10	A
			PM	07/26/06	11	B	13	B
5	Main Street and Front Street	AWSC	AM	07/27/06	8	A	9	A
			PM	07/27/06	10	B	12	B
6	East Street and Front Street	AWSC	AM	07/27/06	9	A	***14***	***B***
			PM	07/27/06	14	B	***73***	***F***
7	Front Street and Nestles Road	TWSC	AM	07/26/06	14	B	23	C
			PM	07/26/06	23	C	***300***	***F***
8	Front Street and US 101 NB Ramps	AWSC	AM	07/26/06	9	A	9	A
			PM	07/26/06	12	B	***14***	***B***
9	Front Street and US 101 SB Ramps	TWSC	AM	07/26/06	9	A	11	B
			PM	07/26/06	15	B	19	C
10	Front Street and Morisoli Road	TWSC	AM	07/27/06	10	A	11	B
			PM	07/27/06	11	B	13	B
11	San Vicente Road and Market Street	TWSC	AM	07/26/06	11	B	15	B
			PM	07/26/06	11	B	16	C
12	West Street and Market Street	AWSC	AM	07/27/06	8	A	8	A
			PM	07/27/06	9	A	9	A
13	Main Street and Market Street	AWSC	AM	07/25/06	7	A	8	A
			PM	07/26/06	8	A	8	A
14	East Street and Market Street	AWSC	AM	07/27/06	8	A	10	B
			PM	07/27/06	9	A	16	C
15	East Street and North Street/Metz Road	AWSC	AM	07/27/06	8	A	11	B
			PM	07/27/06	9	A	***21***	***C***
16	San Vicente Road and Gabilan Drive	TWSC	AM	07/26/06	11	B	13	B
			PM	07/26/06	10	B	13	B
17	West Street and Gabilan Drive	AWSC	AM	07/27/06	9	A	10	B
			PM	07/27/06	9	A	11	B
18	Main Street and Gabilan Drive	AWSC	AM	07/27/06	8	A	9	A
			PM	07/27/06	8	A	9	A
19	Andalucia Drive and Gabilan Drive	TWSC	AM	07/27/06	10	A	14	B
			PM	07/27/06	10	B	16	C
20	Orchard Lane and Metz Road	TWSC	AM	N/A	6	B	15	C
			PM	N/A	4	A	9	B
21	Front Street and Oak Street	TWSC	AM	N/A	***33***	***D***	***134***	***F***
			PM	N/A	***473***	***F***	***1247***	***F***

Notes:
1. Intersection control based on existing conditions
   -TWSC = Two-way stop-controlled intersection
   -AWSC = Four-way stop-controlled intersection
2. Significant impacts are shown in **BOLD** and boxed.
3. *Italics* and **BOLD** indicates signal warrant met.

Table 11
Background Intersection Signal Warrant Analysis

Study Number	Intersection Name	Existing Conditions AM	Existing Conditions PM	Background Conditions AM	Background Conditions PM
Existing Unsignalized Intersections					
1	Moranda Road & US 101 NB Ramps	No	No	No	No
2	Moranda Road & Front Street	No	**Yes**	**Yes**	**Yes**
3	San Vicente Road & Front Street	**Yes**	**Yes**	**Yes**	**Yes**
4	West Street & Front Street	No	No	No	No
5	Main Street & Front Street	No	No	No	No
6	East Street & Front Street	No	**Yes**	**Yes**	**Yes**
7	Front Street & Nestles Road	No	No	No	**Yes**
8	Front Street & US 101 NB Ramps	No	No	No	**Yes**
9	Front Street & US 101 SB Ramps	No	No	No	No
10	Front Street & Morisoli Road	No	No	No	No
11	San Vicente Road & Market Street	No	No	No	No
12	West Street & Market Street	No	No	No	No
13	Main Street & Market Street	No	No	No	No
14	East Street & Market Street	No	No	No	No
15	East Street & North Street/Metz Road	No	No	No	**Yes**
16	San Vicente Road & Gabilan Drive	No	No	No	No
17	West Street & Gabilan Drive	No	No	No	No
18	Main Street & Gabilan Drive	No	No	No	No
19	Andalucia Drive & Gabilan Drive	No	No	No	No
20	Orchard Street & Metz Road	No	No	No	No
21	Oak Street & Front Street	**Yes**	**Yes**	**Yes**	**Yes**

Notes:
1. Signal warrant analysis based on Caltrans Peak Hour Signal Warrant #11.

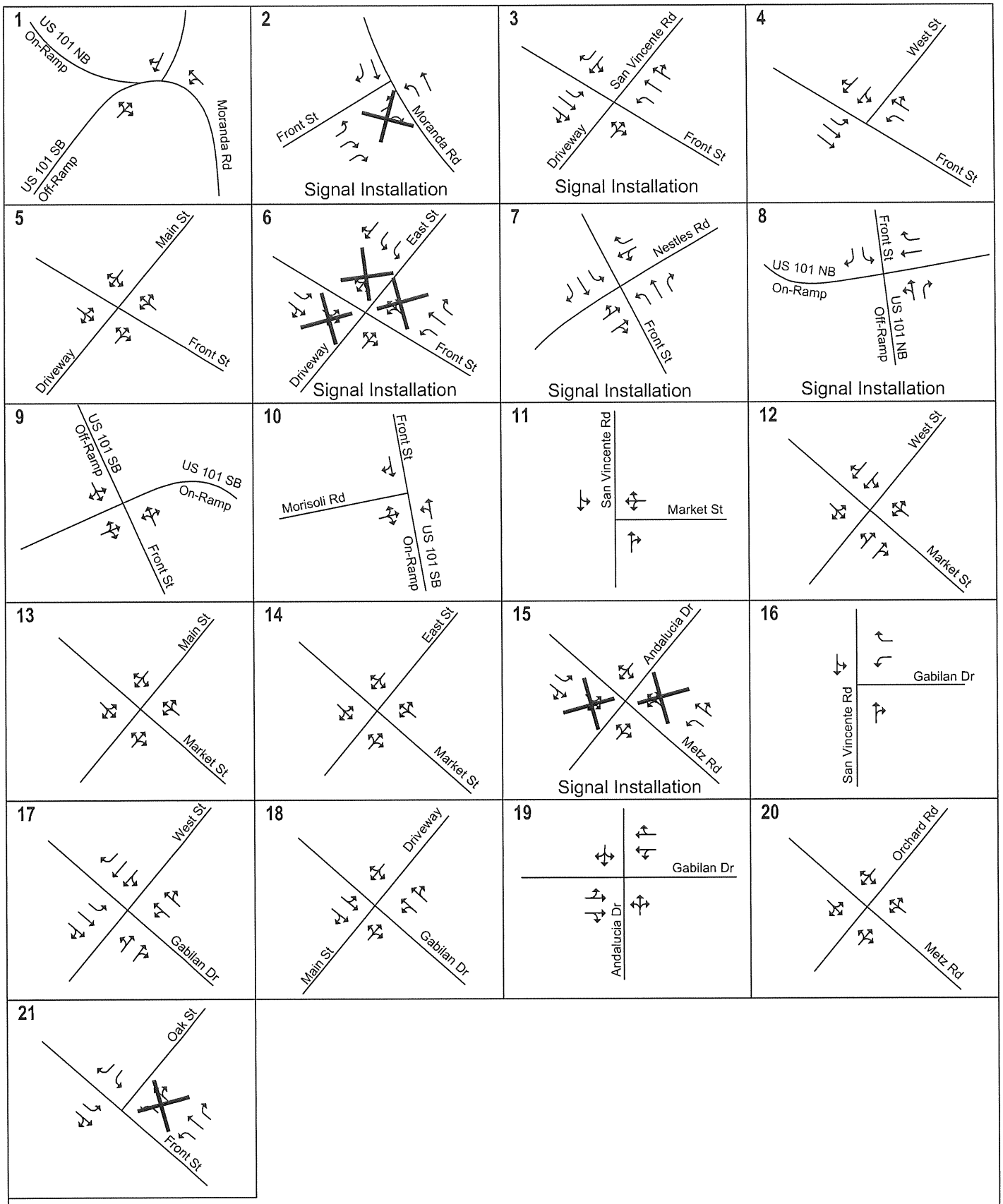


Figure 7

BACKGROUND CONDITIONS NECESSARY IMPROVEMENTS

Soledad Miravale

Hexagon
Transportation Consultants, Inc.

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Table 12
Background Roadway Segment Analysis

Segment	Direction	# Of Lanes	Capacity (vph)	Existing Conditions AM Peak-Hr Volume	AM V/C	AM LOS	PM Peak-Hr Volume	PM V/C	PM LOS	Approved Project Trips AM Peak-Hr Volume	AM Increase	PM Peak-Hr Volume	PM Increase	Background Conditions AM Peak-Hr Volume	AM V/C	AM LOS	PM Peak-Hr Volume	PM V/C	PM LOS
Front St																			
Moranda Rd and San Vicente Rd	EB	2	2,400	289	0.120	A	971	0.405	A	185	64.01%	283	29.15%	474	0.198	A	1,254	0.523	A
	WB	2	2,400	756	0.315	A	360	0.150	A	220	29.10%	240	66.67%	976	0.407	A	600	0.250	A
San Vicente Rd and West St	EB	2	2,400	211	0.088	A	635	0.265	A	56	26.54%	95	14.96%	267	0.111	A	730	0.304	A
	WB	2	2,400	436	0.182	A	278	0.116	A	77	17.66%	75	26.98%	513	0.214	A	353	0.147	A
West St and Main St	EB	1	1,200	197	0.164	A	476	0.397	A	56	28.43%	95	19.96%	253	0.211	A	571	0.476	A
	WB	1	1,200	195	0.163	A	283	0.236	A	77	39.49%	75	26.50%	272	0.227	A	358	0.298	A
Main St and East St	EB	1	1,200	237	0.198	A	408	0.340	A	56	23.63%	95	23.28%	293	0.244	A	503	0.419	A
	WB	1	1,200	260	0.217	A	352	0.293	A	77	29.62%	75	21.31%	337	0.281	A	427	0.356	A
East St and Nestles Rd	EB	1	1,200	470	0.392	A	495	0.413	A	213	45.32%	197	39.80%	683	0.569	A	692	0.577	A
	WB	1	1,200	393	0.328	A	568	0.473	A	141	35.88%	257	45.25%	534	0.445	A	825	0.688	B
Gabilan Dr																			
San Vicente Rd and West St	EB	2	2,400	79	0.033	A	146	0.061	A	103	130.38%	163	111.64%	182	0.076	A	309	0.129	A
	WB	2	2,400	201	0.084	A	93	0.039	A	128	63.68%	138	148.39%	329	0.137	A	231	0.096	A
West St and Andalucia Dr	EB	2	2,400	146	0.061	A	231	0.096	A	110	75.34%	174	75.32%	256	0.107	A	405	0.169	A
	WB	2	2,400	261	0.109	A	196	0.082	A	135	51.72%	148	75.51%	396	0.165	A	344	0.143	A
San Vicente Rd																			
Market St and Gabilan Dr	NB	1	1,200	109	0.091	A	341	0.284	A	101	92.66%	159	46.63%	210	0.175	A	500	0.417	A
	SB	1	1,200	355	0.296	A	165	0.138	A	125	35.21%	133	80.61%	480	0.400	A	298	0.248	A
North of Gabilan Dr	NB	1	1,200	61	0.051	A	134	0.112	A	2	3.28%	5	3.73%	63	0.053	A	139	0.116	A
	SB	1	1,200	127	0.106	A	77	0.064	A	2	1.57%	4	5.19%	129	0.108	A	81	0.068	A
West St																			
Market St and Gabilan Dr	NB	2	2,400	101	0.042	A	253	0.105	A	6	5.94%	8	3.16%	107	0.045	A	261	0.109	A
	SB	2	2,400	215	0.090	A	125	0.052	A	6	2.79%	7	5.60%	221	0.092	A	132	0.055	A
North of Gabilan Dr	NB	2	2,400	151	0.063	A	200	0.083	A	0	0.00%	1	0.50%	151	0.063	A	201	0.084	A
	SB	2	2,400	205	0.085	A	134	0.056	A	0	0.00%	1	0.75%	205	0.085	A	135	0.056	A

Notes:
1. Capacity of roadways based on assumed capacity of 1,200 vphpl and existing lanes on roadways.

Table 13
Background Freeway Segment Analysis

Segment	Direction	# Of Lanes	Capacity (vph) /a/	Existing Conditions AM Peak-Hour Volume	V/C	LOS	Existing Conditions PM Peak-Hour Volume	V/C	LOS	Approved Project Trips AM Peak-Hour Volume	Increase	Approved Project Trips PM Peak-Hour Volume	Increase	Background Conditions AM Peak-Hour Volume	V/C	LOS	Background Conditions PM Peak-Hour Volume	V/C	LOS
US 101				/b/			/b/												
North Gonzales and Gonzales-5th Street	Both	4	9,600	4,400	0.458	B	4,400	0.458	B	391	8.89%	503	11.42%	4,791	0.499	B	4,903	0.511	B
	NB	2	4,800	2,640	0.550	C	1,760	0.367	B	223	8.46%	225	12.77%	2,863	0.597	C	1,985	0.413	B
	SB	2	4,800	1,760	0.367	B	2,640	0.550	C	168	9.55%	278	10.53%	1,928	0.402	B	2,918	0.608	C
Gonzales-5th Street and Gloria Road	Both	4	9,600	4,250	0.443	B	4,250	0.443	B	447	10.52%	574	13.52%	4,697	0.489	B	4,824	0.503	B
	NB	2	4,800	2,550	0.531	B	1,700	0.354	A	255	10.01%	257	15.11%	2,805	0.584	C	1,957	0.408	B
	SB	2	4,800	1,700	0.354	A	2,550	0.531	B	192	11.29%	318	12.45%	1,892	0.394	B	2,868	0.597	C
Gloria Road and Soledad Prison	Both	4	9,600	3,350	0.349	A	3,350	0.349	A	503	15.02%	646	19.29%	3,853	0.401	B	3,996	0.416	B
	NB	2	4,800	2,010	0.419	B	1,340	0.279	A	287	14.28%	289	21.56%	2,297	0.479	B	1,629	0.339	A
	SB	2	4,800	1,340	0.279	A	2,010	0.419	B	216	16.12%	357	17.78%	1,556	0.324	A	2,367	0.493	B
Soledad Prison and Camphora	Both	4	9,600	3,150	0.328	A	3,150	0.328	A	531	16.86%	682	21.65%	3,681	0.383	B	3,832	0.399	B
	NB	2	4,800	1,890	0.394	B	1,260	0.263	A	303	16.03%	305	24.20%	2,193	0.457	B	1,565	0.326	A
	SB	2	4,800	1,260	0.263	A	1,890	0.394	B	228	18.10%	377	19.96%	1,488	0.310	A	2,267	0.472	B
Camphora and North Soledad	Both	4	9,600	4,300	0.448	B	4,300	0.448	B	559	13.00%	718	16.70%	4,859	0.506	B	5,018	0.523	B
	NB	2	4,800	2,580	0.538	B	1,720	0.358	A	319	12.36%	321	18.66%	2,899	0.604	C	2,041	0.425	B
	SB	2	4,800	1,720	0.358	A	2,580	0.538	B	240	13.95%	397	15.39%	1,960	0.408	B	2,977	0.620	C
North Soledad and South Soledad	Both	4	9,600	3,800	0.396	B	3,800	0.396	B	154	4.05%	194	5.11%	3,954	0.412	B	3,994	0.416	B
	NB	2	4,800	2,280	0.475	B	1,520	0.317	A	99	4.34%	81	5.33%	2,379	0.496	B	1,601	0.334	A
	SB	2	4,800	1,520	0.317	A	2,280	0.475	B	55	3.62%	113	4.96%	1,575	0.328	A	2,393	0.499	B
South Soledad and Arroyo Seco Road	Both	4	9,600	3,700	0.385	B	3,700	0.385	B	161	4.35%	209	5.65%	3,861	0.402	B	3,909	0.407	B
	NB	2	4,800	2,035	0.424	B	1,665	0.347	A	69	3.39%	115	6.91%	2,104	0.438	B	1,780	0.371	B
	SB	2	4,800	1,665	0.347	A	2,035	0.424	B	92	5.53%	94	4.62%	1,757	0.366	B	2,129	0.444	B
Arroyo Seco Road and North Greenfield	Both	4	9,600	3,550	0.370	B	3,550	0.370	B	153	4.31%	199	5.59%	3,703	0.386	B	3,749	0.390	B
	NB	2	4,800	1,953	0.407	B	1,598	0.333	A	66	3.36%	109	6.84%	2,018	0.420	B	1,707	0.356	A
	SB	2	4,800	1,598	0.333	A	1,953	0.407	B	87	5.47%	89	4.57%	1,685	0.351	A	2,042	0.425	B
North Greenfield and Walnut Avenue	Both	4	9,600	3,050	0.318	A	3,050	0.318	A	137	4.49%	178	5.82%	3,187	0.332	A	3,228	0.336	A
	NB	2	4,800	1,678	0.349	A	1,373	0.286	A	59	3.50%	98	7.12%	1,736	0.362	B	1,470	0.306	A
	SB	2	4,800	1,373	0.286	A	1,678	0.349	A	78	5.70%	80	4.76%	1,451	0.302	A	1,757	0.366	B
Walnut Avenue and Oak Avenue	Both	4	9,600	2,850	0.297	A	2,850	0.297	A	121	4.24%	157	5.50%	2,971	0.309	A	3,007	0.313	A
	NB	2	4,800	1,568	0.327	A	1,283	0.267	A	52	3.30%	86	6.73%	1,619	0.337	A	1,369	0.285	A
	SB	2	4,800	1,283	0.267	A	1,568	0.327	A	69	5.38%	71	4.50%	1,352	0.282	A	1,638	0.341	A
South Greenfield and Oak Avenue	Both	4	9,600	2,350	0.245	A	2,350	0.245	A	105	4.45%	136	5.78%	2,455	0.256	A	2,486	0.259	A
	NB	2	4,800	1,293	0.269	A	1,058	0.220	A	45	3.47%	75	7.07%	1,337	0.279	A	1,132	0.236	A
	SB	2	4,800	1,058	0.220	A	1,293	0.269	A	60	5.65%	61	4.73%	1,117	0.233	A	1,354	0.282	A

Notes:
/a/ Capacity of freeway lanes based on assumed capacity of 2,400 vphpl, as prescribed by the Highway Capacity Manual
/b/ Data provided by Caltrans Data System Unit 2005, Route 101 District 5

Table 14

Background Freeway Ramp Analysis

Interchange	Direction	# Of Lanes	Type	Capacity (vph)	Existing						Approved Trips				Background Conditions					
					AM Peak-Hour			PM Peak-Hour			AM Peak-Hour		PM Peak-Hour		AM Peak-Hour			PM Peak-Hour		
					Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
US 101																				
Camphora Road	SB to Camphora Road	1	Diagonal	1,500	24	0.016	A	30	0.020	A	0	0.00%	0	0.00%	24	0.016	A	30	0.020	A
	NB from Camphora Road	1	Diagonal	1,500	40	0.027	A	32	0.021	A	0	0.00%	0	0.00%	40	0.027	A	32	0.021	A
	SB from Camphora Road	1	Diagonal	1,500	76	0.051	A	95	0.063	A	12	15.79%	20	21.05%	88	0.059	A	115	0.077	A
	NB to Camphora Road	1	Diagonal	1,500	80	0.053	A	64	0.043	A	16	20.00%	16	25.00%	96	0.064	A	80	0.053	A
Moranda Road	SB to Moranda Road	1	Diagonal	1,500	224	0.149	A	824	0.549	B	184	82.14%	283	34.34%	408	0.272	A	1107	0.738	C
	NB from Moranda Road	1	Loop	1,500	657	0.438	B	242	0.161	A	220	33.49%	240	99.17%	877	0.585	C	482	0.321	A
	SB from Moranda Road	1	Loop	1,500	52	0.035	A	42	0.028	A	0	0.00%	0	0.00%	52	0.035	A	42	0.028	A
	NB to Moranda Road	1	Loop	1,500	37	0.025	A	86	0.057	A	0	0.00%	0	0.00%	37	0.025	A	86	0.057	A
Front Street	SB to Front Street	1	Loop	1,500	107	0.071	A	170	0.113	A	55	51.40%	113	66.47%	162	0.108	A	283	0.189	A
	NB from Front Street	1	Loop	1,500	223	0.149	A	135	0.090	A	99	44.39%	81	60.00%	322	0.215	A	216	0.144	A
	SB from Front Street	1	Diagonal	1,500	189	0.126	A	283	0.189	A	92	48.68%	93	32.86%	281	0.187	A	376	0.251	A
	NB to Front Street	1	Diagonal	1,500	248	0.165	A	393	0.262	A	69	27.82%	115	29.26%	317	0.211	A	508	0.339	A
Arroyo Seco Road	SB to Arroyo Seco Road	1	Diagonal	1,500	70	0.047	A	88	0.059	A	5	7.14%	5	5.68%	75	0.050	A	93	0.062	A
	NB from Arroyo Seco Road	1	Diagonal	1,500	88	0.059	A	70	0.047	A	3	3.41%	6	8.57%	91	0.061	A	76	0.051	A

Notes:
1. Capacity for all ramps based on assumed capacity of 1,500 vphpl, as prescribed by the Highway Capacity Manual

Table 15
Trip Generation Estimates

Land Use	Size	Daily Trip Rates	Daily Trips	AM Peak Hour Pk-Hr Rate	AM Splits In	AM Splits Out	AM Trips In	AM Trips Out	AM Trips Total	PM Peak Hour Pk-Hr Rate	PM Splits In	PM Splits Out	Pass-By Red. /e/	PM Trips In	PM Trips Out	PM Trips Total
Proposed Uses																
Single-Family Homes/a/	1,470 Units	9.57	14,068	0.75	25%	75%	276	827	1,103	1.01	63%	37%		935	549	1,485
Multi-Family/b/	2,230 Units	6.72	14,986	0.51	20%	80%	227	910	1,137	0.62	65%	35%		899	484	1,383
Senior Housing/c/	500 Units	3.48	1,740	0.08	45%	55%	18	22	40	0.11	61%	39%		34	21	55
Hotel/d/	120 Units	8.92	1,070	0.67	58%	42%	47	34	80	0.70	49%	51%		41	43	84
			31,864				568	1,792	2,360					1,909	1,098	3,006
			-9,196				-157	-123	-280					-186	-236	-422
			22,668				411	1,669	2,080					1,723	861	2,585
Retail "A"/e/	175,000 s.f.	44.3	7,756	1.35	56%	44%	132	104	236	2.71	44%	56%	25%	157	199	356
Retail "B"/e/	100,000 s.f.	44.3	4,432	1.35	56%	44%	76	59	135	2.71	44%	56%	25%	89	114	203
			12,188				208	163	371					246	313	559
			34,856				**619**	**1,833**	**2,451**					**1,969**	**1,174**	**3,143**

Source:
ITE Trip Generation, 7th Edition

Notes:
/a/ Single-Family Detached Housing (210) average rates used for proposed single-family units
/b/ Apartment (220) average rates used for proposed multi-family units
/c/ Senior Adult Housing-Attached (252) average rates used for proposed senior housing units
/d/ Hotel (310) average rates used for proposed hotel units
/e/ Specialty Retail Center (814) average rates used for proposed retail space. No AM peak hour rates are available for Specialty Retail, therefore half of the PM peak hour rates were assumed for the AM peak hour.
/f/ A reduction of of residential trips equal to 90% of Retail "A" and 50% of Retail "B" was applied for internalization of retail/residential uses.
/e/ A reduction of 25% to account for pass-by trips was applied to retail use during the PM peak hour

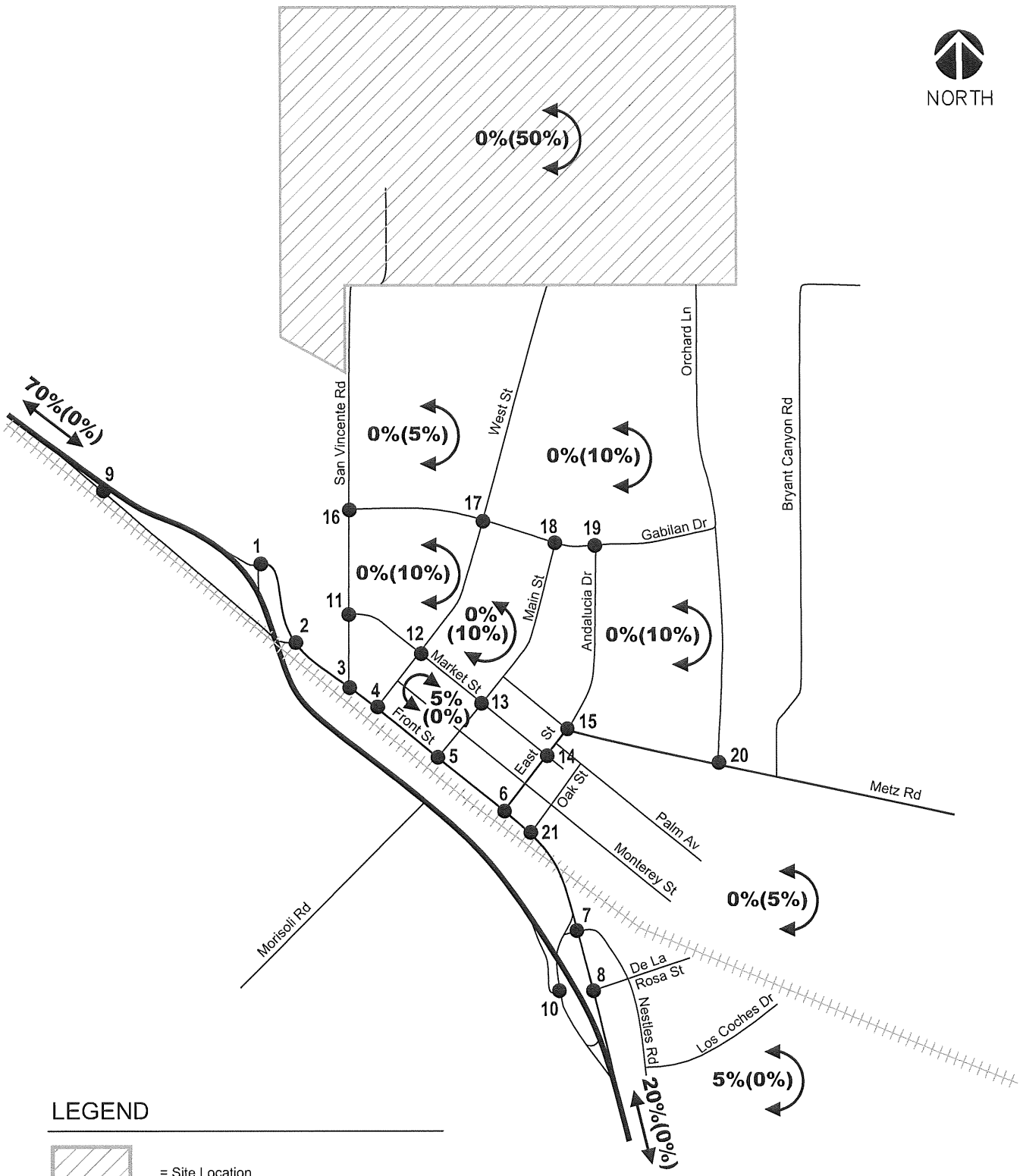


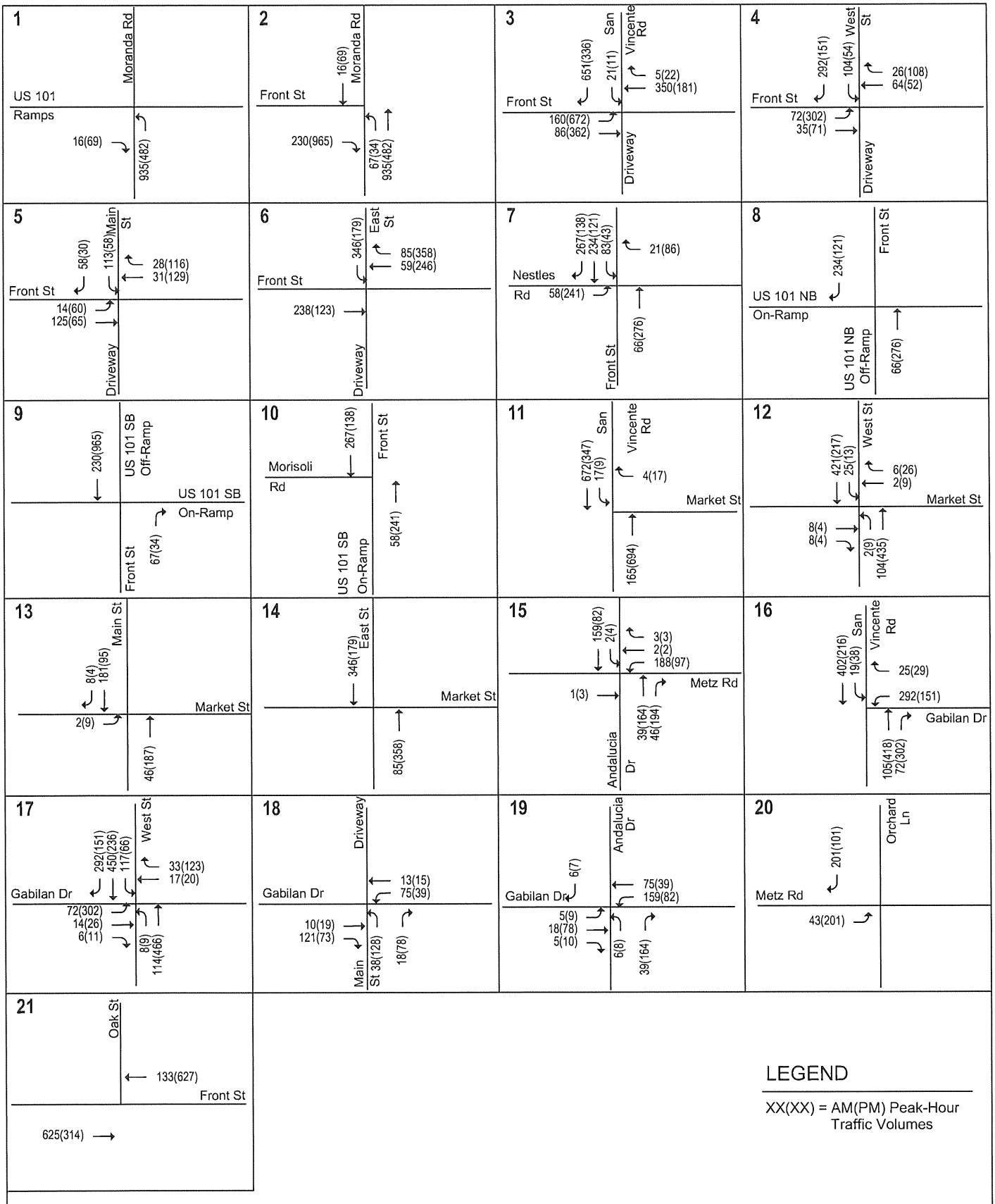
Figure 8

PROJECT TRIP DISTRIBUTION

Soledad Mirevale

Hexagon
Transportation Consultants, Inc.

JH D:\Projects\Soledad Mirevale\Fig 8.dwg



LEGEND

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

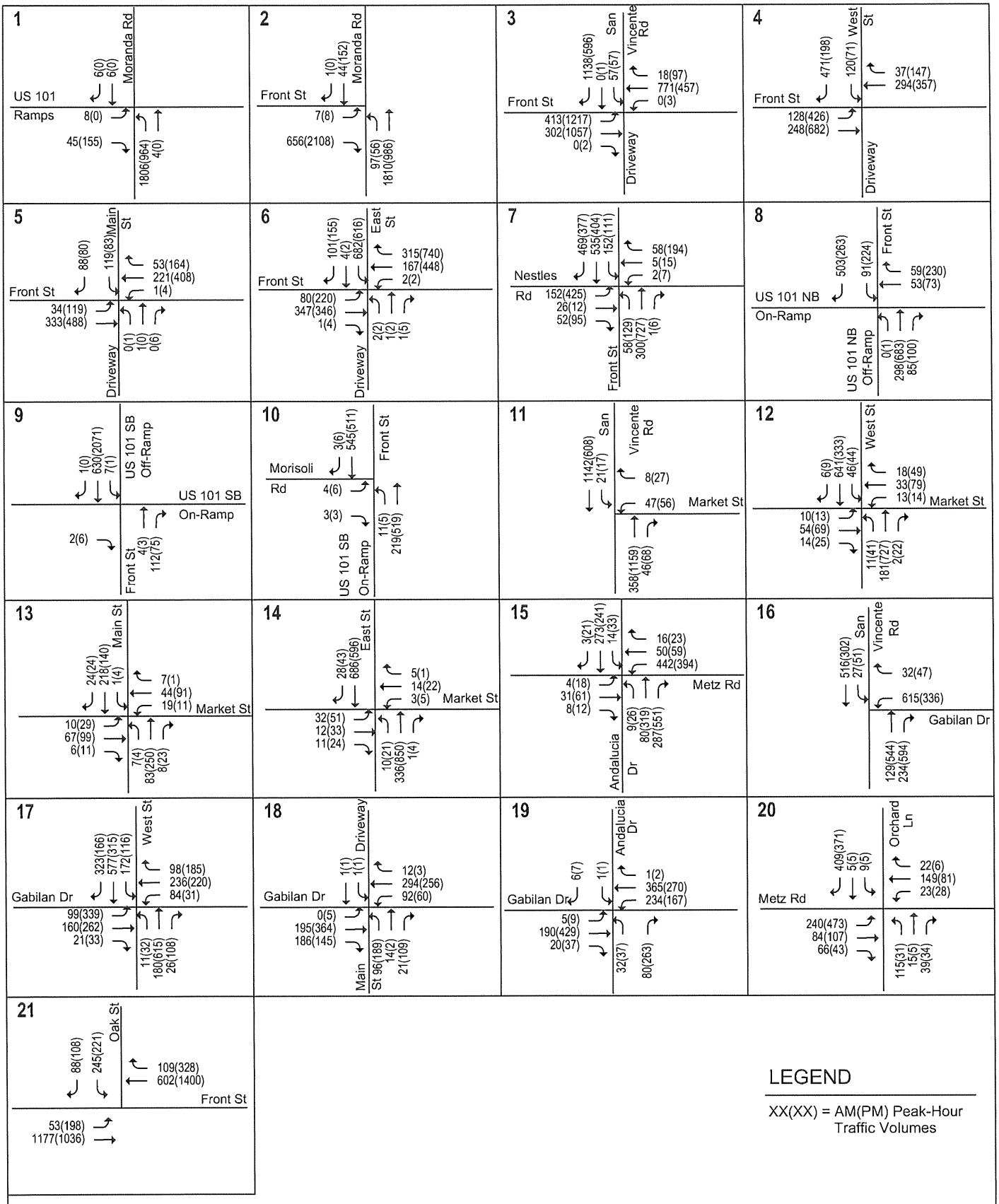
Figure 9

PROJECT TRIP ASSIGNMENT

Soledad Miravale

Hexagon
Transportation Consultants, Inc.

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LEGEND

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Figure 10

PROJECT PLUS BACKGROUND TRAFFIC VOLUMES

Hexagon Transportation Consultants, Inc.

Soledad Miravale

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Table 16
Project Intersection Levels of Service

	Intersection	Intersection Control	Peak Hour	Background Conditions Ave. Delay	Background Conditions LOS	Project Conditions Ave. Delay	Project Conditions LOS
1	Moranda Road and US 101 NB Ramps	TWSC	AM	33	D	**425**	**F**
			PM	14	B	**72**	**F**
2	Moranda Road and Front Street	Signal	AM	14	B	**172**	**F**
			PM	21	C	**189**	**F**
3	San Vicente Road and Front Street	Signal	AM	19	B	**143**	**F**
			PM	18	B	**146**	**F**
4	West Street and Front Street	AWSC	AM	10	A	***18***	***C***
			PM	13	B	***34***	***D***
5	Main Street and Front Street	AWSC	AM	9	A	11	B
			PM	12	B	***28***	***D***
6	East Street and Front Street	Signal	AM	19	B	22	C
			PM	23	C	27	C
7	Front Street and Nestles Road	Signal	AM	14	B	14	B
			PM	16	B	26	C
8	Front Street and US 101 NB Ramps	Signal	AM	20	C	10	B
			PM	20	B	25	C
9	Front Street and US 101 SB Ramps	TWSC	AM	11	B	13	B
			PM	19	C	**62**	**F**
10	Front Street and Morisoli Road	TWSC	AM	11	B	14	B
			PM	13	B	17	C
11	San Vicente Road and Market Street	TWSC	AM	15	B	**47**	**E**
			PM	16	C	**114**	**F**
12	West Street and Market Street	AWSC	AM	8	A	12	B
			PM	9	A	***15***	***C***
13	Main Street and Market Street	AWSC	AM	8	A	9	A
			PM	8	A	10	A
14	East Street and Market Street	AWSC	AM	10	B	25	C
			PM	16	C	***95***	***F***
15	East Street and North Street/Metz Road	Signal	AM	13	B	16	B
			PM	15	B	15	B
16	San Vicente Road and Gabilan Drive	TWSC	AM	13	B	***375***	***F***
			PM	13	B	***395***	***F***
17	West Street and Gabilan Drive	AWSC	AM	10	B	26	D
			PM	11	B	***58***	***F***
18	Main Street and Gabilan Drive	AWSC	AM	9	A	10	A
			PM	9	A	***12***	***B***
19	Andalucia Drive and Gabilan Drive	TWSC	AM	14	B	15	B
			PM	16	C	***18***	***C***
20	Orchard Lane and Metz Road	TWSC	AM	15	C	***37***	***E***
			PM	9	B	***17***	***C***
21	Front Street and Oak Street	TWSC	AM	12	B	20	B
			PM	14	B	***74***	***E***

Notes:

1. Intersection control based on background wth improvements conditions
   -TWSC = Two-way stop-controlled intersection
   -AWSC = Four-way stop-controlled intersection
2. Significant impacts are shown in **BOLD** and boxed.
3. *Italics* and **BOLD** indicates signal warrant met.

Table 17

Project Intersection Signal Warrant Analysis

Study Number	Intersection Name	Existing Conditions AM	Existing Conditions PM	Background Conditions AM	Background Conditions PM	Project Conditions AM	Project Conditions PM
Existing Unsignalized Intersections							
1	Moranda Road & US 101 NB Ramps	No	No	No	No	No	No
2	Moranda Road & Front Street	No	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
3	San Vicente Road & Front Street	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
4	West Street & Front Street	No	No	No	No	**Yes**	**Yes**
5	Main Street & Front Street	No	No	No	No	No	**Yes**
6	East Street & Front Street	No	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
7	Front Street & Nestles Road	No	No	No	**Yes**	**Yes**	**Yes**
8	Front Street & US 101 NB Ramps	No	No	No	**Yes**	No	**Yes**
9	Front Street & US 101 SB Ramps	No	No	No	No	No	No
10	Front Street & Morisoli Road	No	No	No	No	No	No
11	San Vicente Road & Market Street	No	No	No	No	No	No
12	West Street & Market Street	No	No	No	No	No	**Yes**
13	Main Street & Market Street	No	No	No	No	No	No
14	East Street & Market Street	No	No	No	No	No	**Yes**
15	East Street & North Street/Metz Road	No	No	No	**Yes**	**Yes**	**Yes**
16	San Vicente Road & Gabilan Drive	No	No	No	No	**Yes**	**Yes**
17	West Street & Gabilan Drive	No	No	No	No	**Yes**	**Yes**
18	Main Street & Gabilan Drive	No	No	No	No	No	**Yes**
19	Andalucia Drive & Gabilan Drive	No	No	No	No	No	**Yes**
20	Orchard Street & Metz Road	No	No	No	No	**Yes**	**Yes**
21	Oak Street & Front Street	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**

Notes:
1. Signal warrant analysis based on Caltrans Peak Hour Signal Warrant #11.

Table 18
Project Roadway Segment Analysis

Segment	Direction	# Of Lanes	Capacity (vph)	Background Conditions AM Peak-Hr Volume	AM V/C	AM LOS	Background Conditions PM Peak-Hr Volume	PM V/C	PM LOS	Project Trips AM Peak-Hr Volume	AM Increase	Project Trips PM Peak-Hr Volume	PM Increase	Project Conditions AM Peak-Hr Volume	AM V/C	AM LOS	Project Conditions PM Peak-Hr Volume	PM V/C	PM LOS
Front St																			
Moranda Rd and San Vicente Rd	EB	2	2,400	474	0.198	A	1,254	0.523	A	247	52.11%	**1,034**	**82.46%**	721	0.300	A	**2,288**	**0.953**	**E**
	WB	2	2,400	976	0.407	A	600	0.250	A	1,001	102.56%	517	86.17%	1,977	0.824	D	1,117	0.465	A
San Vicente Rd and West St	EB	2	2,400	267	0.111	A	730	0.304	A	107	40.07%	373	51.10%	374	0.156	A	1,103	0.460	A
	WB	2	2,400	513	0.214	A	353	0.147	A	356	69.40%	202	57.22%	869	0.362	A	555	0.231	A
West St and Main St	EB	1	1,200	253	0.211	A	571	0.476	A	140	55.34%	125	21.89%	393	0.328	A	696	0.580	A
	WB	1	1,200	272	0.227	A	358	0.298	A	89	32.72%	159	44.41%	361	0.301	A	517	0.431	A
Main St and East St	EB	1	1,200	293	0.244	A	503	0.419	A	238	81.23%	123	24.45%	531	0.443	A	626	0.522	A
	WB	1	1,200	337	0.281	A	427	0.356	A	59	17.51%	246	57.61%	396	0.330	A	673	0.561	A
East St and Nestles Rd	EB	1	1,200	683	0.569	A	692	0.577	A	**584**	**85.51%**	301	43.50%	**1,267**	**1.056**	**F**	993	0.828	D
	WB	1	1,200	534	0.445	A	825	0.688	B	144	26.97%	**603**	**73.09%**	678	0.565	A	**1,428**	**1.190**	**F**
Gabilan Dr																			
San Vicente Rd and West St	EB	2	2,400	182	0.076	A	309	0.129	A	91	50.00%	339	109.71%	273	0.114	A	648	0.270	A
	WB	2	2,400	329	0.137	A	231	0.096	A	317	96.35%	180	77.92%	646	0.269	A	411	0.171	A
West St and Andalucia Dr	EB	2	2,400	256	0.107	A	405	0.169	A	130	50.78%	92	22.72%	386	0.161	A	497	0.207	A
	WB	2	2,400	396	0.165	A	344	0.143	A	51	12.88%	143	41.57%	447	0.186	A	487	0.203	A
San Vicente Rd																			
Market St and Gabilan Dr	NB	1	1,200	210	0.175	A	500	0.417	A	170	80.95%	**711**	**142.20%**	380	0.317	A	**1,211**	**1.009**	**F**
	SB	1	1,200	480	0.400	A	298	0.248	A	**688**	**143.33%**	355	119.13%	**1,168**	**0.973**	**E**	653	0.544	A
North of Gabilan Dr	NB	1	1,200	63	0.053	A	139	0.116	A	130	206.35%	447	321.58%	193	0.161	A	586	0.488	A
	SB	1	1,200	129	0.108	A	81	0.068	A	422	327.13%	254	313.58%	551	0.459	A	335	0.279	A
West St																			
Market St and Gabilan Dr	NB	2	2,400	107	0.045	A	261	0.109	A	110	102.80%	461	176.63%	217	0.090	A	722	0.301	A
	SB	2	2,400	221	0.092	A	132	0.055	A	446	201.81%	230	174.24%	667	0.278	A	362	0.151	A
North of Gabilan Dr	NB	2	2,400	151	0.063	A	201	0.084	A	219	145.03%	890	442.79%	370	0.154	A	1,091	0.455	A
	SB	2	2,400	205	0.085	A	135	0.056	A	858	418.54%	453	335.56%	1,063	0.443	A	588	0.245	A

Notes:
1. Capacity of roadways based on assumed capacity of 1,200 vphpl and existing lanes on roadways.
2. **BOLD** indictaes significant increase in roadway segment volume and LOS.

Table 19
Project Freeway Segment Analysis

Segment	Direction	# Of Lanes	Capacity (vph) /a/	Background Conditions						Project Trips				Project Conditions					
				AM Peak-Hour			PM Peak-Hour			AM Peak-Hour		PM Peak-Hour		AM Peak-Hour			PM Peak-Hour		
				Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
US 101																			
North Gonzales and Gonzales-5th Street	Both	4	9,600	4,791	0.499	B	4,903	0.511	B	1,837	38.34%	1,688	34.44%	6,628	0.690	C	6,591	0.687	C
	NB	2	4,800	2,863	0.597	C	1,985	0.413	B	**1,019**	**35.60%**	1,266	63.80%	**3,883**	**0.809**	**D**	3,251	0.677	C
	SB	2	4,800	1,928	0.402	B	2,918	0.608	C	818	42.41%	422	14.47%	2,746	0.572	C	3,340	0.696	C
Gonzales-5th Street and Gloria Road	Both	4	9,600	4,697	0.489	B	4,824	0.503	B	2,099	44.69%	1,930	40.00%	6,796	0.708	C	6,754	0.704	C
	NB	2	4,800	2,805	0.584	C	1,957	0.408	B	**1,165**	**41.52%**	1,447	73.96%	**3,970**	**0.827**	**D**	3,404	0.709	C
	SB	2	4,800	1,892	0.394	B	2,868	0.597	C	934	49.39%	482	16.82%	2,826	0.589	C	3,350	0.698	C
Gloria Road and Soledad Prison	Both	4	9,600	3,853	0.401	B	3,996	0.416	B	2,362	61.29%	2,171	54.32%	6,215	0.647	C	6,167	0.642	C
	NB	2	4,800	2,297	0.479	B	1,629	0.339	A	1,310	57.05%	1,628	99.95%	3,608	0.752	C	3,257	0.679	C
	SB	2	4,800	1,556	0.324	A	2,367	0.493	B	1,051	67.56%	543	22.92%	2,607	0.543	B	2,910	0.606	C
Soledad Prison and Camphora	Both	4	9,600	3,681	0.383	B	3,832	0.399	B	2,493	67.72%	2,291	59.79%	6,174	0.643	C	6,124	0.638	C
	NB	2	4,800	2,193	0.457	B	1,565	0.326	A	1,383	63.07%	1,719	109.82%	3,576	0.745	C	3,284	0.684	C
	SB	2	4,800	1,488	0.310	A	2,267	0.472	B	1,110	74.57%	573	25.27%	2,598	0.541	B	2,840	0.592	C
Camphora and North Soledad	Both	4	9,600	4,859	0.506	B	5,018	0.523	B	1,456	29.97%	1,809	36.05%	6,315	0.658	C	6,827	0.711	C
	NB	2	4,800	2,899	0.604	C	2,041	0.425	B	**1,168**	**40.29%**	603	29.54%	**4,067**	**0.847**	**D**	2,644	0.551	C
	SB	2	4,800	1,960	0.408	B	2,977	0.620	C	288	14.69%	**1,206**	**40.51%**	2,248	0.468	B	**4,183**	**0.871**	**D**
North Soledad and South Soledad	Both	4	9,600	3,954	0.412	B	3,994	0.416	B	374	9.46%	465	11.64%	4,328	0.451	B	4,459	0.464	B
	NB	2	4,800	2,379	0.496	B	1,601	0.334	A	250	10.51%	189	11.81%	2,629	0.548	B	1,790	0.373	B
	SB	2	4,800	1,575	0.328	A	2,393	0.499	B	124	7.87%	276	11.53%	1,699	0.354	A	2,669	0.556	C
South Soledad and Arroyo Seco Road	Both	4	9,600	3,861	0.402	B	3,909	0.407	B	416	10.77%	517	13.23%	4,277	0.446	B	4,426	0.461	B
	NB	2	4,800	2,104	0.438	B	1,780	0.371	B	82	3.90%	345	19.38%	2,186	0.455	B	2,125	0.443	B
	SB	2	4,800	1,757	0.366	B	2,129	0.444	B	334	19.01%	172	8.08%	2,091	0.436	B	2,301	0.479	B
Arroyo Seco Road and North Greenfield	Both	4	9,600	3,703	0.386	B	3,749	0.390	B	395	10.67%	491	13.10%	4,098	0.427	B	4,240	0.442	B
	NB	2	4,800	2,018	0.420	B	1,707	0.356	A	78	3.86%	328	19.20%	2,096	0.437	B	2,035	0.424	B
	SB	2	4,800	1,685	0.351	A	2,042	0.425	B	317	18.83%	163	8.00%	2,002	0.417	B	2,205	0.459	B
North Greenfield and Walnut Avenue	Both	4	9,600	3,187	0.332	A	3,228	0.336	A	354	11.10%	439	13.62%	3,540	0.369	B	3,667	0.382	B
	NB	2	4,800	1,736	0.362	B	1,470	0.306	A	70	4.01%	293	19.95%	1,806	0.376	B	1,764	0.367	B
	SB	2	4,800	1,451	0.302	A	1,757	0.366	B	284	19.57%	146	8.32%	1,735	0.361	B	1,904	0.397	B
Walnut Avenue and Oak Avenue	Both	4	9,600	2,971	0.309	A	3,007	0.313	A	312	10.50%	388	12.90%	3,283	0.342	A	3,395	0.354	A
	NB	2	4,800	1,619	0.337	A	1,369	0.285	A	62	3.80%	259	18.90%	1,681	0.350	A	1,628	0.339	A
	SB	2	4,800	1,352	0.282	A	1,638	0.341	A	251	18.53%	129	7.88%	1,602	0.334	A	1,767	0.368	B
South Greenfield and Oak Avenue	Both	4	9,600	2,455	0.256	A	2,486	0.259	A	270	11.02%	336	13.52%	2,725	0.284	A	2,822	0.294	A
	NB	2	4,800	1,337	0.279	A	1,132	0.236	A	53	3.99%	224	19.81%	1,391	0.290	A	1,357	0.283	A
	SB	2	4,800	1,117	0.233	A	1,354	0.282	A	217	19.43%	112	8.26%	1,334	0.278	A	1,465	0.305	A

Notes:
/a/ Capacity of freeway lanes based on assumed capacity of 2,400 vphpl, as prescribed by the Highway Capacity Manual
/b/ Data provided by Caltrans Data System Unit 2005, Route 101 District 5.

Table 20

Freeway Ramp Analysis

Interchange	Direction	# Of Lanes	Type	Capacity (vph)	Background Conditions						Project Trips				Project Conditions					
					AM Peak-Hour			PM Peak-Hour			AM Peak-Hour		PM Peak-Hour		AM Peak-Hour			PM Peak-Hour		
					Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
US 101																				
Camphora Road	SB to Camphora Road	1	Diagonal	1,500	24	0.016	A	30	0.020	A	0	0.00%	0	0.00%	24	0.016	A	30	0.020	A
	NB from Camphora Road	1	Diagonal	1,500	40	0.027	A	32	0.021	A	0	0.00%	0	0.00%	40	0.027	A	32	0.021	A
	SB from Camphora Road	1	Diagonal	1,500	88	0.059	A	115	0.077	A	14	15.91%	60	52.17%	102	0.068	A	175	0.117	A
	NB to Camphora Road	1	Diagonal	1,500	96	0.064	A	80	0.053	A	58	60.42%	30	37.50%	154	0.103	A	110	0.073	A
Moranda Road	SB to Moranda Road	1	Diagonal	1,500	408	0.272	A	1107	0.738	C	230	56.37%	**965**	**87.17%**	638	0.425	B	**2072**	**1.381**	**F**
	NB from Moranda Road	1	Loop	1,500	877	0.585	C	482	0.321	A	**935**	**106.61%**	482	100.00%	**1812**	**1.208**	**F**	964	0.643	C
	SB from Moranda Road	1	Loop	1,500	52	0.035	A	42	0.028	A	67	128.85%	34	80.95%	119	0.079	A	76	0.051	A
	NB to Moranda Road	1	Loop	1,500	37	0.025	A	86	0.057	A	16	43.24%	69	80.23%	53	0.035	A	155	0.103	A
Front Street	SB to Front Street	1	Loop	1,500	162	0.108	A	283	0.189	A	58	35.80%	241	85.16%	220	0.147	A	524	0.349	A
	NB from Front Street	1	Loop	1,500	322	0.215	A	216	0.144	A	234	72.67%	121	56.02%	556	0.371	B	337	0.225	A
	SB from Front Street	1	Diagonal	1,500	281	0.187	A	376	0.251	A	267	95.02%	138	36.70%	548	0.365	B	514	0.343	A
	NB to Front Street	1	Diagonal	1,500	317	0.211	A	508	0.339	A	66	20.82%	276	54.33%	383	0.255	A	784	0.523	B
Arroyo Seco Road	SB to Arroyo Seco Road	1	Diagonal	1,500	75	0.050	A	93	0.062	A	17	22.67%	9	9.68%	92	0.061	A	102	0.068	A
	NB from Arroyo Seco Road	1	Diagonal	1,500	91	0.061	A	76	0.051	A	4	4.40%	17	22.37%	95	0.063	A	93	0.062	A

Notes:
1. Capacity for all ramps based on assumed capacity of 1,500 vphpl, as prescribed by the Highway Capacity Manual

Table 21
Project Intersection Levels of Service with Mitigation

	Intersection	Peak Hour	Background Conditions Ave. Delay	Background Conditions LOS	Project Conditions Ave. Delay	Project Conditions LOS	Project Mitigated Ave. Delay	Project Mitigated LOS	Project With Gabilan Ext. Ave. Delay	Project With Gabilan Ext. LOS
1	Moranda Road and US 101 NB Ramps	AM	33	D	**425**	**F**	13	B	18	B
		PM	14	B	**72**	**F**	12	B	10	B
2	Moranda Road and Front Street	AM	14	B	**172**	**F**	7	A	14	B
		PM	21	C	**189**	**F**	6	A	13	B
3	San Vicente Road and Front Street	AM	19	B	**143**	**F**	12	B	16	B
		PM	18	B	**146**	**F**	15	B	16	B
4	West Street and Front Street	AM	10	A	***18***	***C***	18	B	15	B
		PM	13	B	***34***	***D***	20	B	12	B
5	Main Street and Front Street	AM	9	A	11	B	19	B	10	B
		PM	12	B	***28***	***D***	23	C	17	C
6	East Street and Front Street	AM	19	B	22	C			22	C
		PM	23	C	27	C			24	C
7	Front Street and Nestles Road	AM	14	B	14	B			19	B
		PM	16	B	26	C			22	C
8	Front Street and US 101 NB Ramps	AM	20	C	10	B			11	B
		PM	20	B	25	C			23	C
9	Front Street and US 101 SB Ramps	AM	11	B	13	B	7	A	7	A
		PM	19	C	**62**	**F**	8	A	8	A
10	Front Street and Morisoli Road	AM	11	B	14	B			14	B
		PM	13	B	17	C			16	C
11	San Vicente Road and Market Street	AM	15	B	**47**	**E**	7	A	12	B
		PM	16	C	**114**	**F**	8	A	15	B
12	West Street and Market Street	AM	8	A	12	B	5	A	10	A
		PM	9	A	***15***	***C***	7	A	11	B
13	Main Street and Market Street	AM	8	A	9	A			8	A
		PM	8	A	10	A			9	A
14	East Street and Market Street	AM	10	B	25	C			5	A
		PM	16	C	***95***	***F***			6	A
15	East Street and North Street/Metz Road	AM	13	B	16	B			14	B
		PM	15	B	15	B			15	B
16	San Vicente Road and Gabilan Drive	AM	13	B	***375***	***F***	15	B	15	B
		PM	13	B	***395***	***F***	12	B	18	B
17	West Street and Gabilan Drive	AM	10	B	***26***	***D***	26	C	29	C
		PM	11	B	***58***	***F***	37	D	37	D
18	Main Street and Gabilan Drive	AM	9	A	10	A	12	B	11	B
		PM	9	A	***12***	***B***	16	B	13	B
19	Andalucia Drive and Gabilan Drive	AM	14	B	15	B			20	B
		PM	16	C	***18***	***C***			22	C
20	Orchard Lane and Metz Road	AM	15	C	***37***	***E***			18	B
		PM	9	B	***17***	***C***			18	B
21	Front Street and Oak Street	AM	12	B	20	B			12	B
		PM	14	B	**74**	**E**			12	B

Notes:
1. Significant impacts are shown in **BOLD** and boxed.
2. *Italics* and **BOLD** indicates signal warrant met.

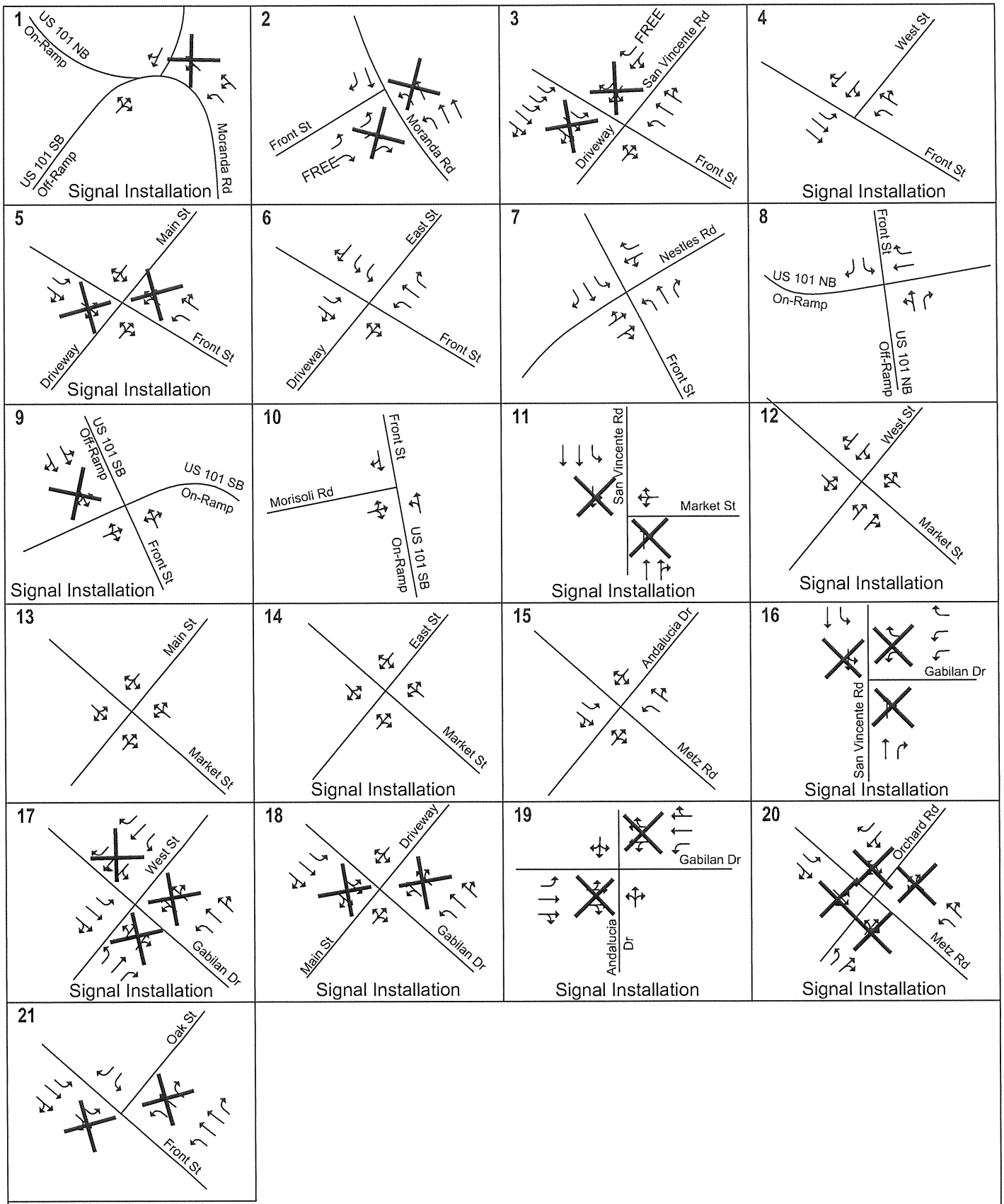


Figure 11

PROJECT MITIGATION MEASURES

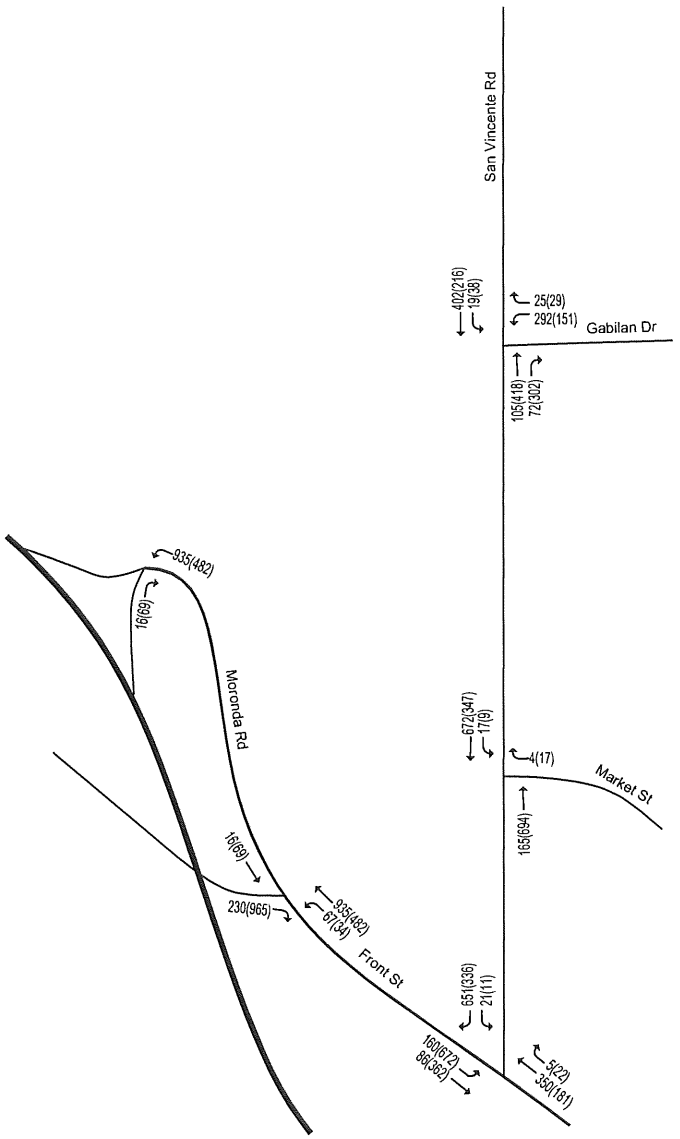
Soledad Miravale

Hexagon
Transportation Consultants, Inc.

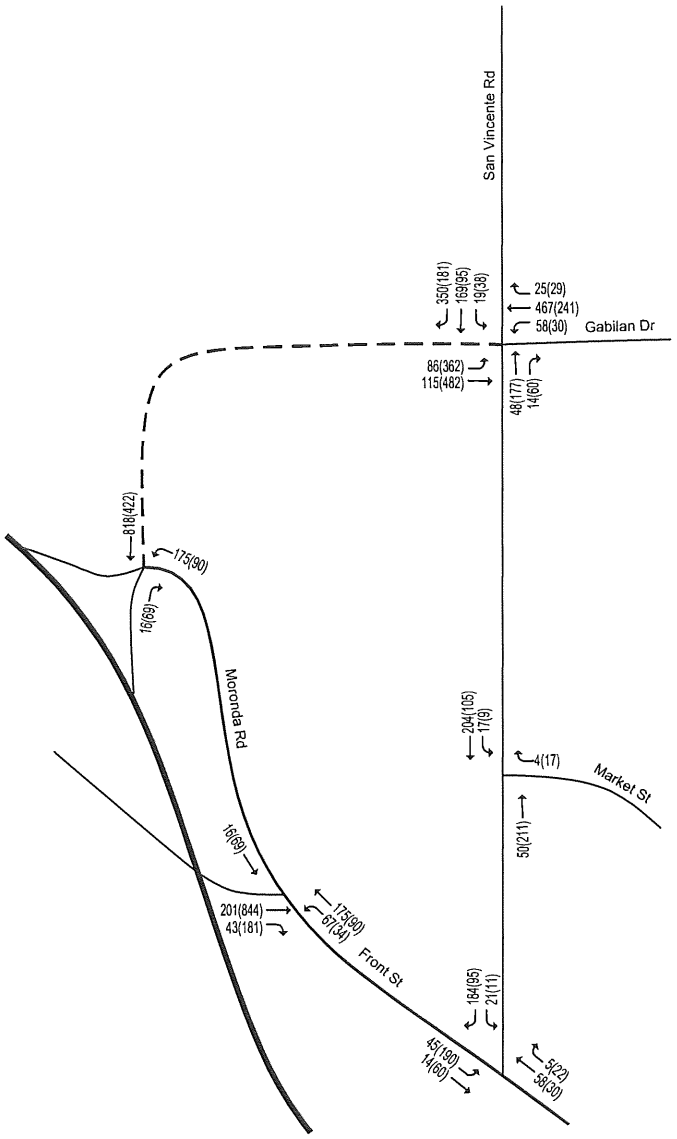
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NORTH

Without Gabilan Extension



With Gabilan Extension



LEGEND

XX(XX) = AM(PM) Traffic Volumes

Figure 12

PROJECT TRIPS WITH AND WITHOUT GABILAN EXTENSION

Soledad Miravale

Hexagon
Transportation Consultants, Inc.

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Table 22
Miravale Site Roadway Segment Volumes

Segment	Direction	Project Trips AM Peak	Project Trips AM Peak Tot. Volume	Project Trips PM Peak	Project Trips PM Peak Tot. Volume	Cumulative Trips AM Peak	Cumulative Trips AM Peak Tot. Volume	Cumulative Trips PM Peak	Cumulative Trips PM Peak Tot. Volume	Future Total Trips AM Peak	Future Total Trips PM Peak	Future Total Trips Maximum Tot. Volume	Future Total Trips **Daily Volume**	**Roadway Designation**
San Vicente Road Between														
Vista de Soledad and Miravale Road	NB	135	561	454	714	21	54	106	202	615	916	916	**9,160**	**Collector**
	SB	426		260		33		96						
Miravale Road and West Street	NB	141	357	257	460	5	13	25	47	370	507	507	**5,070**	**Collector**
	SB	216		203		8		22						
West Street Between														
Cuesta Street and H Street	NB	225	1,087	895	1,355	49	125	249	473	1,212	1,828	1,828	**18,280**	**Arterial**
	SB	862		460		76		224						
H Street and I Street	NB	202	909	743	1,144	23	58	115	218	967	1,362	1,362	**13,620**	**Arterial**
	SB	707		401		35		103						
I Street and J Street	NB	165	661	532	846	18	46	90	171	707	1,017	1,017	**10,170**	**Collector**
	SB	496		314		28		81						
J Street and L Street	NB	162	638	511	816	18	46	90	171	684	987	987	**9,870**	**Collector**
	SB	476		305		28		81						
L Street and Hilltop Road	NB	158	608	486	781	17	44	87	165	652	946	946	**9,460**	**Collector**
	SB	450		295		27		78						
Hilltop Road and S Street	NB	154	484	371	633	12	31	62	118	515	751	751	**7,510**	**Collector**
	SB	330		262		19		56						
S Street and Crest Street	NB	108	398	315	504	7	19	38	72	417	576	576	**5,760**	**Collector**
	SB	290		189		12		34						
Crest Street and Eucalyptus Lane	EB	146	323	221	422	2	5	10	19	328	441	441	**4,410**	**Collector**
	WB	177		201		3		9						
Eucalyptus Lane and San Vicente Road	EB	153	354	247	462	5	13	25	47	367	509	509	**5,090**	**Collector**
	WB	201		215		8		22						
Orchard Road Between														
Terraza Street and H Street	NB	104	524	434	651	11	27	53	101	551	752	752	**7,520**	**Collector**
	SB	420		217		16		48						
H Street and Hilltop Street	NB	87	437	362	543	18	46	90	171	483	714	714	**7,140**	**Collector**
	SB	350		181		28		81						
Hilltop Street and S Street	NB	51	175	135	220	15	38	74	140	213	360	360	**3,600**	**Collector**
	SB	124		85		23		66						
S Street and Crest Street	NB	49	165	126	207	15	38	74	140	203	347	347	**3,470**	**Collector**
	SB	116		81		23		66						
Crest Street Between														
L Street and West Street	NB	35	70	54	102	1	2	3	6	72	108	108	**1,080**	**Local**
	SB	35		48		1		3						
West Street and Orchard Lane	EB	86	363	301	466	8	20	40	76	383	542	542	**5,420**	**Collector**
	WB	277		165		12		36						
Eucalyptus Lane Between														
L Street and West Street	NB	24	31	14	40	4	7	13	27	38	67	67	**670**	**Local**
	SB	7		26		3		14						
Hilltop Road Between														
West Street and Orchard Lane	EB	50	197	161	252	5	13	25	47	210	299	299	**2,990**	**Collector**
	WB	147		91		8		22						
S Street Between														
West Street and Orchard Lane	EB	18	50	42	71	5	13	25	47	63	118	118	**1,180**	**Local**
	WB	32		29		8		22						

Notes:
1. Peak Hour volumes obtained from Trip assignments created for the Miravale Phase III project by Hexagon.
2. Daily volumes estimated by multiplying larger of either the AM or PM peak hour volume on each segment, total of both directions of travel, by 10.
3. Roadway designations based on City of Soledad General Plan, 2005 Existing Roadway and Capacities.

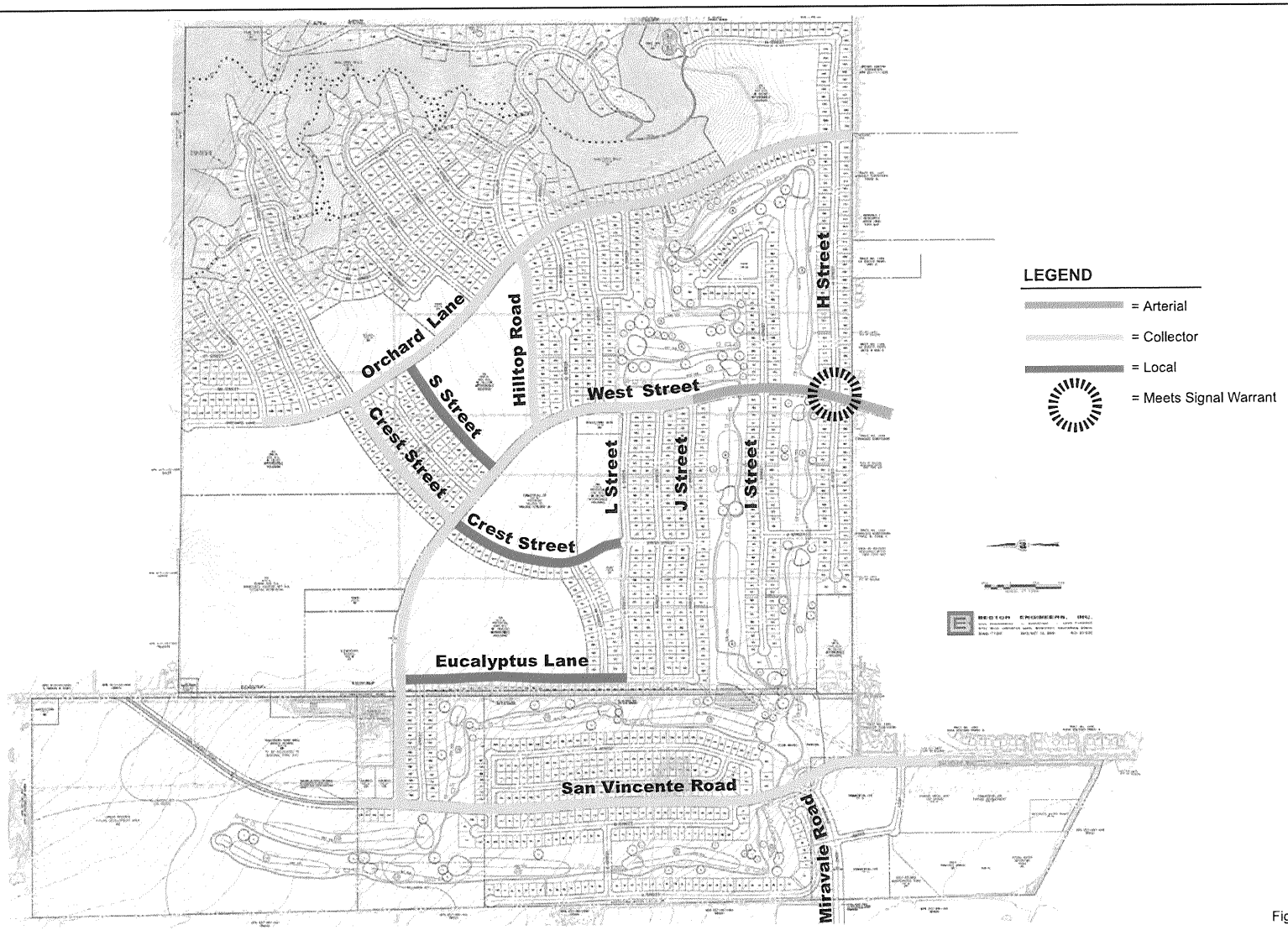


Figure 13

MIRAVALE SITE ROADWAY DESIGNATION

Soledad Miravale

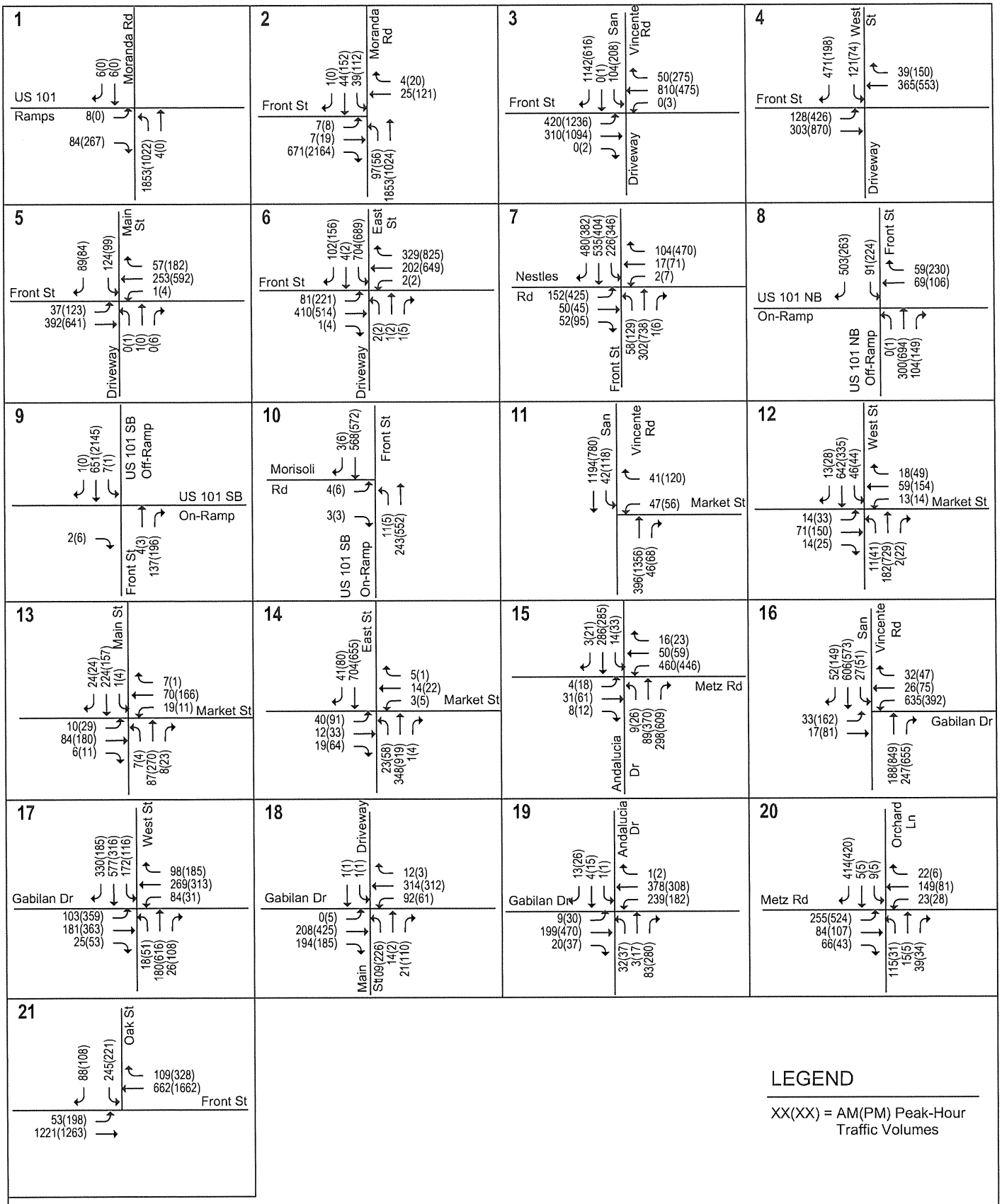
Hexagon
Transportation Consultants, Inc.

Table 23
Cumulative Project Trip Generation Estimates

		Daily		AM Peak Hour				PM Peak Hour			
Land Use	Size	Rate /a/	Trips	Rate /a/	In	Out	Total	Rate /a/	In	Out	Total
The Village at Soledad											
Shopping Center /d/	139,730 s.f.	42.94	6,000	1.03	88	56	144	3.75	252	272	524
Hotel /e/	84 Rooms	8.17	686	0.56	29	18	47	0.59	26	23	50
Cinema	1,329 seats							0.08	38	68	106
Totals			6,686		116	74	191		316	364	680
Soledad Plaza											
Shopping Center /d/	415,000 s.f.	42.94	17,820	1.03	261	167	427	3.75	747	809	1556
263 Front Street											
Specialty Retail Center /c/	12,200 s.f.	44.32	541	1.35	8	9	16	2.71	15	19	33
Residential /b/	152 units	5.86	891	0.44	11	56	67	0.52	53	26	79
Totals			1,431		19	64	83		68	45	112
Total All Approved Projects			**25,938**		**397**	**305**	**702**		**1,131**	**1,218**	**2,348**

Notes:
/a/ Rates expressed in trips per dwelling units.
/b/ Trip Generation rates for residential condominium/townhouse (ITE Land Use #230) used for this project.
/c/ Trip Generation rates for specialty retail center (ITE Land Use #814) used for this project.
/d/ Trip Generation rates for shopping center (ITE Land Use #820) used for this project.
/e/ Trip Generation rates for hotel (ITE Land Use #310) used for this project.

Source for rates: *ITE Trip Generation, Seventh Edition.*



LEGEND

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Figure 14

CUMULATIVE TRAFFIC VOLUMES

Soledad Miravale

Hexagon
Transportation Consultants, Inc.

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Table 24

Cumulative Conditions Intersection Levels of Service

	Intersection	Intersection Control	Peak Hour	No Project Ave. Delay	No Project LOS	With Project: No Gabilan Extension Ave. Delay	With Project: No Gabilan Extension LOS	With Project: With Gabilan Extension Ave. Delay	With Project: With Gabilan Extension LOS
1	Moranda Road and US 101 NB Ramps	Signal	AM	8	A	14	B	18	B
			PM	15	B	16	B	10	B
2	Moranda Road and Front Street	Signal	AM	10	A	5	A	15	B
			PM	18	B	11	B	14	B
3	San Vicente Road and Front Street	Signal	AM	19	B	13	B	16	B
			PM	20	C	17	B	19	B
4	West Street and Front Street	Signal	AM	11	B	19	B	14	B
			PM	25	C	34	C	13	B
5	Main Street and Front Street	Signal	AM	9	A	23	C	21	C
			PM	24	C	22	C	23	C
6	East Street and Front Street	Signal	AM	20	B	24	C	23	C
			PM	25	C	38	D	32	C
7	Front Street and Nestles Road	Signal	AM	17	B	20	B	21	C
			PM	24	C	42	D	42	D
8	Front Street and US 101 NB Ramps	Signal	AM	20	C	10	A	12	B
			PM	19	B	25	C	23	C
9	Front Street and US 101 SB Ramps	Signal	AM	11	B	7	A	7	A
			PM	21	C	12	B	13	B
10	Front Street and Monsoli Road	TWSC	AM	11	B	14	B	14	B
			PM	14	B	18	C	18	C
11	San Vicente Road and Market Street	Signal	AM	***14***	***B***	8	A	11	B
			PM	***34***	***D***	10	B	11	B
12	West Street and Market Street	Signal	AM	9	A	6	A	10	A
			PM	11	B	9	A	11	B
13	Main Street and Market Street	AWSC	AM	8	A	9	A	8	A
			PM	9	A	11	B	9	A
14	East Street and Market Street	Signal	AM	11	B	5	A	5	A
			PM	34	D	9	A	8	A
15	East Street and North Street/Metz Road	Signal	AM	13	B	16	B	14	B
			PM	15	B	16	B	16	B
16	San Vicente Road and Gabilan Drive	Signal	AM	18	B	21	C	16	B
			PM	19	B	23	C	27	C
17	West Street and Gabilan Drive	Signal	AM	11	B	27	C	30	C
			PM	13	B	39	D	38	D
18	Main Street and Gabilan Drive	Signal	AM	9	A	12	B	10	A
			PM	10	B	16	B	15	B
19	Andalucia Drive and Gabilan Drive	TWSC	AM	12	B	20	B	20	B
			PM	16	C	23	C	23	C
20	Orchard Lane and Metz Road	TWSC	AM	17	C	36	D	18	B
			PM	11	C	32	C	20	B
21	Front Street and Oak Street	TWSC	AM	12	B	12	B	12	B
			PM	26	C	13	B	12	B

Notes:

1. Intersection control based on project with mitigation conditions
   -TWSC = Two-way stop-controlled intersection
   -AWSC = Four-way stop-controlled intersection
2. Significant impacts are shown in **BOLD** and boxed.
3. *Italics* and **BOLD** indicates signal warrant met.

Table 25

Cumulative Intersection Signal Warrant Analysis Summary

Study Number	Intersection Name	Existing Conditions AM	Existing Conditions PM	Background Conditions AM	Background Conditions PM	Project Conditions AM	Project Conditions PM	Cumulative Conditions AM	Cumulative Conditions PM
Existing Unsignalized Intersections									
1	Moranda Road & US 101 NB Ramps	No	No	No	No	No	No	**Yes**	**Yes**
2	Moranda Road & Front Street	No	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
3	San Vicente Road & Front Street	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
4	West Street & Front Street	No	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**
5	Main Street & Front Street	No	No	No	No	No	**Yes**	No	**Yes**
6	East Street & Front Street	No	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
7	Front Street & Nestles Road	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
8	Front Street & US 101 NB Ramps	No	No	No	**Yes**	No	**Yes**	No	**Yes**
9	Front Street & US 101 SB Ramps	No	No	No	No	No	No	No	No
10	Front Street & Morisoli Road	No	No	No	No	No	No	No	No
11	San Vicente Road & Market Street	No	No	No	No	No	No	No	**Yes**
12	West Street & Market Street	No	No	No	No	No	**Yes**	No	**Yes**
13	Main Street & Market Street	No	No	No	No	No	No	No	No
14	East Street & Market Street	No	No	No	No	No	**Yes**	No	**Yes**
15	East Street & North Street/Metz Road	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
16	San Vicente Road & Gabilan Drive	No	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**
17	West Street & Gabilan Drive	No	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**
18	Main Street & Gabilan Drive	No	No	No	No	No	**Yes**	No	**Yes**
19	Andalucia Drive & Gabilan Drive	No	No	No	No	No	**Yes**	No	**Yes**
20	Orchard Street & Metz Road	No	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**
21	Oak Street & Front Street	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**

Notes:
1. Signal warrant analysis based on Caltrans Peak Hour Signal Warrant #11.

Table 26
Cumulative Roadway Segment Analysis (No Project)

				Background Conditions						Cumulative Trips				Cumulative Conditions					
		# Of	Capacity	AM Peak-Hr			PM Peak-Hr			AM Peak-Hr		PM Peak-Hr		AM Peak-Hr			PM Peak-Hr		
Segment	Direction	Lanes	(vph)	Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
Front St																			
Moranda Rd and San Vicente Rd	EB	2	2,400	474	0.198	A	1,254	0.523	A	14	2.95%	56	4.47%	488	0.203	A	1,310	0.546	A
	WB	2	2,400	976	0.407	A	600	0.250	A	43	4.41%	38	6.33%	1,019	0.425	A	638	0.266	A
San Vicente Rd and West St	EB	2	2,400	267	0.111	A	730	0.304	A	55	20.60%	188	25.75%	322	0.134	A	918	0.383	A
	WB	2	2,400	513	0.214	A	353	0.147	A	71	13.84%	196	55.52%	584	0.243	A	549	0.229	A
West St and Main St	EB	1	1,200	253	0.211	A	571	0.476	A	54	21.34%	188	32.92%	307	0.256	A	759	0.633	B
	WB	1	1,200	272	0.227	A	358	0.298	A	71	26.10%	193	53.91%	343	0.286	A	551	0.459	A
Main St and East St	EB	1	1,200	293	0.244	A	503	0.419	A	65	22.18%	169	33.60%	358	0.298	A	672	0.560	A
	WB	1	1,200	337	0.281	A	427	0.356	A	35	10.39%	203	47.54%	372	0.310	A	630	0.525	A
East St and Nestles Rd	EB	1	1,200	683	0.569	A	692	0.577	A	86	12.59%	240	34.68%	769	0.641	B	932	0.777	C
	WB	1	1,200	534	0.445	A	825	0.688	B	48	8.99%	**286**	**34.67%**	582	0.485	A	**1,111**	**0.926**	**E**
Gabilan Dr																			
San Vicente Rd and West St	EB	2	2,400	182	0.076	A	309	0.129	A	29	15.93%	142	45.95%	211	0.088	A	451	0.188	A
	WB	2	2,400	329	0.137	A	231	0.096	A	46	13.98%	131	56.71%	375	0.156	A	362	0.151	A
West St and Andalucia Dr	EB	2	2,400	256	0.107	A	405	0.169	A	21	8.20%	101	24.94%	277	0.115	A	506	0.211	A
	WB	2	2,400	396	0.165	A	344	0.143	A	33	8.33%	93	27.03%	429	0.179	A	437	0.182	A
San Vicente Rd																			
Market St and Gabilan Dr	NB	1	1,200	210	0.175	A	500	0.417	A	71	33.81%	290	58.00%	281	0.234	A	790	0.658	B
	SB	1	1,200	480	0.400	A	298	0.248	A	72	15.00%	273	91.61%	552	0.460	A	571	0.476	A
North of Gabilan Dr	NB	1	1,200	63	0.053	A	139	0.116	A	93	147.62%	467	335.97%	156	0.130	A	606	0.505	A
	SB	1	1,200	129	0.108	A	81	0.068	A	143	110.85%	420	518.52%	272	0.227	A	501	0.418	A
West St																			
Market St and Gabilan Dr	NB	2	2,400	107	0.045	A	261	0.109	A	5	4.67%	23	8.81%	112	0.047	A	284	0.118	A
	SB	2	2,400	221	0.092	A	132	0.055	A	8	3.62%	21	15.91%	229	0.095	A	153	0.064	A
North of Gabilan Dr	NB	2	2,400	151	0.063	A	201	0.084	A	5	3.31%	21	10.45%	156	0.065	A	222	0.093	A
	SB	2	2,400	205	0.085	A	135	0.056	A	7	3.41%	19	14.07%	212	0.088	A	154	0.064	A

Notes:
1. Capacity of roadways based on assumed capacity of 1,200 vphpl and existing lanes on roadways.
2. **BOLD** indictaes significant increase in roadway segment volume and LOS.

Table 27
Cumulative Roadway Segment Analysis (With Project)

				Cumulative No Project Conditions						Project Trips				Cumulative Conditions With Project					
				AM Peak-Hr			PM Peak-Hr			AM Peak-Hr		PM Peak-Hr		AM Peak-Hr			PM Peak-Hr		
Segment	Direction	# Of Lanes	Capacity (vph)	Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
Front St																			
Moranda Rd and San Vicente Rd	EB	2	2,400	488	0.203	A	1,310	0.546	A	247	50.61%	**1,034**	**78.93%**	735	0.306	A	**2,344**	**0.977**	**E**
	WB	2	2,400	1,019	0.425	A	638	0.266	A	1,001	98.23%	517	81.03%	2,020	0.842	D	1,155	0.481	A
San Vicente Rd and West St	EB	2	2,400	322	0.134	A	918	0.383	A	107	33.23%	373	40.63%	429	0.179	A	1,291	0.538	A
	WB	2	2,400	584	0.243	A	549	0.229	A	356	60.96%	202	36.79%	940	0.392	A	751	0.313	A
West St and Main St	EB	1	1,200	307	0.256	A	759	0.633	B	140	45.60%	125	16.47%	447	0.373	A	884	0.737	C
	WB	1	1,200	343	0.286	A	551	0.459	A	89	25.95%	159	28.86%	432	0.360	A	710	0.592	A
Main St and East St	EB	1	1,200	358	0.298	A	672	0.560	A	238	66.48%	123	18.30%	596	0.497	A	795	0.663	B
	WB	1	1,200	372	0.310	A	630	0.525	A	59	15.86%	246	39.05%	431	0.359	A	876	0.730	C
East St and Nestles Rd	EB	1	1,200	769	0.641	B	932	0.777	C	**584**	**75.94%**	**301**	**32.30%**	**1,353**	**1.128**	**F**	**1,233**	**1.028**	**F**
	WB	1	1,200	582	0.485	A	1,111	0.926	E	144	24.74%	603	54.28%	726	0.605	B	1,714	1.428	F
Gabilan Dr																	0		
San Vicente Rd and West St	EB	2	2,400	211	0.088	A	451	0.188	A	91	43.13%	339	75.17%	302	0.126	A	790	0.329	A
	WB	2	2,400	375	0.156	A	362	0.151	A	317	84.53%	180	49.72%	692	0.288	A	542	0.226	A
West St and Andalucia Dr	EB	2	2,400	277	0.115	A	506	0.211	A	130	46.93%	92	18.18%	407	0.170	A	598	0.249	A
	WB	2	2,400	429	0.179	A	437	0.182	A	51	11.89%	143	32.72%	480	0.200	A	580	0.242	A
San Vicente Rd																	0		
Market St and Gabilan Dr	NB	1	1,200	281	0.234	A	790	0.658	B	170	60.50%	**711**	**90.00%**	451	0.376	A	**1,501**	**1.251**	**F**
	SB	1	1,200	552	0.460	A	571	0.476	A	**688**	**124.64%**	355	62.17%	**1,240**	**1.033**	**F**	926	0.772	C
North of Gabilan Dr	NB	1	1,200	156	0.130	A	606	0.505	A	130	83.33%	447	73.76%	286	0.238	A	1,053	0.878	D
	SB	1	1,200	272	0.227	A	501	0.418	A	422	155.15%	254	50.70%	694	0.578	A	755	0.629	B
West St																	0		
Market St and Gabilan Dr	NB	2	2,400	112	0.047	A	284	0.118	A	110	98.21%	461	162.32%	222	0.093	A	745	0.310	A
	SB	2	2,400	229	0.095	A	153	0.064	A	446	194.76%	230	150.33%	675	0.281	A	383	0.160	A
North of Gabilan Dr	NB	2	2,400	156	0.065	A	222	0.093	A	219	140.38%	890	400.90%	375	0.156	A	1,112	0.463	A
	SB	2	2,400	212	0.088	A	154	0.064	A	858	404.72%	453	294.16%	1,070	0.446	A	607	0.253	A

Notes:
1. Capacity of roadways based on assumed capacity of 1,200 vphpl and existing lanes on roadways.
2. **BOLD** indictaes significant increase in roadway segment volume and LOS.

Table 28
Cumulative Freeway Segment Analysis (No Project)

Segment	Direction	# Of Lanes	Capacity (vph) /a/	Background Conditions						Cumulative Trips				Cumulative Conditions					
				AM Peak-Hour			PM Peak-Hour			AM Peak-Hour		PM Peak-Hour		AM Peak-Hour			PM Peak-Hour		
				Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
US 101																			
North Gonzales and Gonzales-5th Street	Both	4	9,600	4,791	0.499	B	4,903	0.511	B	120	2.50%	204	4.15%	4,911	0.512	B	5,106	0.532	B
	NB	2	4,800	2,863	0.597	C	1,985	0.413	B	76	2.64%	139	7.02%	2,939	0.612	C	2,124	0.443	B
	SB	2	4,800	1,928	0.402	B	2,918	0.608	C	44	2.29%	64	2.21%	1,972	0.411	B	2,982	0.621	C
Gonzales-5th Street and Gloria Road	Both	4	9,600	4,697	0.489	B	4,824	0.503	B	137	2.91%	233	4.83%	4,834	0.504	B	5,057	0.527	B
	NB	2	4,800	2,805	0.584	C	1,957	0.408	B	86	3.08%	159	8.14%	2,892	0.602	C	2,116	0.441	B
	SB	2	4,800	1,892	0.394	B	2,868	0.597	C	50	2.66%	74	2.57%	1,942	0.405	B	2,941	0.613	C
Gloria Road and Soledad Prison	Both	4	9,600	3,853	0.401	B	3,996	0.416	B	154	3.99%	262	6.55%	4,007	0.417	B	4,258	0.444	B
	NB	2	4,800	2,297	0.479	B	1,629	0.339	A	97	4.23%	179	11.00%	2,394	0.499	B	1,808	0.377	B
	SB	2	4,800	1,556	0.324	A	2,367	0.493	B	57	3.64%	83	3.50%	1,613	0.336	A	2,450	0.510	B
Soledad Prison and Camphora	Both	4	9,600	3,681	0.383	B	3,832	0.399	B	162	4.41%	276	7.21%	3,844	0.400	B	4,109	0.428	B
	NB	2	4,800	2,193	0.457	B	1,565	0.326	A	103	4.68%	189	12.08%	2,296	0.478	B	1,754	0.365	B
	SB	2	4,800	1,488	0.310	A	2,267	0.472	B	60	4.02%	87	3.86%	1,548	0.322	A	2,355	0.491	B
Camphora and North Soledad	Both	4	9,600	4,859	0.506	B	5,018	0.523	B	108	2.22%	199	3.97%	4,967	0.517	B	5,217	0.543	B
	NB	2	4,800	2,899	0.604	C	2,041	0.425	B	63	2.17%	92	4.51%	2,962	0.617	C	2,133	0.444	B
	SB	2	4,800	1,960	0.408	B	2,977	0.620	C	45	2.30%	107	3.59%	2,005	0.418	B	3,084	0.643	C
North Soledad and South Soledad	Both	4	9,600	3,954	0.412	B	3,994	0.416	B	105	2.66%	299	7.49%	4,059	0.423	B	4,293	0.447	B
	NB	2	4,800	2,379	0.496	B	1,601	0.334	A	55	2.31%	145	9.06%	2,434	0.507	B	1,746	0.364	B
	SB	2	4,800	1,575	0.328	A	2,393	0.499	B	50	3.17%	154	6.44%	1,625	0.339	A	2,547	0.531	B
South Soledad and Arroyo Seco Road	Both	4	9,600	3,861	0.402	B	3,909	0.407	B	108	2.80%	353	9.03%	3,969	0.413	B	4,262	0.444	B
	NB	2	4,800	2,104	0.438	B	1,780	0.371	B	60	2.85%	171	9.61%	2,164	0.451	B	1,951	0.406	B
	SB	2	4,800	1,757	0.366	B	2,129	0.444	B	48	2.73%	182	8.55%	1,805	0.376	B	2,311	0.481	B
Arroyo Seco Road and North Greenfield	Both	4	9,600	3,703	0.386	B	3,749	0.390	B	103	2.77%	335	8.95%	3,806	0.396	B	4,084	0.425	B
	NB	2	4,800	2,018	0.420	B	1,707	0.356	A	57	2.82%	162	9.52%	2,075	0.432	B	1,869	0.389	B
	SB	2	4,800	1,685	0.351	A	2,042	0.425	B	46	2.71%	173	8.47%	1,731	0.361	B	2,215	0.461	B
North Greenfield and Walnut Avenue	Both	4	9,600	3,187	0.332	A	3,228	0.336	A	92	2.88%	300	9.30%	3,279	0.342	A	3,528	0.367	B
	NB	2	4,800	1,736	0.362	B	1,470	0.306	A	51	2.94%	145	9.89%	1,787	0.372	B	1,616	0.337	A
	SB	2	4,800	1,451	0.302	A	1,757	0.366	B	41	2.81%	155	8.80%	1,492	0.311	A	1,912	0.398	B
Walnut Avenue and Oak Avenue	Both	4	9,600	2,971	0.309	A	3,007	0.313	A	81	2.73%	265	8.81%	3,052	0.318	A	3,272	0.341	A
	NB	2	4,800	1,619	0.337	A	1,369	0.285	A	45	2.78%	128	9.37%	1,664	0.347	A	1,497	0.312	A
	SB	2	4,800	1,352	0.282	A	1,638	0.341	A	36	2.66%	137	8.33%	1,388	0.289	A	1,775	0.370	B
South Greenfield and Oak Avenue	Both	4	9,600	2,455	0.256	A	2,486	0.259	A	70	2.86%	229	9.23%	2,525	0.263	A	2,715	0.283	A
	NB	2	4,800	1,337	0.279	A	1,132	0.236	A	39	2.92%	111	9.82%	1,376	0.287	A	1,243	0.259	A
	SB	2	4,800	1,117	0.233	A	1,354	0.282	A	31	2.79%	118	8.74%	1,149	0.239	A	1,472	0.307	A

Notes:
/a/ Capacity of freeway lanes based on assumed capacity of 2,400 vphpl, as prescribed by the Highway Capacity Manual
/b/ Data provided by Caltrans Data System Unit 2005, Route 101 District 5.

Table 29
Cumulative Freeway Segment Analysis (With Project)

Segment	Direction	# Of Lanes	Capacity (vph)	Cumulative No Project Conditions						Project Trips				Cumulative Conditions With Project					
				AM Peak-Hour			PM Peak-Hour			AM Peak-Hour		PM Peak-Hour		AM Peak-Hour			PM Peak-Hour		
				Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
US 101																			
North Gonzales and Gonzales-5th Street	Both	4	9,600	4,911	0.512	B	5,106	0.532	B	1,837	37.40%	1,688	33.07%	6,748	0.703	C	6,795	0.708	C
	NB	2	4,800	2,939	0.612	C	2,124	0.443	B	**1,019**	**34.68%**	1,266	59.62%	**3,958**	**0.825**	**D**	3,390	0.706	C
	SB	2	4,800	1,972	0.411	B	2,982	0.621	C	818	41.46%	422	14.15%	2,790	0.581	C	3,404	0.709	C
Gonzales-5th Street and Gloria Road	Both	4	9,600	4,834	0.504	B	5,057	0.527	B	2,099	43.43%	1,930	38.16%	6,933	0.722	C	6,987	0.728	C
	NB	2	4,800	2,892	0.602	C	2,116	0.441	B	**1,165**	**40.28%**	1,447	68.39%	**4,056**	**0.845**	**D**	3,563	0.742	C
	SB	2	4,800	1,942	0.405	B	2,941	0.613	C	934	48.11%	482	16.40%	2,877	0.599	C	3,424	0.713	C
Gloria Road and Soledad Prison	Both	4	9,600	4,007	0.417	B	4,258	0.444	B	2,362	58.94%	2,171	50.98%	6,369	0.663	C	6,429	0.670	C
	NB	2	4,800	2,394	0.499	B	1,808	0.377	B	**1,310**	**54.73%**	1,628	90.05%	**3,705**	**0.772**	**C**	3,436	0.716	C
	SB	2	4,800	1,613	0.336	A	2,450	0.510	B	1,051	65.18%	543	22.15%	2,664	0.555	C	2,993	0.624	C
Soledad Prison and Camphora	Both	4	9,600	3,844	0.400	B	4,109	0.428	B	2,493	64.86%	2,291	55.77%	6,336	0.660	C	6,400	0.667	C
	NB	2	4,800	2,296	0.478	B	1,754	0.365	B	1,383	60.25%	1,719	97.98%	3,679	0.766	C	3,473	0.723	C
	SB	2	4,800	1,548	0.322	A	2,355	0.491	B	1,110	71.69%	573	24.33%	2,657	0.554	C	2,927	0.610	C
Camphora and North Soledad	Both	4	9,600	4,967	0.517	B	5,217	0.543	B	1,456	29.31%	1,809	34.68%	6,423	0.669	C	7,026	0.732	C
	NB	2	4,800	2,962	0.617	C	2,133	0.444	B	**1,168**	**39.43%**	603	28.27%	**4,130**	**0.860**	**D**	2,736	0.570	C
	SB	2	4,800	2,005	0.418	B	3,084	0.643	C	288	14.36%	**1,206**	**39.11%**	2,293	0.478	B	**4,290**	**0.894**	**D**
North Soledad and South Soledad	Both	4	9,600	4,059	0.423	B	4,293	0.447	B	374	9.21%	465	10.83%	4,433	0.462	B	4,758	0.496	B
	NB	2	4,800	2,434	0.507	B	1,746	0.364	B	250	10.27%	189	10.82%	2,684	0.559	C	1,935	0.403	B
	SB	2	4,800	1,625	0.339	A	2,547	0.531	B	124	7.63%	276	10.84%	1,749	0.364	B	2,823	0.588	C
South Soledad and Arroyo Seco Road	Both	4	9,600	3,969	0.413	B	4,262	0.444	B	416	10.48%	517	12.13%	4,385	0.457	B	4,779	0.498	B
	NB	2	4,800	2,164	0.451	B	1,951	0.406	B	82	3.79%	345	17.68%	2,246	0.468	B	2,296	0.478	B
	SB	2	4,800	1,805	0.376	B	2,311	0.481	B	334	18.50%	172	7.44%	2,139	0.446	B	2,483	0.517	B
Arroyo Seco Road and North Greenfield	Both	4	9,600	3,806	0.396	B	4,084	0.425	B	395	10.38%	491	12.03%	4,201	0.438	B	4,575	0.477	B
	NB	2	4,800	2,075	0.432	B	1,869	0.389	B	78	3.75%	328	17.53%	2,153	0.449	B	2,197	0.458	B
	SB	2	4,800	1,731	0.361	B	2,215	0.461	B	317	18.34%	163	7.38%	2,048	0.427	B	2,378	0.495	B
North Greenfield and Walnut Avenue	Both	4	9,600	3,279	0.342	A	3,528	0.367	B	354	10.78%	439	12.46%	3,632	0.378	B	3,967	0.413	B
	NB	2	4,800	1,787	0.372	B	1,616	0.337	A	70	3.90%	293	18.15%	1,857	0.387	B	1,909	0.398	B
	SB	2	4,800	1,492	0.311	A	1,912	0.398	B	284	19.03%	146	7.65%	1,775	0.370	B	2,058	0.429	B
Walnut Avenue and Oak Avenue	Both	4	9,600	3,052	0.318	A	3,272	0.341	A	312	10.22%	388	11.85%	3,364	0.350	A	3,659	0.381	B
	NB	2	4,800	1,664	0.347	A	1,497	0.312	A	62	3.70%	259	17.28%	1,726	0.360	A	1,756	0.366	B
	SB	2	4,800	1,388	0.289	A	1,775	0.370	B	251	18.05%	129	7.27%	1,638	0.341	A	1,904	0.397	B
South Greenfield and Oak Avenue	Both	4	9,600	2,525	0.263	A	2,715	0.283	A	270	10.71%	336	12.38%	2,795	0.291	A	3,051	0.318	A
	NB	2	4,800	1,376	0.287	A	1,243	0.259	A	53	3.87%	224	18.04%	1,430	0.298	A	1,468	0.306	A
	SB	2	4,800	1,149	0.239	A	1,472	0.307	A	217	18.90%	112	7.60%	1,366	0.285	A	1,584	0.330	A

Notes:
/a/ Capacity of freeway lanes based on assumed capacity of 2,400 vphpl, as prescribed by the Highway Capacity Manual
/b/ Data provided by Caltrans Data System Unit 2005, Route 101 District 5.

Table 30

Cumulative Freeway Ramp Analysis (No Project)

					Background Conditions						Cumulative Trips				Cumulative Conditions					
					AM Peak-Hour			PM Peak-Hour			AM Peak-Hour		PM Peak-Hour		AM Peak-Hour			PM Peak-Hour		
Interchange	Direction	# Of Lanes	Type	Capacity (vph)	Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
US 101																				
Camphora Road	SB to Camphora Road	1	Diagonal	1,500	24	0.016	A	30	0.020	A	0	0.00%	0	0.00%	24	0.016	A	30	0.020	A
	NB from Camphora Road	1	Diagonal	1,500	40	0.027	A	32	0.021	A	0	0.00%	0	0.00%	40	0.027	A	32	0.021	A
	SB from Camphora Road	1	Diagonal	1,500	88	0.059	A	115	0.077	A	2	2.27%	5	4.35%	90	0.060	A	120	0.080	A
	NB to Camphora Road	1	Diagonal	1,500	96	0.064	A	80	0.053	A	3	3.13%	5	6.25%	99	0.066	A	85	0.057	A
Moranda Road	SB to Moranda Road	1	Diagonal	1,500	408	0.272	A	1107	0.738	C	21	5.15%	74	6.68%	429	0.286	A	1181	0.787	D
	NB from Moranda Road	1	Loop	1,500	877	0.585	C	482	0.321	A	48	5.47%	59	12.24%	925	0.617	C	541	0.361	B
	SB from Moranda Road	1	Loop	1,500	52	0.035	A	42	0.028	A	25	48.08%	121	288.10%	77	0.051	A	163	0.109	A
	NB to Moranda Road	1	Loop	1,500	37	0.025	A	86	0.057	A	39	105.41%	112	130.23%	76	0.051	A	198	0.132	A
Front Street	SB to Front Street	1	Loop	1,500	162	0.108	A	283	0.189	A	25	15.43%	33	11.66%	187	0.125	A	316	0.211	A
	NB from Front Street	1	Loop	1,500	322	0.215	A	216	0.144	A	15	4.66%	33	15.28%	337	0.225	A	249	0.166	A
	SB from Front Street	1	Diagonal	1,500	281	0.187	A	376	0.251	A	23	8.19%	61	16.22%	304	0.203	A	437	0.291	A
	NB to Front Street	1	Diagonal	1,500	317	0.211	A	508	0.339	A	21	6.62%	60	11.81%	338	0.225	A	568	0.379	B
Arroyo Seco Road	SB to Arroyo Seco Road	1	Diagonal	1,500	75	0.050	A	93	0.062	A	2	2.67%	9	9.68%	77	0.051	A	102	0.068	A
	NB from Arroyo Seco Road	1	Diagonal	1,500	91	0.061	A	76	0.051	A	3	3.30%	9	11.84%	94	0.063	A	85	0.057	A

Notes:
1. Capacity for all ramps based on assumed capacity of 1,500 vphpl, as prescribed by the Highway Capacity Manual

Table 31

Cumulative Freeway Ramp Analysis (With Project)

Interchange	Direction	# Of Lanes	Type	Capacity (vph)	Cumulative No Project Conditions						Project Trips				Cumulative With Project Conditions					
					AM Peak-Hour			PM Peak-Hour			AM Peak-Hour		PM Peak-Hour		AM Peak-Hour			PM Peak-Hour		
					Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
US 101																				
Camphora Road	SB to Camphora Road	1	Diagonal	1,500	24	0.016	A	30	0.020	A	0	0.00%	0	0.00%	24	0.016	A	30	0.020	A
	NB from Camphora Road	1	Diagonal	1,500	40	0.027	A	32	0.021	A	0	0.00%	0	0.00%	40	0.027	A	32	0.021	A
	SB from Camphora Road	1	Diagonal	1,500	90	0.060	A	120	0.080	A	14	15.56%	60	50.00%	104	0.069	A	180	0.120	A
	NB to Camphora Road	1	Diagonal	1,500	99	0.066	A	85	0.057	A	58	58.59%	30	35.29%	157	0.105	A	115	0.077	A
Moranda Road	SB to Moranda Road	1	Diagonal	1,500	429	0.286	A	1181	0.787	D	230	53.61%	**965**	**81.71%**	659	0.439	B	**2146**	**1.431**	F
	NB from Moranda Road	1	Loop	1,500	925	0.617	C	541	0.361	B	**935**	**101.08%**	482	89.09%	**1860**	**1.240**	F	1023	0.682	C
	SB from Moranda Road	1	Loop	1,500	77	0.051	A	163	0.109	A	67	87.01%	34	20.86%	144	0.096	A	197	0.131	A
	NB to Moranda Road	1	Loop	1,500	76	0.051	A	198	0.132	A	16	21.05%	69	34.85%	92	0.061	A	267	0.178	A
Front Street	SB to Front Street	1	Loop	1,500	187	0.125	A	316	0.211	A	58	31.02%	241	76.27%	245	0.163	A	557	0.371	B
	NB from Front Street	1	Loop	1,500	337	0.225	A	249	0.166	A	234	69.44%	121	48.59%	571	0.381	B	370	0.247	A
	SB from Front Street	1	Diagonal	1,500	304	0.203	A	437	0.291	A	267	87.83%	138	31.58%	571	0.381	B	575	0.383	B
	NB to Front Street	1	Diagonal	1,500	338	0.225	A	568	0.379	B	66	19.53%	276	48.59%	404	0.269	A	844	0.563	C
Arroyo Seco Road	SB to Arroyo Seco Road	1	Diagonal	1,500	77	0.051	A	102	0.068	A	17	22.08%	9	8.82%	94	0.063	A	111	0.074	A
	NB from Arroyo Seco Road	1	Diagonal	1,500	94	0.063	A	85	0.057	A	4	4.26%	17	20.00%	98	0.065	A	102	0.068	A

Notes:
1. Capacity for all ramps based on assumed capacity of 1,500 vphpl, as prescribed by the Highway Capacity Manual

Table 32
Year 2030 Freeway Segment Analysis

Segment	Direction	# Of Lanes	Capacity (vph)	Year 2030 Conditions						Miravale Phase III Project Trips			
				AM Peak-Hour			PM Peak-Hour			AM Peak-Hour		PM Peak-Hour	
				Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase
US 101													
Soledad Prison and Camphora	NB	2	4,800	**4,170**	**0.869**	**D**	2,920	0.608	C	**770**	**18%**	150	5%
	SB	2	4,800	2,920	0.608	C	**4,170**	**0.869**	**D**	150	5%	**770**	**18%**
Camphora and North Soledad	NB	2	4,800	3,300	0.688	C	2,310	0.481	B	250	8%	50	2%
	SB	2	4,800	2,190	0.456	B	3,130	0.652	C	0	0%	0	0%
North Soledad and South Soledad	NB	2	4,800	2,760	0.575	C	1,930	0.402	B	40	1%	200	10%
	SB	2	4,800	1,880	0.392	B	2,690	0.560	C	0	0%	0	0%
South Soledad and Arroyo Seco Road	NB	2	4,800	2,750	0.573	C	1,930	0.402	B	60	2%	320	17%
	SB	2	4,800	1,930	0.402	B	2,750	0.573	C	320	17%	60	2%
Arroyo Seco Road and North Greenfield	NB	2	4,800	2,700	0.563	C	1,890	0.394	B	60	2%	290	15%
	SB	2	4,800	1,890	0.394	B	2,700	0.563	C	290	15%	60	2%

Notes:
1. Capacity of freeway lanes based on assumed capacity of 2,400 vphpl, as prescribed by the Highway Capacity Manual
2. Year 2030 traffic volumes based on projections produced by Omni Means, March 27, 2007
3. Miravale Phase III project trips based on Year 2030 projections produced by Omni Means, Miravale III Future Traffic Volume, March 27, 2007

Table 33
Year 2030 Freeway Ramp Analysis

Interchange	Direction	# Of Lanes	Type	Capacity (vph)	Year 2030 Conditions						Miravale Phase III Year 2030 Project Trips			
					AM Peak-Hour			PM Peak-Hour			AM Peak-Hour		PM Peak-Hour	
					Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase
US 101														
Camphora Road	SB to Camphora Road	1	Diagonal	1,500	900	0.600	C	**1290**	**0.860**	**D**	150	17%	**770**	**60%**
	NB from Camphora Road	1	Diagonal	1,500	970	0.647	C	680	0.453	B	520	54%	100	15%
	SB from Camphora Road	1	Diagonal	1,500	180	0.120	A	250	0.167	A	0	0%	0	0%
	NB to Camphora Road	1	Diagonal	1,500	100	0.067	A	70	0.047	A	0	0%	0	0%
Moranda Road	SB to Moranda Road	1	Diagonal	1,500	390	0.260	A	550	0.367	B	0	0%	0	0%
	NB from Moranda Road	1	Loop	1,500	830	0.553	C	580	0.387	B	250	30%	50	9%
	SB from Moranda Road	1	Loop	1,500	80	0.053	A	110	0.073	A	0	0%	0	0%
	NB to Moranda Road	1	Loop	1,500	290	0.193	A	200	0.133	A	40	14%	200	100%
Front Street	SB to Front Street	1	Loop	1,500	220	0.147	A	320	0.213	A	0	0%	0	0%
	NB from Front Street	1	Loop	1,500	360	0.240	A	250	0.167	A	0	0%	20	8%
	SB from Front Street	1	Diagonal	1,500	270	0.180	A	380	0.253	A	320	119%	60	16%
	NB to Front Street	1	Diagonal	1,500	350	0.233	A	250	0.167	A	30	9%	140	56%
Arroyo Seco Road	SB to Arroyo Seco Road	1	Diagonal	1,500	110	0.073	A	150	0.100	A	30	27%	10	7%
	NB from Arroyo Seco Road	1	Diagonal	1,500	150	0.100	A	110	0.073	A	10	7%	30	27%

Notes:
1. Capacity of freeway lanes based on assumed capacity of 1,500 vphpl for all ramps, as prescribed by the Highway Capacity Manual
2. Year 2030 traffic volumes based on projections produced by Omni Means, March 27, 2007
3. Miravale Phase III project trips based on Year 2030 projections produced by Omni Means, Miravale III Future Traffic Volume, March 27, 2007

APPENDIX K

Water Supply Assessment

Water Supply Assessment and Written Verification of Supply

Proposed

Miravale III Residential Project

Prepared by the City of Soledad

and



Byron Buck & Associates
Water Resources and Environmental Consulting

August 30, 2007

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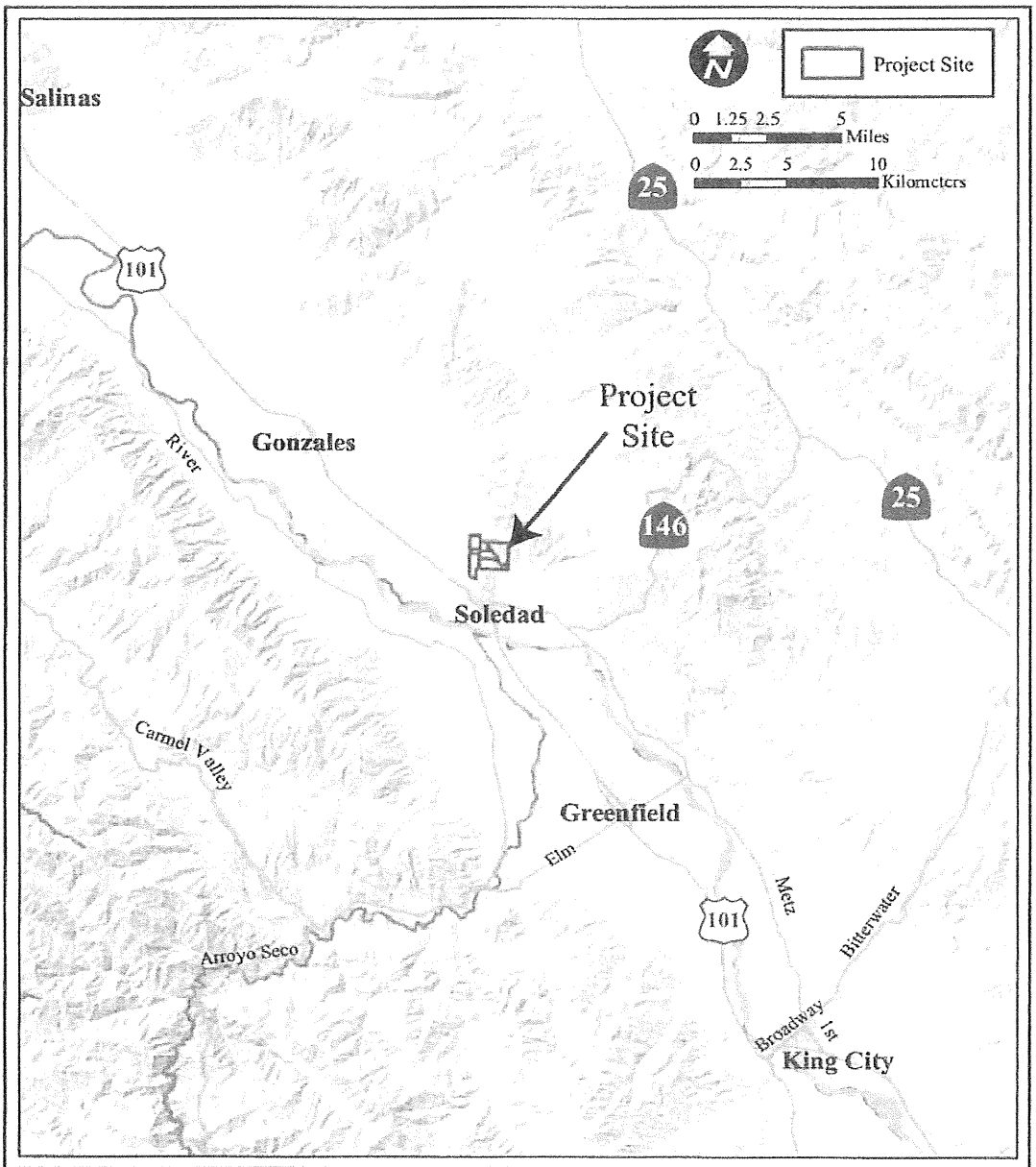
1.0 Introduction and Purpose of Report

1.1 Project Description and Location

The City of Soledad proposes to adopt a Specific Plan for the Miravale Phase III Project. This project is proposed to be located on the northern edge of the City of Soledad (see Figures 1 and 2) and consists of a mixed use development of 1,470 single-family residential units at an average density of 6.1 dwelling units/acre, 2,614 units in village residential settings consisting of a variety of attached housing styles at an average density of 18.99 dwelling units/acre. Commercial uses include a 120 room hotel, up to 275,000 square feet of retail commercial uses and an 18-hole golf course and driving range. Two elementary and one middle school sites are also planned, along with fire and police substations, and 75 acres of parkland and open space and a 1.67 acre church site. Table 1 depicts a summary of these proposed land uses. The project site is generally between San Vicente Road and Orchard Lane, and is surrounded by agricultural land to the north and east, an existing residential subdivision to the south, and undeveloped foothills of the Gabilan Mountain Range to the west. Figure 3 depicts the overall land use plan for the Specific Plan.

The project site is currently zoned for farmland and grazing, which has comprised the recent historic uses, with row crops cultivated on the lower, more level terrain below the 400-foot contour line and grazing uses above this line. Row crops have been irrigated with groundwater from the Salinas Basin.

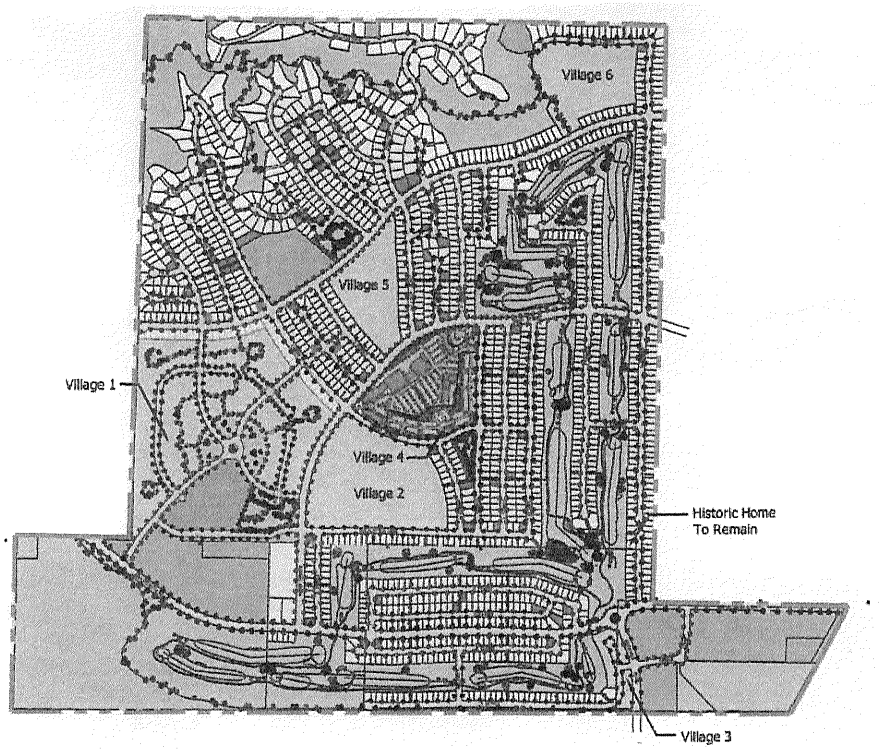
Figure 1
City of Soledad Vicinity Map



	Vicinity Map	Figure 1

DENISE DUFFY & ASSOCIATES, INC.

Figure 2 Specific Plan



Legend

- Single Family Residential (1 to 6 du/ ac)
- Single Family Residential-Hillside (0 to 2 du/ ac)
- Village Residential (10 to 24 du/ ac)
  - * Affordable Housing
  - * Senior Housing
  - * Work Force Housing
  - * Entry Level Housing
- Attached Single Family Residential Units (Affordable Housing)
- Commercial (Hotel, Commercial, Mixed Use)
- Public/ Institutional/ Recreational (Schools, Water Storage, Police, Fire)
- Open Space/ Parks, Agriculture, Golf Course, and Urban Reserve

North

0 500' 1000' 2000'

Notes:
1. Street locations are shown for illustrative purposes only. Actual alignments will be approved with the Vesting Tentative Map.

2. Location of Attached Single Family units are for illustrative purposes only, and are subject to relocation within their owns phase.

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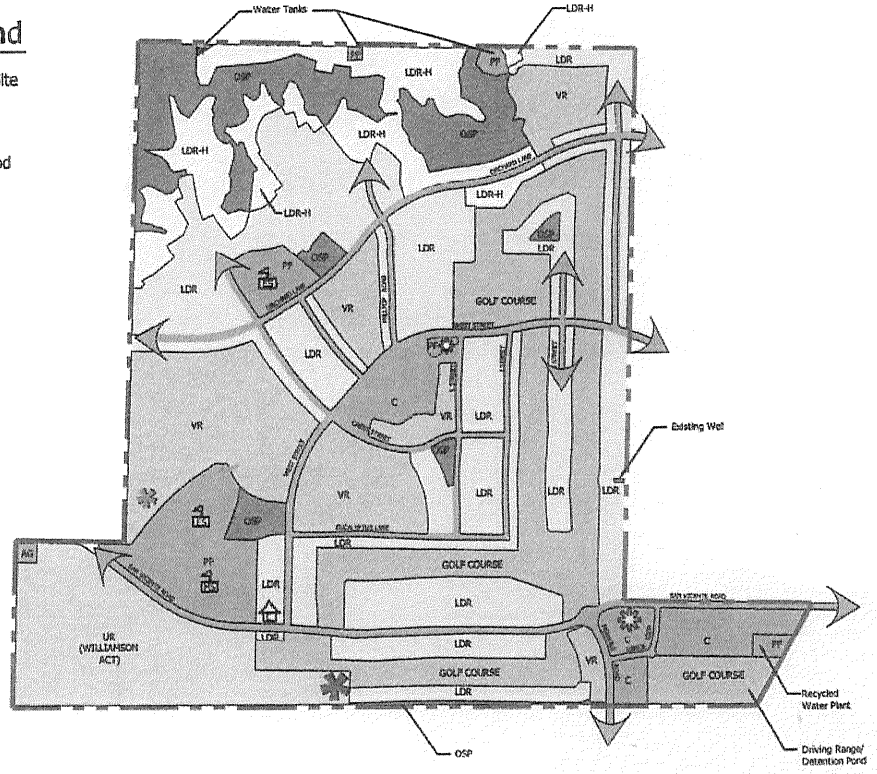
Miravale III Specific Plan
City of Soledad June, 2007

Conceptual Lotting
Illustrative Plan

Figure 3
Miravale III Land Use Plan

Symbol Legend

- Hotel Opportunity Site
- Fire/ Police Station
- Future Neighborhood Park Opportunity
- Elementary School
- Middle School
- Alternative Middle School
- Church Opportunity Site



Land Use Legend

- Single Family Residential-Hillside (0-2 du/ ac)
- Single Family Residential (1 to 10 du/ ac) *
- Village Residential (12-30 du/ ac)
- Commercial
- Public/Institutional/ Recreational (Schools, Water Storage, Police, Fire
- Open Space/ Parks
- Agriculture
- Golf Course
- Urban Reserve - Williamson Act Property (Senior Living - 55 and older, Medical Facilities, High School, Mini/ RV/ Boat Storage, Farm Worker Housing)

North

0 500' 1000' 2000'

Note:
Street locations are shown for illustrative purposes only.
Actual alignments will be approved with the Vesting Tentative Map.

* This zone is primarily 1-6 du/ac. The density above 6 du/ac is allowed to accommodate affordable duplexes and triplexes. Refer to Figure 2-3 to see proposed locations for affordable housing in LDR Districts.

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Miravale III Specific Plan
City of Soledad
June, 20
Land Use Plan

Table 1 - Proposed Land Uses

Table 1-1 Proposed Land Uses	
Residential Uses	**No. Units**
Large Lot Single Family	80
Standard Lot Single Family	1390
Duplex/small lots	116
Village residential - attached	2614
total	4200
Non-Residential	**No. Acres**
General Commercial	33.22
Institutional (Police, Fire Church Recycled Water Plant	4.80
Elementary Schools	20.00
Middle School	19.00
Hotel – 120 Rooms	6.5
Open Spaces	
Golf Course	144.87
Practice Driving Range	12.62
Golf Pond	3.12
Linear Park	1.61
Upland Open Space Park	75.77
Agriculture	
Agriculture	1.0
Urban Reserve	84.80

1.2 Purpose of Water Supply Assessment.

The City of Soledad is required to consider this water supply assessment (Water Code section 10910 et. seq.) and written verification of supply (Government Code section 66473.7) as part of the review and approval process for the land use entitlements on the Project. This water supply assessment and written verification of supply will be included in the draft Environmental Impact Report for the Miravale III Specific Plan.

1.3 Requirements for Water Supply Assessments

On October 9, 2001 former Governor Gray Davis signed into law Senate Bills 610 (Costa) and 221 (Kuehl) (Chapters 643 and 642, respectively, Statutes of 2001) requiring the preparation of a water supply assessment in conjunction with project review under the California Environmental Quality Act (CEQA), and a written verification of water supply where a tentative subdivision map is proposed for approval. The general intent of SB 221 and 610 was to create additional assurance that certain new developments could be provided with a reliable supply of water. It also intended that existing users and others dependent on common sources of water affected by new development were informed of the development's effect on those supplies, and plans to maintain reliable supplies. The legislation also serves to better inform decision makers regarding the water supply implications of development.

SB 610 requires that a water supply assessment be prepared for certain developments, including residential developments in excess of 500 units, where an environmental impact report or negative declaration is being prepared under CEQA. The requirement adds a specific water supply assessment protocol for land use jurisdictions to follow and consider in evaluating the environmental impacts for a proposed project. In the present case, a Water Supply Assessment must be included in the Environmental Impact Report prepared for the proposed Specific Plan. The City of Soledad must determine, based on the entire record, whether water supplies projected in the water supply assessment will be sufficient to satisfy the demands of the proposed project in addition to existing and planned future uses over a 20-year planning horizon.

SB 221 requires a city or county to include as a condition of approval of any tentative map, parcel map or development agreement for residential developments of 500 dwelling units or more, a requirement that a "sufficient

water supply" be available.[1] Proof of this supply must be on the basis of a written verification from the public water system that will serve the development. The City of Soledad is the public water supplier for the proposed development. The City requested an independent analysis of water supply availability for the project from Byron Buck and Associates.

1.4 Relationship of this Document to City of Soledad Urban Water Management Plan

The Urban Water Management Planning Act requires municipal water providers serving over 3,000 acre-feet per year (AF/Y) of water or having 3,000 service connections to prepare plans (urban water management plans or UWMPs) on a five-year, ongoing basis. A UWMP must demonstrate the continued ability to provide water supplies for current and future expected development under normal, single dry and multiple dry year scenarios. These plans also require the assessment of urban water conservation measures and wastewater recycling. Pursuant to Section 10632 of the California Water Code, the plans must also include a water shortage contingency plan outlining how water providers will manage water shortages of up to 50 percent of their normal supplies in a given year.[2]

Soledad adopted a revised UWMP in December of 2005. The 2005 UWMP projects demands for 20 years and UWMPs are updated on a five-year basis, with the next update coming in 2010. As provided for in the law, this water supply assessment incorporates by reference and relies upon many of the planning assumptions and projections of the 2005 UWMP in assessing the water

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[1] Under SB221, a "sufficient water supply" is defined as *"... the total water supply available during normal, single dry and multiple dry years within a 20-year projection that will meet the projected demand associated with the proposed subdivision, in additional to existing and planned future uses..."* (Government Code 66473.7(a)(2).) This does not mean that 100 percent of the development's normal or unrestricted water demand must be met 100 percent of the time, nor does it mean that the new development may not have any impact on the service level to existing customers of the water provider. A "sufficient water supply" may be found to exist for a proposed subdivision as well as for existing customers as long as an acceptable water supply can be estimated and planned for during a record drought (ACWA, 2002).

[2] Like SB 610 and SB 221, specific levels of supply reliability are not mandated (i.e., whether a specific level of demand can be met over a designated frequency). Rather, the law provides that a specific level of reliability is a local policy decision of the water provider.

demand of the proposed project relative to the overall increase in demands expected by Soledad. The 2005 UWMP assumes the development of the Miravale III Project in evaluating the demands to be made on Soledad's water supplies, although proposed uses discussed herein are more detailed, allowing for a more refined water demand analysis. The UWMP anticipates the Miravale project to phase in beginning in 2010 through 2025 (UWMP, p.6). The 2005 UWMP finds a sufficient supply available to meet expected water demands based upon the general plan build-out of the City.

2.0 Project Water Demands and Forecasting Methods

2.1 Project Water Demands

Table 2 depicts projected average annual water demands for the Miravale III project using water use factors that are based upon local climate and geography for land uses proposed. The analysis recognizes that plumbing fixtures in new development will comply with current plumbing code standards, requiring low flow plumbing devices. Soledad is planning to implement an aggressive wastewater recycling program, where current and future wastewater flows will be treated to tertiary treatment standards allowing for reuse in irrigation applications. The City is currently expanding its wastewater treatment plant to 5.5 million gallons per day (MGD) treatment capacity and a 4.3 MGD disposal capacity and is planning to purchase the wastewater treatment plant owned by the State Department of Corrections and Rehabilitation and leased and operated by the City with a disposal capacity of 1.2 MGD. By 2010 the City plans to upgrade both facilities to meet tertiary treatment standards, allowing for use of recycled water for irrigation. The recycled water from these plants not used for urban reuse is ultimately planned to substitute for groundwater use by agricultural land uses surrounding the City.

A satellite recycled water plant with an initial capacity of 1.0 MGD treatment capacity expandable to 2+MGD will be constructed with the project. The

development will also provide sufficient storage pond capacity for build out of the project in an amount necessary to be able to store excess recycled water in times of low demand, such as rain events. This plant will store water in the golf course pond, allowing for recycled water use at the golf course and throughout the development. The Miravale III project will be designed to utilize recycled wastewater for the golf course, parkland, roadway landscaping and single family residential front-yard irrigation demands. This will lower the net demand for groundwater pumped to supply the development.

Table 2 depicts projected demands based upon currently proposed land uses and densities. Actual water demands will vary depending upon the ultimate mix of specific uses, water use behavior of the residents and property managers, and landscape development and maintenance practices. These estimates are based on long-term averages at full project build-out. In any given year, consumption is expected to vary year-to-year by as much as seven percent, depending on weather and precipitation, with the greater use in drier years. During the first few years after any given phase of development occurs, expected water use would likely be higher for landscape uses on a unit basis as new landscape plantings require additional water to become established. After plantings mature, landscape use would reduce to a more static level.

2.2 Forecasting Methodology

Analysis of water demands for a project such as the Miravale III development where prior land uses existed must take into account the local context of historic and future water use. The development site was historically in agricultural uses, with the lower, more level lands irrigated for row crop production with groundwater pumped from the Salinas groundwater basin. Upland areas of the site were used for dry-land grazing, resulting in no groundwater demand. Historic water use for the site was estimated based upon aerial photo analysis of cropped areas and typical water consumption and irrigation efficiencies for row crops, allowing for proper soil salinity management and annual rotational

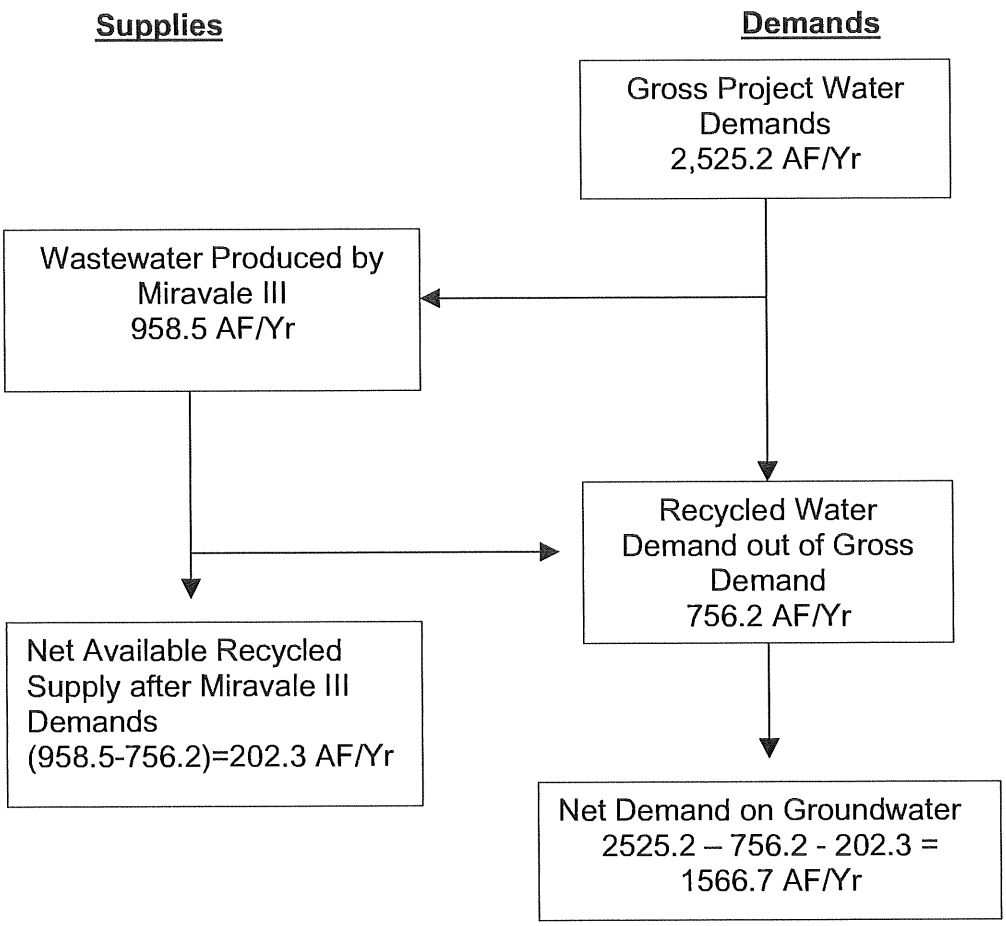
fallowing (about 20 percent of lands would be fallowed annually to allow for good soil management practice).[3]

Development into residential, commercial and recreational uses will replace agricultural water use. Additionally, as mentioned above, recycled water will be extensively used in the development, and the residential and commercial uses will also produce wastewater that will become reusable water supply through the recycled water systems. Thus, an analysis of water use must account for these factors in order to indicate what the net demand on the local and regional groundwater aquifer system, the primary water source for the City of Soledad and the Salinas Valley region. The analysis as shown in Table 2 follows this general water demand equation: (gross water demands including potable and recycled water demands) - (wastewater produced for recycling – recycled water demand) = Net groundwater water demand for the project. Then, (net groundwater water demand for the project) – (net groundwater demand from historic uses) = net total change in groundwater demand/aquifer impact. Figure 4 shows this diagrammatically.

Legal requirements for water supply assessments do not specify a particular method to project usage, nor are specific water use factors mandated for given land uses, as such use varies by location and other use factors such as population and visitor densities. Because water demand forecasts are estimates, not guarantees, with them come varying degrees of uncertainty. For example, for residential uses of the project the analysis utilizes a conservative average consumption factor for each residential unit, broken in to standard (<.0.25 acre) and larger lot classes. Lot sizes in the development and the number of persons per household will vary, and landscaping preferences and practices of future residents will cause individual units to vary from the mean value figures used in

[3] There is no data available on actual fallowing practices for this site. However, this assumption is conservative in that if fallowing was not practiced, prior consumption would be about 20 percent higher than estimated herein and the net benefit of the Miravale project on the groundwater basin as proposed would be even greater.

Figure 4
Miravale III Water Balance



this analysis. Such variations, however, would not affect the overall conclusions in this analysis.

3.0 Available Water Supply

The City of Soledad is the municipal purveyor of water for lands within its limits. Soledad's water supply is groundwater from the Forebay Subarea of the Salinas Valley groundwater basin. The status of the groundwater basins, their management and current production of Soledad from the Salinas Basin and Soledad's legal entitlement to groundwater is discussed in detail in Section 3 of the 2005 Urban Water Management Plan. Historic and projected groundwater to be pumped is found in Tables II and III in the UWMP. The City pumped 1,716 AF in 2000 and that has grown to 2,345 AF in 2004. The City anticipates pumping up to 8,458 AF in 2025 and by extension, 8,764 AF in twenty years time, at 2026. However, this projection is conservative in that it does not represent all new demands on the groundwater basin, as existing agricultural uses will be retired in this process, mitigating much of the impact on the basin.

The City's UWMP also discusses the Salinas Valley Water Project, the regional plan to manage surface and groundwater for the Salinas Valley and its groundwater basin, overseen by the Monterey County Water Resources Agency. Soledad's total groundwater production currently constitutes less than 2 percent of the annual Salinas Valley Groundwater Basin yield. The large buffering capacity of this basin insulates its users from water shortages more common within systems dependent upon annual surface water runoff. Therefore, Soledad's supplies do not vary significantly due to annual hydrology. As such normal, single dry, and multiple dry years are considered similar for water supply planning purposes.

The Salinas Valley groundwater basin is not an adjudicated basin and there are currently no limits on groundwater that may be pumped for overlying uses within the Forebay Subarea. While the basin has experienced overdraft at its coastal

margins, no overdraft concerns exist in the Soledad region, or in the Forebay Subarea of the aquifer. The adoption of the Salinas Valley Water Project convinced the State Water Resources Control Board that adjudication was not the proper approach to address issues of overdraft in this basin, rather that the physical solutions offered by the Salinas Valley Water Project would bring the basin into balance over time.

The City has, however, experienced local groundwater contamination from nitrate and pesticide contamination that has had to be managed, as discussed in Section 3 of the UWMP.

Table 2 MIRAVALE III Estimated Water Demands			
Residential Uses	**No.Units**	**Annual Water Demand Factor AF/Y=Unit**	**Demand AF/YR**
Large Lot Single Family	80	0.9	72.0
Standard Lot Single Family	1390	0.6	834.0
Duplex, small lots	116	0.25	29.0
Village Residential	2614	0.25	653.50
total	4200	**subtotal**	**1588.50**
Non-Residential	**No. Acres**	**Annual Water Demand (AF/Acre)**	
Village and Gateway Commercial	33.22	2.91	96.67
Institutional(4)	9.71	2.95	28.64
Elementary Schools	20	3.87	77.40
Middle School	19	4.0	76.00
Hotel, 120 Rooms	20	(.0.27 AF/Unit)	32.40
		subtotal	**311.11**
Open Spaces			
Golf Course(1)	144.87	3.75	543.26
Practice Driving Range (1)	12.62	3.75	47.33
Golf Pond	3.13	3.00	9.39
Developed Park(1)(2)	1.61	3.75	5.13
Upland Park(6)	75.77	2.50	18.94
Agriculture	1	3.85	1.54
Urban Reserve (7)	84.8	0.00	0.00
		subtotal	**625.59**
		Total Annual Gross Demands AF/Yr	**2525.21**
Wastewater Produced for Recycling in AF/Yr			
Residential Return Flows			865.17
Non-Residential Return Flows			93.33
		subtotal	**958.50**
Recycled Water Demands			
SF Home Front Yard Irrigation		15% gross demand	135.90
Golf Course		90% gross demand	488.94
Golf Course Driving Range		90% gross demand	42.59
Golf Course Pond (100% recycled)		100% gross demand	8.45
Developed Park		90% gross demand	5.13
Upland Park		100% gross demand	18.94
Elementary School playfields		8 acres	30.00
Middle School playfields		7 acres	26.25
Ag Buffer		1 acre	3.75
Roadway landscaping		10% of 122 acres of roadways	36.53
		subtotal	**756.20**
Net Recycled Water Available Due to Project			
			202.30
Net Consumptive Demand On Groundwater			
			1566.70
Historical Irrigated Agricultural Uses (746 out of 922 acres)			
Row Crops Annual Groundwater Demand (3)			**2067.9**
Net Demand Change (reduction) on Aquifer			**(501.2)**
Notes			
(1) 3.0 ETO @80% efficiency			
(2) 85% irrigated, 15% hardscape			
(3) 10% unirrigated roads, access;net of deep percolation and 20% annual fallowing at 3.85 ETO			
(4) Police/Fire,Golf Maint., Recycled water plant and Church site			
(5) 40% landscape			
(6) 10% buffer area irrigated only, drought tolerant landscape			
(7) no change in land use			

4.0 Water Conservation

Water conservation and Soledad's efforts to implement the Best Management Practices (BMPs) for Urban Water Conservation are discussed in Section 8 of the 2005 UWMP. Conservation effects of current water conserving plumbing code requirements on water demands are built into the demand forecasts for Soledad. The proposed Miravale III project will be fully metered and required to comply with current plumbing code requirements calling for low-flow plumbing fixtures.

5.0 Water Supply Sufficiency Analysis

As shown in Table 2, while the City will have to pump about 1,566 AF/Y to meet the demands of the project, the net effect of the Miravale III Specific Plan development as proposed, when taking into account prior groundwater use on the site by agricultural uses, will be a reduction in historic net groundwater pumping from the basin by approximately 501 acre-feet per year. Therefore, the project will assist the Monterey County Resources Agency in achieving balanced use and recharge to the Salinas Valley groundwater basin through the Salinas Valley Water Project. This net increase in regionally available water supply can be attributed to the recycled water component of the project and the City's overall recycled water plans. These plans must be pursued to assure a net positive impact on the region's water resources.

6.0 Availability of Water Treatment and Delivery System Capacity

The significant growth in Soledad, including the Miravale III project, will require commensurate investment in water supply infrastructure for the City, and the Miravale III development in particular. Soledad's current plans to upgrade its water delivery infrastructure are described in Section 7 of the 2005 UWMP and include installation of two new high capacity wells, 1.4 million gallons of system storage, two miles of new transmission mains, four new pump stations and

remote electronic monitoring and management systems. The Miravale III water distribution system on site will be designed for five pressure zones, with development of the zones phased in along with other improvements. In-tract distribution systems will be designed and constructed by the developer to accommodate necessary demand and fire flows for the project in accordance with City design standards. No treatment other than chlorination for maintenance of system disinfection is currently expected.

7.0 Regulatory Permits Necessary for Supply Delivery

Soledad's local supplies are maintained under a public water supply permit from the State Department of Health Services. Additions to Soledad's water supply infrastructure will require the permits to be updated to include new supply facilities for the Miravale III development. Soledad is the permitting entity for local building codes with respect to construction of water treatment and delivery facilities. Implementation of recycled water systems will require new authorizations from the Department of Health Services. No other discretionary permits are expected to be necessary for supply infrastructure as sensitive resources such as wetlands or other waters of the United States are not affected.

8.0 Effect on Agricultural and Industrial Users Not Supplied by the City of Soledad but Reliant on the Same Sources

Agricultural users in the Salinas Valley generally rely on the same basin-wide supply from the Salinas Valley Groundwater Basin. These uses are taken into account in the basin planning of the Monterey County Water Resources Agency as part of developing a water balance for the Basin. Because of Soledad's plans for recycled water and the net reduction in demand on the Salinas Valley groundwater basin due to the Miravale III project's aggressive use of recycled water, the Miravale project will have a net positive impact on water supplies available for other users of the Salinas Valley groundwater basin.

9.0 Summary Water Supply Sufficiency Determination

Pursuant to Section 10910 of the California Water Code, and based on the foregoing analysis and representations by the project's proponents and the City of Soledad, Soledad has determined that its currently projected water supplies are sufficient to meet the projected annual water demands of existing and previously approved uses and the Miravale III project during normal, single dry and multiple dry years during the next twenty years.

Pursuant to California Government Code Section 66473.7, Soledad has determined based on the foregoing analysis and representations by the project's proponents that it has sufficient currently available water supply available within normal, single-dry and multiple dry years over the next 20 years, in addition to existing and planned future uses to provide for the anticipated water demands of the Miravale III Tentative Subdivision Map.

10.0 References

Association of California Water Agencies, Water Supply and Development A Users Guide to California Statutes Including AB 221 (Kuehl) & SB 610 Costa. 2002.

Bestor Engineers, Miravale III Water System. July 15, 2006

California Irrigation Management System, Data for King City and Salinas. 2006

Littleworth, Arthur L. and Garner, Eric L., California Water. 1996

City of Soledad, 2005 Urban Water Management Plan. December, 2005

City of Soledad, 2006 Miravale III Specific Plan. 2006

City of Soledad, Miravale Phase III Notice of Preparation. August, 2006

Monterey County Water Resources Agency, Salinas Valley Water Project EIR, 1998.

The Miravale Phase III Subdivision EIR outlines the four phased build out of the 920 acre project site over the next twenty years. The totals for the completed project are 1,470 single-family residential units, 2,730 multi-family units, and 120 hotel rooms. Due to the phasing of the project in five year intervals the actual building schedule is:

2008-2013	304 Single Family units, and 71 Multi-family units = 375 residential
2013-2018	682 Single Family units, and 358 Multi-family units = 1,040 residential
2018-2023	280 Single Family units, and 358 Multi-family units = 438 residential
2023-2028	204 Single Family units, 746 Multi-family units, and 500 senior housing units = 1,450 residential

The combination of the existing and approved housing units in Monterey County (147,879) plus the 375 increase of proposed housing units in the Miravale Phase III Subdivision EIR is 147,907 still less then the regional forecasts for Monterey County (161,255) in year 2015. The 1,040 residential units to be added by 2018 is also less than the forecasted county limits, as is each future build phase. Therefore the Miravale Phase III Subdivision EIR is **consistent** with the 2004 regional forecasts and the Air Quality Management Plan.

Please feel free to contact me if you have any questions about this determination.

Sincerely,

David Roemer
Associate Planner

cc: Jean Getchell, MBUAPCD

DRAFT

ENVIRONMENTAL IMPACT REPORT
for the
MIRAVALE PHASE III SPECIFIC PLAN

VOLUME II

State Clearinghouse # 2006081129

Prepared for

City of Soledad
Planning Department
Soledad City Hall
248 Main Street
Soledad, CA 93960

October 2008

TECHNICAL APPENDIX T-1

Agricultural Resources Report &
Land Evaluation & Site Assessment for Miravale III (Buchanan Associates)

AGRICULTURAL RESOURCES

Project implementation would result in the conversion of 760 acres of prime agricultural land to residential and commercial uses. Impacts related to the loss of such agriculturally suitable land would be significant and unavoidable. Potential impacts related to land use conflicts between proposed development and adjacent agricultural uses would be significant but can be largely mitigated.

Monterey County Agricultural Resources

Monterey County is one of the primary agricultural regions in the State of California. The total value of agricultural products produced has been increasing steadily in real dollars (accounting for inflation) since 1990. Monterey County ranked third in the state in the value of crops produced in 2002 and as of 2005 was ranked fourth. Table 1 shows important crop revenues for Monterey County in 2002 and 2005. The data reflect the continuing importance of leaf lettuce and strawberries, as well as, the increasing importance of winegrapes and nursery crops. Conversely, the recent significant expansion of spinach production may be tempered in the near term. The gross value of agricultural production is multiplied by a factor of two to three times through the local economy due to the involvement of other sectors of the economy, including industry, retail trade and commercial services.

Table 1. Changes in value of selected Monterey County crops between 2002 and 2005

Crop	Value	
	2002	2005
Leaf lettuce	$429,400,000	$600,800,000
Head lettuce	$309,150,000	$311,800,000
Broccoli	$265,900,000	$156,100,000
Strawberries	$226,850,000	$385,750,000
Nursery	$218,700,000	$276,200,000
Grapes	$147,100,000	$254,600,000
Spinach	$49,100,000	$164,800,000
Spring Mix	$119,320,000	$132,277,000

Source: Monterey County Crop Report, 2002 and 2005

Project Area Setting

The Project Area is located in an area north and west of the current Soledad City limits currently undergoing a transition from agricultural to residential and commercial uses. Currently approximately 430 acres of the 929 acre Project Area appear to currently be used for the production of irrigated row crops including grapes (approx. 155 acres), lettuce, and leafy greens (approx. 275 acres) . At the time of initial site visit, approximately 330 acres in the Project Area were not actively cropped. The remaining non-irrigated land area (approximately 170 acres) is grassland. Equipment storage areas, worker housing, other buildings, and water detention and impoundment ponds comprise approximately 7 acres of the non-cropped area. Within the Project Area one parcel

of approximately 100 acres is under Williamson Act contract, but is currently in non-renewal status with cancellation pending in 2016.

Land uses surrounding the proposed Project Area are varied. The northern and eastern boundaries are largely grazing and fallow lands, although approximately 2,000 feet in the southwest corner is adjacent to San Vincente Rd. and existing residential areas. The southern boundary is adjacent to predominantly residential development, while all of the western boundary is adjacent to irrigated row crop land. Current crop production (winegrapes) is within approximately 50 feet of the exisitng residential areas on the southern boundary, while residential development at the southeastern corner of the Project Area was estimated to be approximately 150 feet from adjacent field crop land.

Impact Analysis

The City of Soledad has applied an objective methodology to determine thresholds of significance for impact to agricultural resources that is consistent with California Environmental Quality Act (CEQA) Guidelines. In accordance with CEQA Guidelines, a project impact would be considered significant if the project would:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;
- conflict with existing zoning for agricultural use, or a Williamson Act contract; or
- involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use.

Methodology

The California Agricultural Land Evaluation and Site Assessment model (LESA) was used to rate potential impacts due to project development. This provides an objective quantitative approach for rating the relative quality of land resources based upon specific measurable features. The LESA model is a point-based approach to assessing the relative value of agricultural land resources which relies on two separate sets of factors: land evaluation, which are primarily soil-based qualities of land, and site assessment factors that are intended to measure social, economic, and geographic attributes. The formulation of a California Agricultural LESA Model is the result of Senate Bill 850 (Chapter 812 /1993), which charges the Resources Agency, in consultation with the Governor's Office of Planning and Research, with developing an amendment to Appendix G of the California Environmental Quality Act (CEQA) Guidelines concerning agricultural lands. Such an amendment is intended "to provide lead agencies with an optional methodology to ensure that significant effects on the environment of agricultural land conversions are quantitatively and consistently considered in the environmental review process".

The California Agricultural LESA Model is composed of six different factors. Two Land Evaluation factors are based upon measures of soil resource quality. Four Site Assessment factors provide measures of a given project's size, water resource availability, surrounding agricultural lands, and surrounding protected resource lands (e.g. open space, conservation easement, or Williamson Act contract). For a given project, each of these factors is separately rated on a 100 point scale. The factors are then weighted relative to one another and combined, resulting in a single numeric score for a given project, with a maximum attainable score of 100 points. It is this project score that becomes the basis for making a determination of a project's potential significance, based upon a range of established scoring thresholds.

Agricultural Land Capability

Overall, there are three separate land classification systems which determine an area's suitability of agriculture and/or provide definition for prime agricultural lands. Increasingly in California, the Department of Conservation's Farmland Mapping criteria are being applied to the assessment of agricultural land capability and determination of impacts due to development of these lands.

Natural Resources Conservation Service (NRCS) Land Capability Class System

Land Capability Classes (LCC) rate soils according to their characteristics and slopes. These classifications range from a 'high' of I-1 to a 'low' of VIIIs-1. Classes I and II are generally considered to be of prime agricultural significance. The NRCS also assigns a Storie Index Rating to soils, which is based exclusively on soil characteristics only. Lands which qualify for a Storie Index Rating of 80 to 100 are considered agriculturally significant.

Cortese-Knox Local Government Reorganization Act of 1985

The Cortese-Knox Act, defines "prime agricultural land" as an area of land, whether a single parcel or contiguous parcels, which has not been developed for a use other than agriculture and which meets any of the following qualifications:

1. Land which qualifies for rating as class I or class II in the Soil Conservation Service land use capability classification and that qualifies for rating 80 through 100 Storie Index Rating.
2. Land which is used to maintain livestock for commercial purposes, which has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture in the National Handbook on Range and Related Grazing lands.
3. Land planted with fruit or nut-bearing trees, vines, bushes, or crops which have a nonbearing period of less than five years and which will return during the commercial bearing period on an annual basis for the production of unprocessed agricultural plant production not less than two hundred dollars ($200) per acre.
4. Land which has returned from the production of unprocessed agricultural plant products an annual gross value of not less than two hundred dollars ($200) per acre for three of the previous five calendar years.

State Farmland Mapping & Monitoring Program

The State of California's Farmland Mapping and Monitoring Program (FMMP) monitors land use change affecting California's agricultural land. The program, administered by the California Department of Conservation, Office of Land Conservation, produces maps and statistical data to be used for assessing the importance of agricultural lands, which is rated according to soil quality and irrigation status. The best quality land is called Prime Farmland; other classifications, in descending order according to their suitability, include Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, Grazing Land, Urban and Built-up Land, and Other Lands.

Prime farmland is land with the best combination of physical and chemical features able to sustain long-term production of agricultural crops. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. The land must have been used for the production of irrigated crops at some time during the two update cycles prior to the mapping date of 1992 (or since 1988).

Farmland of Statewide Importance is land similar to prime farmland, but with minor shortcomings, such as greater slopes or with less ability to hold and store moisture. The land must have been used for the production of irrigated crops at some time during the two update cycles prior to the mapping date (or since 1988).

Unique Farmland is land of lesser quality soils used for the production of the State's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards, as found in some climatic zones in California. The land must have been cultivated at some time during the two update cycles prior to the mapping date (or since 1988).

Grazing Land is land on which the existing vegetation is suited to the grazing of livestock. The minimum mapping unit for this category is 40 acres.

Urban and Built-Up Land is occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. Common examples include residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, and water control structures.

Other Land is not included in other mapping category. For example, low density rural development; brush, timber; wetlands and riparian areas not suitable for livestock grazing; confined livestock; poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40.

Project Area Soil Capability Ratings

Fourteen soil types are found on the Project Area as shown in Figure 1 and Table 2. According to the USDA Soil Survey for Monterey County, the total potentially irrigated land within the Project Area is approximately 82 percent of the total Project Area (760 acres).

NRCS Land Capability Classification - Based on this systems' criteria, approximately 561 acres are considered prime agricultural land due to their Capability Class I and II rating (Table 2).

Cortese-Knox Capability Classification - Three of the four criteria (refer to prior page description) apply to classifying prime lands within the project area. Approximately 500 acres meet criteria #1 exclusively, approximately 430 acres meet criteria #3, while the total potentially irrigated land area of 760 acres (actively cropped plus recently fallowed) could meet criteria #4.

California Department of Conservation - The 760 acres of potentially irrigated land have soils classified as Prime Farmland and Farmland of Statewide Importance by the Important Farmlands Mapping Program.

Figure 1. Soil series types within the proposed Project Area

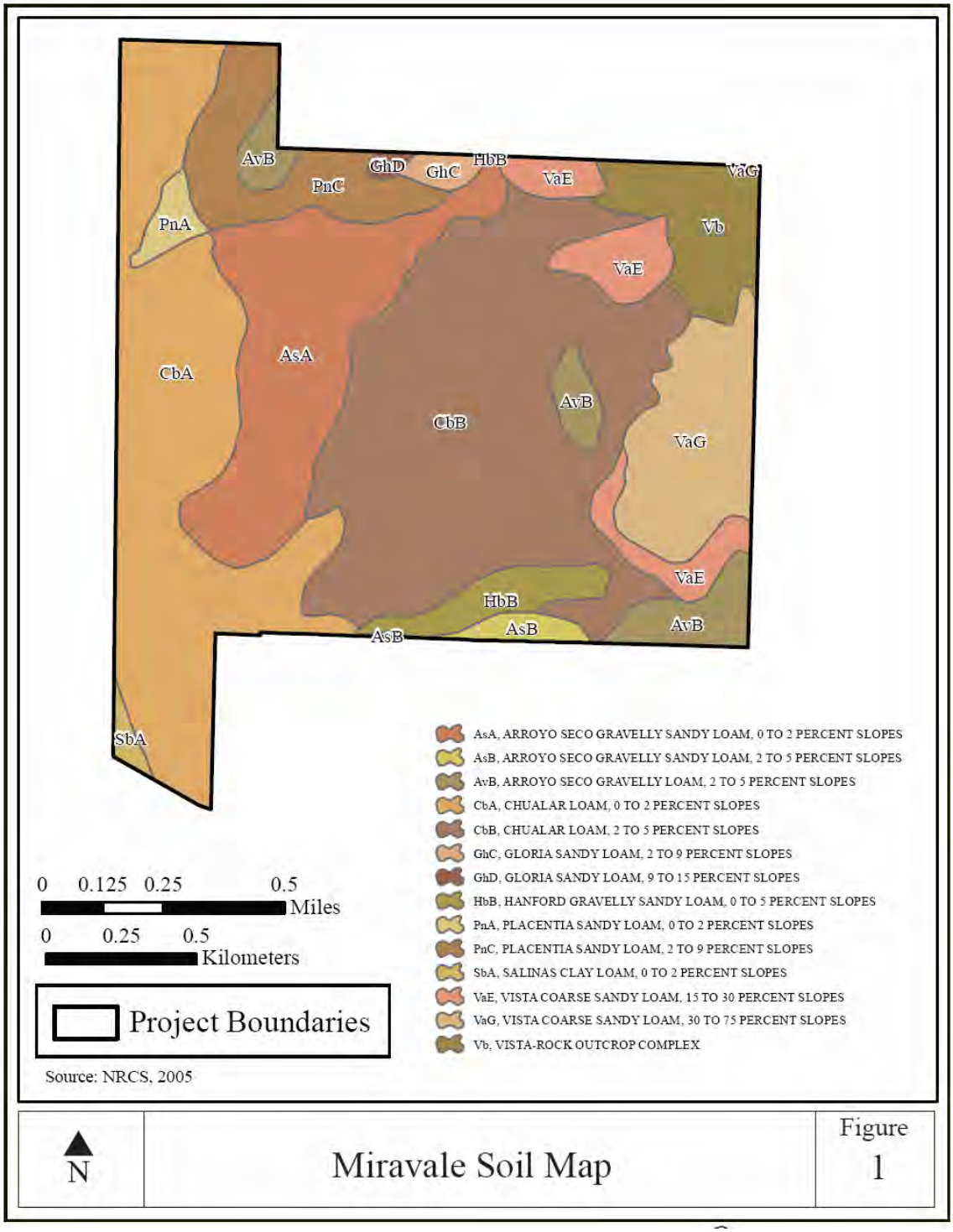


Table 2. Soil series and Land Capability Class and Storie designations within the Project Area

Soil Type	Acres	Prime	LCC	Storie
ARROYO SECO GRAVELLY LOAM, 2 TO 5 PERCENT SLOPES	38.9	x	II	72
ARROYO SECO GRAVELLY SANDY LOAM, 0 TO 2 PERCENT SLOPES	127.9	x	III	63
ARROYO SECO GRAVELLY SANDY LOAM, 2 TO 5 PERCENT SLOPES	8.9	x	III	60
CHUALAR LOAM, 0 TO 2 PERCENT SLOPES	212.6	x	I	85
CHUALAR LOAM, 2 TO 5 PERCENT SLOPES	283.4	x	II	81
GLORIA SANDY LOAM, 2 TO 9 PERCENT SLOPES	6.4		III	27
GLORIA SANDY LOAM, 9 TO 15 PERCENT SLOPES	2.4		IV	25
HANFORD GRAVELLY SANDY LOAM, 0 TO 5 PERCENT SLOPES	22.0	x	II	60
PLACENTIA SANDY LOAM, 0 TO 2 PERCENT SLOPES	9.1	x	III	45
PLACENTIA SANDY LOAM, 2 TO 9 PERCENT SLOPES	53.1	x	IV	37
SALINAS CLAY LOAM, 0 TO 2 PERCENT SLOPES	4.4	x	I	85
VISTA COARSE SANDY LOAM, 15 TO 30 PERCENT SLOPES	45.2		VI	29
VISTA COARSE SANDY LOAM, 30 TO 75 PERCENT SLOPES	70.1		VII	12
VISTA-ROCK OUTCROP COMPLEX	44.7		VII	6
Total acres	**929.0**	**760.2**		

Regulatory Considerations

The Williamson Act

The California Land Conservation Act, also known as the Williamson Act, was adopted in 1965 in order to encourage the preservation of the state's agricultural lands and to prevent its premature conversion to urban uses. In order to preserve these uses, this act established an agricultural preserve contract procedure by which any county or city within the state taxes landowners at a lower rate using a scale based on the actual use of the land for agricultural purposes, as opposed to its unrestricted market value. In return, the owners guarantee that these properties would remain under agricultural production for a 10-year period. This contract is renewed automatically unless a notice of non-renewal is filed by the owner. In this manner, each agricultural preserve contract (at any given date) is always operable at least nine years into the future. The owner of the property may file a Notice of Non-Renewal, which would cause the contract to expire in 10 years. After the contract has expired, a landowner may apply to remove that property from an agricultural preserve. The landowner also has the option of petitioning the Board of Supervisors for the cancellation of the contract. Cancellation of the contract involves payment of substantial cancellation fees.

As noted previously, within the Project Area there is one parcel of approximately 100 acres that is currently in non-renewal status with anticipated cancellation in 2016.

City of Soledad General Plan

The Agricultural Resources section of the Soledad General Plan contain goals and policies that seek to limit adverse impacts to agricultural operations due to new development, and further, to protect and preserve agricultural land. The following are relevant:

C/OS-1 The City shall discourage "leapfrog" development and development in peninsulas extending into agricultural lands to avoid adverse effects on agricultural operations.

C/OS-2 The City shall retain the agricultural land use designation on lands within its planning area until the land is needed for urban development.

C/OS-3 The City shall ensure that new development and public infrastructure projects do not encourage expansion of urban uses outside the general plan area into areas designated Agriculture by the Monterey County General Plan.

C/OS-4 The City shall support the agricultural economy by encouraging the location of agricultural support industries in the City, establishing and promoting marketing of local farm products, and providing its regional fair share of adequate housing to meet the needs of agricultural labor.

C/OS-5 The City shall require a right-to-farm condition to all future subdivision maps adjacent to farmlands.

C/OS-6 The City shall require development within or adjacent to designated agricultural areas to minimize conflicts with adjacent agricultural uses.

Monterey County General Plan (1982)

The proposed project is outside of the current Soledad City limits in an unincorporated area of Monterey County. The Agricultural Element of the current draft County General Plan also contains a goal and policies that seek to promote the long-term conservation of productive and potentially productive agricultural land. Further, the draft Plan also contains a goal and policies to assure that the County's land use policies do not inappropriately limit or constrain "routine and ongoing agricultural activities". The following provide some guidance:

AG–1.1 Land uses that would interfere with routine and ongoing agricultural operations on viable farmlands designated as prime, of statewide importance, unique, or of local importance shall be prohibited.

AG–1.4 Viable agricultural land uses, including ancillary and support uses, on farmland designated as Prime, of Statewide Importance, Unique, or of Local Importance shall be conserved, enhanced and expanded through agricultural land use designations and encouragement of large lot agricultural zoning, except as provided in a Community Plan.

AG–1.5 An ordinance establishing policies that provide tax and economic incentives to enhance the competitive capabilities of farms and ranches, thereby promoting long-term conservation, enhancement, and expansion of viable agricultural lands shall be enacted.

AG-1.12 The County shall prepare, adopt and implement a program that requires projects involving a change of land use designation resulting in the loss of Important Farmland (as mapped by the California Department of Conservation Farmland Mapping and Monitoring Program) or involving land to be annexed to an incorporated area, in consultation with the cities to mitigate the loss of Important Farmland resulting from annexation, to mitigate the loss of that acreage. The program may include ratios, payment of fees, or some other mechanisms. Until such time as the program has been established, the County shall consult and cooperate with the cities so that projects shall mitigate the loss of Important Farmland on an individual basis as much as is feasible as determined by the Board of Supervisors. The acreage in a project or annexation that is to be utilized for inclusionary

housing shall not be subject to this mitigation policy. A Community Plan or Rural Center Plan that includes a mitigation program shall not be subject to this policy. This policy would not apply to annexations covered by the 2006 Greater Salinas Area Memorandum of Understanding (MOU) between the County of Monterey and the City of Salinas.

AG–3.1 "Routine and Ongoing Agricultural Activities" shall be allowed pursuant to the policies in this plan. Activities that may have significant impacts are subject to a greater level of review.

Standards of Significance

As noted earlier, a number of qualitative and quantitative methods are used to determine potential impacts of agricultural land conversion. Monterey County also relies on the Agricultural Commissioner to assess the potential for development activities to impact the agricultural productivity of a given site. Among the criteria used by the Commissioner are:

- *The soil type(s), and its suitability for agriculture as defined by the USDA Natural Resources Conservation Service (NRCS);*
- *Present and past agricultural use of the site;*
- *The size, shape and slope of the site in question;*
- *The availability and use of irrigation;*
- *Agricultural practices on surrounding properties;*

The California LESA Model is weighted so that 50 percent of the total LESA score of a given project is derived from the Land Evaluation factors, and 50 percent from the Site Assessment factors. Individual factor weights are listed below, with the sum of the factor weights required to equal 100 percent.

Table 3. LESA Model project rating factors

- Land Evaluation Factors
  - Land Capability Classification (25%)
  - Storie Index Rating (25%)
  - **Land Evaluation Subtotal (50%)**
- Site Assessment Factors
  - Project Size (15%)
  - Water Resource Availability (15%)
  - Surrounding Agricultural Lands (15%)
  - Surrounding Protected Resource Lands (5%)
  - **Site Assessment Subtotal (50%)**
- Total LESA Factor Weighting 100%

A single LESA score is generated for a given project after all of the individual Land Evaluation (LE) and Site Assessment (SA) factors have been scored and weighted (Table 4). The final project scoring is based on a scale of 100 points, with a given project being capable of deriving a maximum of 50 points from the Land Evaluation factors and 50 points from the Site Assessment factors. Scoring thresholds are based upon both the total LESA score as well as the component LE and SA subscores. In this manner the scoring thresholds are dependent upon the attainment of a minimum score for the LE and SA subscores so that a single threshold is not the result of heavily skewed subscores (i.e., a site with a very high LE score, but a very low SA score, or vice versa).

Table 4. California LESA Model Scoring Thresholds for Significance

Total LESA Score	**Scoring Decision**
0 to 39 Points	Not Considered Significant
40 to 59 Points	Considered Significant only if LE and SA subscores are each greater than or equal to 20
60 to 79 Points	Considered Significant unless either LE or SA subscore is less than 20
80 to 100 Points	Considered Significant

Impacts and Mitigation

The LESA model rating results in a significant impact determination for the proposed project (Table 5). This is largely due to the predominance of prime soils and large land area of the Project Area, as well as, a high percentage of agricultural land in the Zone of Influence surrounding the Project Area.

Table 5. LESA Model project score results

Land Evaluation Factors	Weighted Rating
Land Capability Classification	18.25
Storie Index Rating	15.95
Land Evaluation Subtotal	**34.2**
Site Assessment Factors	
Project Size	15.0
Water Resource Availability	12.1
Surrounding Agricultural Lands	14.25
Surrounding Protected Resource Lands	0.0
Site Assessment Subtotal	**41.4**
Total LESA Score	**75.6**

Impact 1

The proposed project will convert a total of 929 acres of agricultural and grazing land to residential and commercial uses. Of this total the project would convert approximately 760 acres of Prime Farmland to non-agricultural use. This has been determined to be a significant impact.

As the City of Soledad is largely surrounded by agricultural land, the City may have limited options other than conversion of farmland if it is to grow to meet population and housing demand. There are a number of policies and programs in place that attempt to limit the loss of farmland. The policies of the City of Soledad and policies in the current and draft County General Plans strongly encourage new development to occur only within areas that are within the City's urbanizing area and discourage the conversion of agricultural lands to urban uses where urban services are not available.

The project area is contiguous to the City's current boundaries and part of "expansion areas" identified in the General Plan as appropriate areas for accommodation of the City's planner growth over the next 25 to 50 years. The impacts to agricultural lands due to development accommodated by the Land Use Element was identified as a Class I unavoidable significant impact due to the conversion of 3500 acres of state-identified prime agricultural land. Therefore, the proposed project constitutes a part of the previously-identified impact, and would not result in an additional significant impact to the one already determined.

Impact 2

The proposed project has the potential to impact routine and on-going agricultural activities on the areas adjacent to the northern, eastern, and western boundaries of the Project Area. The following mitigation measures are recommended to reduce these impacts to the extent possible.

(2-1) Mitigation Measure - Access for agricultural equipment and vehicles to the adjoining row crop land on the western boundary shall continue be provided from the ramp to Highway 101 North (see Figure 2). The current access road to the Braga property should remain at the current width to allow for passing and ensure adequate turnaround space for field equipment.

Significance After Mitigation - Implementation of this measure would reduce impacts to routine and on-going agricultural operations on lands west of the proposed Project Area.

(2-2) Mitigation Measure - Adequate buffer areas between urban and agricultural uses shall be incorporated into the final design of the proposed project. The inclusion of an agricultural buffer is to protect the public health, safety and welfare of people and protect the economic viability agricultural production. Buffers are required to lessen public and animal exposure to agricultural chemicals, dust, noise and odors and protect agricultural operations and land from vandalism, pilferage, trespassing and complaints against standard legal agricultural practices. The requirements for and attributes of functional buffers may differ dependent on the nature of routine and on-going agricultural operations and practices. Generally agricultural buffers can include constructed fences or walls, earthen berms, roadways, drainage ditches, parking areas, landscaped or other vegetated areas. In some cases, buffers should be considered temporary, when it is anticipated that further development beyond the existing boundary is planned. The current County General Plan does not specify requirements, including distance, for agricultural buffers. However, the proposed draft General Plan (AG–1.2) includes the following guidelines:

The following criteria shall be used to establish agricultural buffers to protect existing agricultural operations:

a. Factors to consider include the type of non-agricultural use proposed, site conditions and anticipated agricultural practices. Other factors include weather patterns, crop type, machinery and pesticide use, existence of topographical features, trees and shrubs, and possible development of landscape berm to separate the non-agricultural use from the existing agricultural use.

b. Drainage, shading, vegetation, and erosion control shall be considered in the establishment of an agricultural buffer area and be made beneficial to the adjacent agricultural use.

c. Buffers shall be designed to comply with applicable state and local laws regulating school buffers, pesticide setbacks, and other controls.

d. Agricultural buffers and/or easements shall be provided from the proposed new use and not from the adjacent agricultural land unless by mutual agreement between the two landowners.

e. Agricultural buffers are designed to be used for the purposes and manner described in this policy and for no other purposes unless agreed to by abutting landowners.

f. Buffer maintenance will be the responsibility of the underlying fee title owner.

g. Buffers are not meant to be permanent and will be terminated once the underlying reason for the buffer no longer exists.

Western Boundary Buffer - All of the land on the western edge and southwest corner of the Project Area adjoins row crop lands used for vegetable production. Routine and on-going operations will typically generate dust and noise, and require application of pesticides (likely ground applied). The current access road immediately adjacent to this boundary has heavy agricultural equipment traffic and is used for temporary storage of field equipment. There are also two surface impoundments for irrigation close to the project boundary. An additional factor to consider is prevailing wind direction and duration which increase the likelihood for potential conflict between agricultural and residential land uses. Currently the Monterey County Agricultural Commissioner recommends at least a 200 foot buffer from residences for ground application of pesticides. Aerial application permit conditions require 1,000 and up to 600 foot distances for fixed wing and helicopter application, respectively.

Therefore, an adequate buffer shall require some type of physical barrier combined with adequate distance (minimum 200 feet) in areas where residential and commercial structures are to be located. This is required to minimize the potential liabilities related to safety and potential injury, theft, and vandalism. The proposed Urban Reserve and golf course fairways in the northwest area (currently Williamson Act contract lands) would provide adequate buffer distance as long as access to adjacent fields can be restricted. Vegetation in the area will need to be managed to be consistent with agricultural pest and food safety management requirements for leafy green and vegetable crops. The proposed project has included a planned buffer along the residential areas that shall meet minimum requirements for distance and include physical barriers. Any planned landscaping must be consistent with agricultural pest and food safety management requirements for leafy greens and other vegetable crops.

Northern Boundary Buffer - Most of the land on the northern edge of the Project Area adjoins rural residential and grazing lands or non-agricultural land owned by the City of Soledad. Routine operations on these lands are less likely to generate conflicts between land uses, therefore adequate buffer could be achieved with physical barriers and a minimum 50 foot distance from residential structures. As a significant portion of the northern boundary towards the east will be park open space, this should serve as adequate buffer as long as public access to adjacent private lands is restricted.

Eastern Boundary Buffer - All of the land on the eastern edge of the Project Area adjoins rural residential and grazing lands. Routine operations on these lands are less likely to generate conflicts between land uses, therefore adequate buffer could be achieved with physical barriers and a minimum 50 foot distance from residential structures.

Significance After Mitigation - Implementation of the above measures would reduce land use impacts related to agricultural operations to a less than significant level.

(2-3) Mitigation Measure - New residents and workers within the Project Area shall be informed of the County's "Right-to-Farm" ordinance. Effective noticing is essential to make property owners and other located near agricultural operations aware of potential conditions that are accepted practices within Monterey County.

Significance After Mitigation - Implementation of this measure would reduce impacts to routine and on-going agricultural operations on lands adjacent to the proposed Project Area.

Cumulative Impact of Agricultural Land Conversion

Conversion of agricultural land to urban uses continues to be a public policy issue in California. The Farmland Mapping and Monitoring Program (FMMP) has determined that approximately 828,445 acres (approximately 1.8 percent of California's landmass) were converted to urban and built-up uses between 2000–2002. Of the total acres converted, 397,097 were formerly cropland and 172,857 were formerly grazing land.

Monterey County cities and residential communities continue to grow and in recent years, agricultural land has been converted to residential and other non-agricultural uses. Based on data from the FMMP for the years 2000 to 2004 (Table 6), it would appear that the majority of residential and commercial development has occurred on prime farmlands (prime and important lands, combined). However, the conversion of prime irrigated lands is not consistently related to the increases in urban land areas. As example, Table 7 shows that between 2000 and 2002, approximately 12.5 percent of irrigated farmland loss was due to conversion to urban development. During this period total irrigated agricultural acreage increased by 1,596 acres. The additional prime land is largely attributable to the conversion of non-irrigated grazing and other lands.

Table 6. Change in Monterey County prime and important farmland acreage

CATEGORY	YEARS INVENTORIED			NET CHANGE (%)	
	1984	2000	2004	1984-2000	2000-2004
Prime Farmland	176,779	169,255	169,368	-4.3	0.1
Farmland of Statewide Importance	37,762	45,877	44,544	21.5	-2.9
Prime Farmland Subtotal	214,541	215,132	213,912	0.2	-0.6
			Acres	*591*	*-1220*
Grazing Land	1,081,510	1,060,663	1,066,539	-1.9	0.6
			Acres	*-20,847*	*5876*
Agricultural Land Subtotal	1,306,926	1,299,937	1,306,929	-0.5	0.5
			Acres	*-6989*	*6992*
Urban and Built-Up Land	42,374	52,486	54,293	23.9	3.4
			Acres	*10,112*	*1807*

Source: California Department of Conservation Farmland Mapping and Monitoring Program, 1994-2000

*Due to the incorporation of digital soil survey data (SSURGO) in 2000, acreages for farmland, grazing and other land categories may differ from those published in the 1998-2000 Farmland Conversion Report.

Table 7. Change in Monterey County irrigated farmland acreage between 2000 and 2002

Land converted to irrigated			Land converted from irrigated			
Prime	Statewide and Unique	Total	Urban	Grazing	Other	Total
1295	2953	4248	331	1461	860	2652

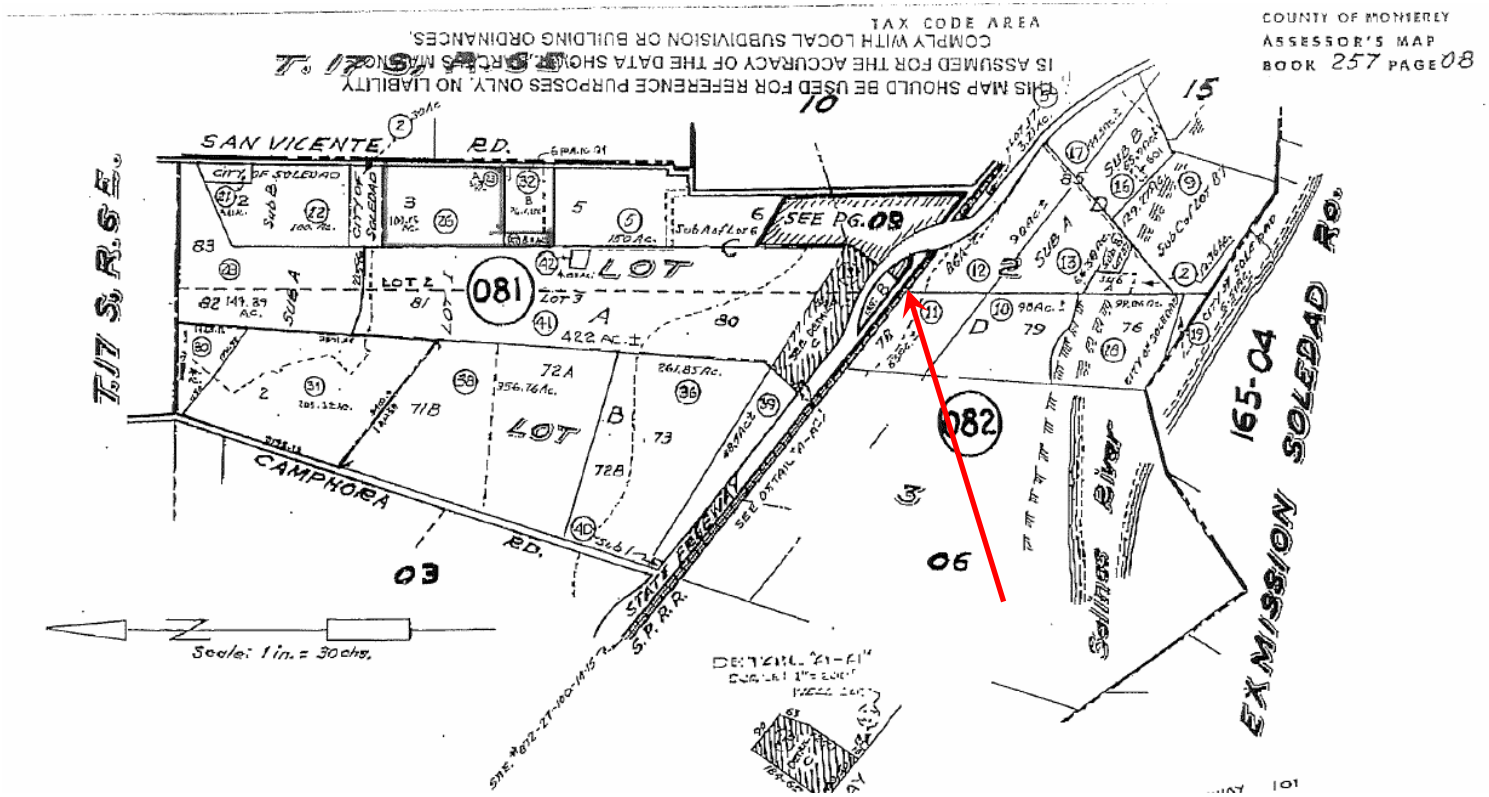
The proposed project would incrementally contribute to this significant cumulative impact by converting approximately 760 acres of prime cropland to a non-agricultural use and is therefore considered significant and unavoidable.

The draft County General Plan includes a policy where "... impacts to productive farmlands resulting from urban development shall be mitigated through the implementation of agricultural land conservation programs. Mitigation shall be provided at a ratio of 1 acre conserved for each acre impacted. In lieu of conserving land through a conservation easement, another mitigation approach is payment of a fee based upon a one to one replacement for a farmland conservation easement or farmland deed restriction established by the Board of Supervisors by resolution or through an enforceable agreement with the developer. The in lieu fee option must be approved by the Board of Supervisors. The fee shall be equal to or greater than the value of a previous farmland conservation transaction in the planning area plus the estimated cost of legal, appraisal and other costs, including staff time, to acquire property for agricultural mitigation...".

(1-1) Mitigation Measure - Currently there are no formal mitigation fee and/or conservation easement policies in place. There are grant programs provided by the State's Department of Conservation to assist in the acquisition of conservation easements and the Monterey County Agricultural and Historical Conservancy Inc. has successfully acquired easements in the Salinas Valley.

Impact after Mitigation - No measures are available to fully mitigate the loss of prime agricultural land, therefore even after mitigation the impact will be significant. This conclusion reiterates the conclusion of the City of Soledad Agricultural Resources section for the eventual phased development of adjacent agricultural land. The impacts to agricultural lands due to development accommodated by the Land Use Element was identified as a Class I unavoidable significant impact due to the conversion of 3500 acres of state-identified prime agricultural land. Therefore, the proposed project constitutes a part of the previously-identified impact, and would not result in an additional significant impact to the one already determined.

Figure 2. Location of access road to Braga Farm parcels from Highway 101 ramp at Soledad



TECHNICAL APPENDIX T-2

Miravale Phase III Specific Plan
Air Quality Study (Illingworth & Rodkin)

Miravale Phase III Specific Plan
Air Quality Study

June 26, 2007
Revised August 29, 2007

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Introduction

This report describes the impacts of the proposed Miravale Phase III specific plan and vested tentative map for mixed-use development in Soledad, California. This study was conducted using methodologies and assumptions recommended within the air quality impact assessment guidelines of the Monterey Bay Unified Air Pollution Control District (MBUAPCD). In keeping with these guidelines, this report describes existing air quality, temporary construction-related impacts, potential direct and indirect long-term emissions associated with the Plan-facilitated build out scenario, and the impacts of these emissions on both the local and regional scale. Mitigation measures warranted to reduce or eliminate any identified significant impacts are described.

This analysis was conducted following guidance provided by the Monterey Bay Air Pollution Control District (MBAPCD) CEQA Guidelines. Emissions, which are the quantity of pollutant that the project would emit both directly and indirectly, are measured in pounds per day. The amount of pollutant material measured per volumetric unit of air is referred to as the concentration and is typically measured in parts per million (ppm) or micrograms per cubic meter ($\mu g/m^3$). Stationary sources associated with the project, which could result in adverse air quality impacts that would contribute to air quality emissions, have not been identified.

Overall Regulatory Setting

The Federal Clean Air Act governs air quality in the United States. In addition to being subject to federal requirements, air quality in California is also governed by more stringent regulations under the California Clean Air Act. At the federal level, the United States Environmental Protection Agency (USEPA) administers the Clean Air Act (CAA). The California Clean Air Act is administered by the California Air Resources Board (CARB) at the State level and by the Air Quality Management Districts at the regional and local levels. The Monterey Bay Air Pollution Control District (MBAPCD) regulates air quality at the regional level.

United States Environmental Protection Agency

The USEPA is responsible for enforcing the Federal CAA. The USEPA is also responsible for establishing the National Ambient Air Quality Standards (NAAQS). The NAAQS are required under the 1977 CAA and subsequent amendments. The USEPA regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain types of locomotives. The agency has jurisdiction over emission sources outside state waters (e.g., beyond the outer continental shelf) and establishes various emission standards, including those for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission standards established by the CARB.

California Air Resources Board

In California, the CARB, which became part of the California Environmental Protection Agency (CalEPA) in 1991, is responsible for meeting the state requirements of the Federal CAA, administering the California CAA, and establishing the California Ambient Air Quality Standards (CAAQS). The California CAA, as amended in 1992, requires all air districts in the

State to endeavor to achieve and maintain the California Ambient Air Quality Standards (CAAQS). The CARB regulates mobile air pollution sources, such as motor vehicles. The agency is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. The CARB has established passenger vehicle fuel specifications. The CARB oversees the functions of local air pollution control districts and air quality management districts, which in turn administer air quality activities at the regional and county level.

Monterey Bay Unified Air Pollution Control District

The Monterey Bay Unified Air Pollution Control District (MBAPCD) is primarily responsible for assuring that the National and State ambient air quality standards are attained and maintained in the Monterey Bay Area. The MBAPCD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, conducting public education campaigns, as well as many other activities.

National and State Ambient Air Quality Standards

As required by the Federal Clean Air Act, the NAAQS have been established for six major air pollutants: carbon monoxide (CO), nitrogen oxides (NO_x), ozone (O_3), respirable particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), sulfur oxides, and lead. Pursuant to the California Clean Air Act, the State of California has also established ambient air quality standards. These standards are generally more stringent than the corresponding federal standards and incorporate additional standards for sulfates, hydrogen sulfide, vinyl chloride and visibility reducing particles.

Both State and Federal standards are summarized in Table 1. The “primary” standards have been established to protect the public health. The “secondary” standards are intended to protect the nation’s welfare and account for air pollutant effects on soil, water, visibility, materials, vegetation and other aspects of the general welfare. The CAAQS are more stringent than the NAAQS. Thus, the CAAQS are used as the comparative standard in this analysis.

Table 1 Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards	National Standards [a]	
			Primary [b,c]	Secondary [b,d]
Ozone	8-hour	0.07 ppm (137 µg/m^3)	0.08 ppm (157 µg/m^3)	—
	1-hour	0.09 ppm (180 µg/m^3)	—[e]	Same as primary
Carbon monoxide	8-hour	9 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	—
	1-hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	—
Nitrogen dioxide	Annual	0.030 ppm	0.053 ppm (100 µg/m^3)	Same as primary
	1-hour	0.18 ppm	—	—
Sulfur dioxide	Annual	—	0.03 ppm (80 µg/m^3)	—
	24-hour	0.04 ppm (105 µg/m^3)	0.14 ppm (365 µg/m^3)	—
	3-hour	—	—	0.5 ppm (1,300 µg/m^3)
	1-hour	0.25 ppm (655 µg/m^3)	—	—
PM_{10}	Annual	20 µg/m^3	--[f]	Same as primary
	24-hour	50 µg/m^3	150 µg/m^3	Same as primary
$PM_{2.5}$	Annual	12 µg/m^3	15 µg/m^3	
	24-hour	—	35 µg/m^3 [f]	
Lead	Calendar quarter	—	1.5 µg/m^3	Same as primary
	30-day average	1.5 µg/m^3	—	—

Notes: (a) Standards, other than for ozone and those based on annual averages, are not to be exceeded more than once a year. The ozone standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above the standard is equal to or less than one.

(b) Concentrations are expressed first in units in which they were promulgated. Equivalent units given in parenthesis.

(c) Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health. Each state must attain the primary standards no later than 3 years after that state's implementation plan is approved by the EPA.

(d) Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

(e) The national 1-hour ozone standard was revoked by U.S. EPA on June 15, 2005.

(f) The annual PM_{10} standard was revoked by U.S. EPA on September 21, 2006 and a new $PM_{2.5}$ 24-hour standard was established.

Air Pollutants & Effect

Air quality studies generally focus on five pollutants that are most commonly measured and regulated: CO, O_3, NO_2, SO_2, and suspended particulate, i.e., PM_{10} and $PM_{2.5}$. These are referred to as "criteria " air pollutants. In addition, there are toxic air contaminants (TACs), which are a broad class of compounds that can have a range of health effects.

Ozone

Ground-level ozone is the principal component of smog. Ozone is not directly emitted into the atmosphere, but instead forms through a photochemical reaction of reactive organic gases (ROG) and nitrogen oxides (NO_X), which are known as ozone precursors. Ozone levels are highest from late spring through autumn when precursor emissions are high and meteorological conditions are warm and stagnant. Motor vehicles create the majority of reactive organic gas and nitrogen oxide emissions in the California. In April 2005, the California Air Resources Board approved a new eight-hour standard of 0.070 ppm and retained the one-hour ozone standard of 0.09 ppm after an extensive review of the scientific literature. Evidence from the reviewed studies indicate that significant harmful health effects could occur among both adults and children if exposed to levels above these standards. Exposure to levels of ozone above current ambient air quality standards can lead to human health effects such as lung inflammation and tissue damage and impaired lung functioning. Ozone exposure is also associated with symptoms such as coughing, chest tightness, shortness of breath, and the worsening of asthma symptoms. The greatest risk for harmful health effects belongs to outdoor workers, athletes, children and others who spend greater amounts of time outdoors during periods where ozone levels exceed air quality standards. Elevated ozone levels can reduce crop and timber yields, as well as damage native plants. Ozone can also damage materials such as rubber, fabrics and plastics.

Particulate Matter (PM_{10} and $PM_{2.5}$)

Particulate matter (PM) is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, and dust. Particles 10 microns or less in diameter are defined as "respirable particulate matter" or "PM_{10} ". Fine particles are 2.5 microns or less in diameter ($PM_{2.5}$) and can contribute significantly to regional haze and reduction of visibility. Inhalable particulates found in the region come from smoke, vehicle exhaust, and dust. Although particulates are found naturally in the air, most particulate matter found in the region are emitted either directly or indirectly by wood burning, motor vehicles, construction, agricultural activities, and wind erosion of disturbed areas. Most $PM_{2.5}$ is comprised of combustion products such as smoke or vehicle exhaust. Respirable particulate matter, especially $PM_{2.5}$, is unhealthy to breathe and has been associated with premature mortality and other serious health effects. PM_{10} poses a health concern because these particulates can be inhaled into and accumulate in the respiratory system. $PM_{2.5}$ is believed to pose the greatest health risks. Because of their small size (approximately three percent of the average width of a human hair), fine particles can lodge deeply into the lungs. Extensive research reviewed by CARB indicates that exposure to outdoor PM_{10} and $PM_{2.5}$ levels exceeding current ambient air quality standards is associated with increased risk of hospitalization for lung and heart-related respiratory illness, including

emergency room visits for asthma. PM exposure is also associated with increased risk of premature deaths, especially in the elderly and people with pre-existing cardiopulmonary disease. In children, studies have shown associations between PM exposure and reduced lung function and increased respiratory symptoms and illnesses. Besides reducing visibility, the acidic portion of PM (e.g., nitrates and sulfates) can harm crops, forests, aquatic and other ecosystems.

The State of California regularly reviews scientific literature regarding the health effects of exposure to particulate matter and other pollutants. On July 5, 2003, the CARB adopted new standard for particulate matter, lowering the level of the annual standard for PM_{10} and establishing a new annual standard for $PM_{2.5}$.

Carbon Monoxide. CO, a colorless and odorless gas, interferes with the transfer of oxygen to the brain. It can cause dizziness and fatigue, and can impair central nervous system functions. CO is emitted almost exclusively from the incomplete combustion of fossil fuels. Automobile exhausts release most of the CO in the area. A substantial amount also comes from burning wood in fireplaces and wood stoves. CO is a non-reactive air pollutant that dissipates relatively quickly, so ambient CO concentrations generally follows the spatial and temporal distributions of vehicular traffic. The highest CO concentrations measured in the Monterey Bay area are typically recorded during the winter.

Nitrogen Dioxide. NO_2, a reddish-brown gas, irritates the lungs. It can cause breathing difficulties at high concentrations. Like O_3, NO_2 is not directly emitted, but is formed through a reaction between nitric oxide (NO) and atmospheric oxygen. NO and NO_2 are collectively referred to as nitrogen oxides (NO_x) and are major contributors to O_3 formation. NO_2 also contributes to the formation of PM_{10} (see discussion of PM_{10} below). NO_2 concentrations in the air basin have been well below ambient air quality standards; therefore, NO_2 concentrations from land use projects are not a concern. In February 2007, the California Air Resources Board approved a new annual standard of 0.030 ppm and lowered the existing one-hour standard to 0.25 ppm.

Sulfur Oxides. Sulfur oxides, primarily SO_2, are a product of high-sulfur fuel combustion. The main sources of SO_2 are coal and oil used in power stations, in industries, and for domestic heating. SO_2 is an irritant gas that attacks the throat and lungs. It can cause acute respiratory symptoms and diminished ventilator function in children. SO_2 concentrations have been reduced to levels well below the state and national standards, but further reductions in emissions are needed to attain compliance with standards for PM_{10}, of which SO_2 is a contributor. Regional SO_2 concentrations have been well below ambient air quality standards; therefore, SO_2 concentrations from land use projects are not a concern.

Toxic Air Contaminants (TAC)

TACs are a broad class of compounds known to cause morbidity or mortality (usually because they cause cancer) and include, but are not limited to, the criteria air pollutants listed above. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., benzene near a freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, state, and federal level.

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about two-thirds of the cancer risk from TACs (based on the statewide average). According to the CARB, diesel exhaust is a complex mixture of gases, vapors and fine particles. This complexity makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the ARB, and are listed as carcinogens either under the state's Proposition 65 or under the federal Hazardous Air Pollutants programs. California has adopted a comprehensive diesel risk reduction program. The U.S. EPA has adopted low sulfur diesel fuel standards that will reduce diesel particulate matter substantially. These went into effect in late 2006.

In cooler weather, smoke from residential wood combustion can be a source of TACs. Localized high TAC concentrations can result when cold stagnant air traps smoke near the ground and, with no wind, the pollution can persist for many hours. This occurs in sheltered valleys during the winter. Wood smoke also contains a significant amount of PM_{10} and $PM_{2.5}$. Wood smoke is an irritant and is implicated in worsening asthma and other chronic lung problems.

Air Quality Planning

Monterey Bay Unified Air Pollution Control District

The Monterey Bay Unified Air Pollution Control District (MBUAPCD) is one of 35 districts established to protect air quality in California. Its jurisdiction is in the North Central Coast Air Basin (NCCAB), comprised of Monterey, Santa Cruz and San Benito counties. The NCAB does not meet the State Ambient Air Quality Standards for ozone or inhalable particulate matter (PM_{10}).

The California Clean Air Act of 1988 required preparation of a 1991 plan showing how the State ozone standard would be met. Air quality plans addressing the California Clean Air Act are developed about every three years. The plans are meant to demonstrate progress toward meeting the more stringent 1-hour O3 CAAQS. The latest plan, which was adopted in September 2004, is called the 2004 Air Quality Management Plan for the Monterey Bay Region. This plan includes a comprehensive strategy to reduce emissions from stationary, area, and mobile sources. The plan objective is to indicate how the region would make progress toward attaining the stricter state air quality standards, as mandated by the California Clean Air Act. The plan is designed to achieve a region-wide reduction of O_3 precursor pollutants through the expeditious implementation of all feasible measures.

The clean air planning efforts for O_3 will also reduce PM_{10} and $PM_{2.5}$, since a substantial amount of this air pollutant comes from combustion emissions such as vehicle exhaust. In addition, attainment of the PM_{10} standard is addressed in the "1998 Report on Attainment of the California Particulate Matter Standards in the Monterey Bay Region."

Physical Setting

Climate and Topography

The project site is located on east of Highway 101 on the eastern border of the City of Soledad, about 35 miles southeast of Monterey Bay, and about 25 miles south of Salinas. Winds from the northwest are most common in Soledad and the rest of the Salinas Valley. In general, wind flow is aligned along the valley orientation. In the winter, winds tend to flow down the Salinas Valley from the southeast toward Monterey Bay, averaging about 2.6 miles per hour (mph). In the spring, winds tend to blow from the west (on-shore) averaging about 3.8 mph. In the summer, winds are primarily westerly northwesterly, averaging about 6.5 mph. In the fall, winds flow from the southeast during the night, and switch to the west and northwest by about 10 am, and average about 2.4 mph. [1] Rainfall in the area averages about 13.4 inches per year, with almost all substantial precipitation occurring between November and April. The presence or absence of winter storms and rainfall affect dust generation on plowed fields, wildfires, and other factors influencing local air quality. Temperatures are generally mild, with little winter frost, and summer maxima rarely exceeding 100 F.

Climate, or the average weather condition, affects air quality in several ways. Wind patterns can remove or bring in air pollutants emitted by stationary or mobile sources. Inversions, a condition where warm air traps cooler air underneath it, can hold pollutants near the ground by limiting upward mixing (dilution). Communities with cold climates may burn wood or other fuels for residential heating, whereas areas with hot climates may have higher emissions of some pollutants from automobiles. Topography also plays a part, as valleys often trap emissions by limiting lateral dispersion.

Air Monitoring Data

Air quality in the region is controlled by the rate of pollutant emissions and meteorological conditions. Meteorological conditions such as wind speed, atmospheric stability, and mixing height may all affect the atmosphere's ability to mix and disperse pollutants. Long-term variations in air quality typically result from changes in air pollutant emissions, while frequent, short-term variations result from changes in atmospheric conditions. While the City of Soledad enjoys fairly good air quality that meets most State and Federal standards, other parts of the air basin do not. Surface winds often move pollutants from their emission source to other areas where an impact may be felt. The MBUAPCD and other government agencies operate a network of air quality monitoring stations throughout the air basin. There are two monitoring stations located within the project vicinity, one located at Salinas High School and the other located at 750 Metz Road in King City. Pollutants monitored on a continuous basis at the Salinas site include ozone, PM_{10} and $PM_{2.5}$, CO, and NO_x - NO_2, and at the King City site include ozone and PM_{10}. Air pollutant concentrations measured at stations closest to the project area are shown in Table 2.

[1] *California Surface Wind Climatology*, California Air Resources Board, Modeling and Meteorology Branch, June 1989.

Table 2 Highest Measured Air Pollutant Concentrations

Pollutant	Average Time	Measured Air Pollutant Levels				
		2001	2002	2003	2004	2005
King City						
Ozone (O_3)	1-Hour	0.08 ppm	0.08 ppm	0.09 ppm	0.08 ppm	0.07 ppm
	8-Hour	0.07 ppm	0.07 ppm	0.07 ppm	0.07 ppm	0.06 ppm
Fine Particulate Matter (PM_{10})	24-Hour	**59 ug/m^3**	**62 ug/m^3**	38 ug/m^3	46 ug/m^3	39 ug/m^3
	Annual	**23 ug/m^3**	19 µg/m^3	17 ug/m^3	20 ug/m^3	18 ug/m^3
Salinas						
Ozone (O_3)	1-Hour	0.08 ppm	0.08 ppm	0.07 ppm	0.08 ppm	0.07 ppm
	8-Hour	0.07 ppm	0.06 ppm	0.06 ppm	0.07 ppm	0.06 ppm
Carbon Monoxide (CO)	8-Hour	1.6 ppm	1.4 ppm	1.1 ppm	1.2 ppm	0.9 ppm
Fine Particulate Matter (PM_{10})	24-Hour	**51** ug/m^3	46 ug/m^3	**67 ug/m^3**	45 ug/m^3	37 ug/m^3
	Annual	20 ug/m^3	19 µg/m^3	20 ug/m^3	17 ug/m^3	16 ug/m^3
Respirable Particulate Matter ($PM_{2.5}$)	24-Hour	26 µg/m^3	24 ug/m^3	16 ug/m^3	22 ug/m^3	16 ug/m^3
	Annual	8.6 µg/m^3	9.1 µg/m^3	7.3 ug/m^3	7.0 ug/m^3	6.8 ug/m^3
Nitrogen Dioxide (NO_2)	1-Hour	0.04 ppm	0.05 ppm	0.05 ppm	0.14 ppm	0.05 ppm
	Annual	0.07 ppm	0.07 ppm	0.06ppm	0.07 ppm	0.08 ppm
North Central Coast Air Basin (Basin Summary)						
Ozone (O_3)	1-Hour	**0.108** ppm	**0.115** ppm	**0.111** ppm	**0.093** ppm	**0.107 ppm**
	8-Hour	**0.088 ppm**	**0.094 ppm**	**0.088 ppm**	0.083 ppm	**0.085 ppm**
Carbon Monoxide (CO)	8-Hour	1.6 ppm	1.4 ppm	1.1 ppm	1.2 ppm	0.9 ppm
Nitrogen Dioxide (NO_2)	1-Hour	0.04 ppm	0.05 ppm	0.05 ppm	0.14 ppm	0.05 ppm
	Annual	0.06 ppm	0.06 ppm	0.06 ppm	0.07 ppm	0.06 ppm
Respirable Particulate Matter (PM_{10})	24-Hour	**74** µg/m^3	**81** µg/m^3	**90** µg/m^3	**83** µg/m^3	**69 µg/m^3**
	Annual	**29** ug/m^3	**29** ug/m^3	**32** ug/m^3	**28** ug/m^3	**26 µg/m^3**

Source: California Air Resources Board Air Quality Data website http://www.arb.ca.gov/aqd/aqdpage.htm.
Note: ppm = parts per million and ug/m^3 = micrograms per cubic meter
Values reported in bold exceed ambient air quality standard
NA = data not available.

Table 3 Annual Number of Days Exceeding Ambient Air Quality Standards

Pollutant	Standard	Monitoring Station	Days Exceeding Standard				
			2001	2002	2003	2004	2005
Ozone (O_3.)	NAAQS 1-hr	King City	0	0	0	0	0
		Salinas	0	0	0	0	0
		NCCAB	0	0	0	0	0
	NAAQS 8-hr	King City	0	0	0	0	0
		Salinas	0	0	0	0	0
		NCCAB	2	5	2	0	1
	CAAQS 1-hr	King City	0	0	0	0	0
		Salinas	0	0	0	0	0
		NCCAB	3	8	3	0	2
Fine Particulate Matter (PM_{10})	NAAQS 24-hr	King City	0	0	0	0	0
		Salinas	0	0	0	0	0
		NCCAB	0	0	0	0	0
	CAAQS 24-hr	King City	NA	NA	NA	NA	0
		Salinas	1	0	4	0	0
		NCCAB	8	4	7	7	2
Fine Particulate Matter ($PM_{2.5}$)	NAAQS 24-hr*	King City	NA	NA	NA	NA	NA
		Salinas	0	0	0	0	0
		NCCAB	NA	NA	NA	NA	NA
All Other (CO, NO_2, Lead, SO_2)	All Other	King City	NA	NA	NA	NA	NA
		Salinas	0	0	0	0	0
		NCCAB	0	0	0	0	0

* Based on standard of 65 µg/m^3 that was in place until September 21, 2006.
NA = data not available.

Attainment Status

Areas that do not violate ambient air quality standards are considered to have attained the standard. Violations of ambient air quality standards are based on air pollutant monitoring data and are judged differently for each air pollutant. The NCCAB as a whole does not meet state ambient air quality standards for PM_{10} and is non-attainment-transitional for state ground level O_3. The U.S. EPA considers the region to be a maintenance area since the 8-hour ozone standard has been attained. For all other standards, the U.S. EPA and the State have classified the region as attainment or unclassified/attainment.

Sensitive Receptors

Some groups of people are more affected by air pollution than others. CARB has identified the following people who are most likely to be affected by air pollution: children under 14, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, elementary schools, and parks.

Environmental Impacts and Mitigations

Thresholds of Significance

The project site is located within the jurisdictional boundary of the Monterey Bay Unified Air Pollution Control District (MBUAPCD). Based on the *CEQA Air Quality Guidelines* adopted by the MBUAPCD, significant impacts would occur when: [2],[3]

- Specific plans or projects conflict with or obstruct implementation of the applicable air quality plan.

- Projects affect the attainment and maintenance of regional ozone levels by emitting 137 pounds per day (lb/day) or more of an ozone precursor air pollutant, which are VOC or NO_x.

- Projects locally affect particulate matter levels by emitting greater than 82 lbs/day of PM_{10} on site and cause an exceedance of the State PM_{10} standard at an existing or reasonably foreseeable receptor as averaged over 24 hours.

- Specific plans or projects cause or contribute to an exceedance of a CO standard as measured by Level of Service (LOS) degradation at a project-effected intersection and confirmed by dispersion modeling. This applies to project-affected intersections with substantial traffic that are degraded from a LOS of E or worse.

- Specific plans or projects expose sensitive receptors or the general public to substantial levels of toxic air contaminants.

- Specific plans or projects create or expose a substantial number of people to objectionable odors or nuisances.

The MBUAPCD emissions thresholds apply to projects and not specific plans. Since the project includes a vested tentative map, the MBUAPCD thresholds would apply to each phase. For cumulative impacts, the MBUAPCD recommends that the project be assessed for consistency with the 2004 Air Quality Management Plan for the North Central Coast Air Basin. This was done by requesting a formal consistency determination from the AMBAG.

The specific plan does not include siting of sensitive receptors (e.g., residences) near roadways with sufficient volumes to expose sensitive receptors to unhealthy air pollution levels. CARB recommends a buffer of 500 feet between sensitive receptors and freeways or rural roads with an average of 50,000 vehicles or more per day[4].

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[2] *CEQA Air Quality Guidelines,* Monterey Bay Unified Air Pollution Control District, 1995, with revisions through July 2004.

[3] Letter from MBUAPCD, dated September 19, 2006, commenting on the NOP for Miravale phase III Specific Plan from Jean Getchell to Mr. Don Flemming, City of Soledad.

[4] *Air Quality and Land Use Handbook: A Community Health Persective,* California Air Resources Board. April 2005.

Environmental Impacts

Impact AQ-1: **Construction Period Impacts –PM_{10} from Fugitive Dust**
Construction activities, such as clearing, excavation and grading operations, construction vehicle traffic on unpaved ground, and wind blowing over exposed earth would generate dust and particulate matter. This would be a ***significant impact.***

Construction would primarily be accomplished using diesel powered heavy equipment. Dust is generated from a variety of project construction activities that include grading, import/export of fill material, and vehicle travel on unpaved surfaces. Dust from construction includes PM_{10}. Soil can also be tracked-out onto paved roads where it is entrained in the air by passing cars and trucks. Additionally, dust can be generated by wind erosion of exposed areas. The rate of dust emissions is related to the type and size of the disturbance, meteorological conditions, and soil conditions. Construction activities can result in localized high concentrations of PM_{10} and affect regional levels of PM_{10}. High levels of PM_{10} can lead to adverse health effects, nuisance concerns, and reduced visibility.

The MBUAQMD CEQA Guidelines consider on-site emissions of 82 pounds per day or greater of PM_{10} from construction activity to be significant. Due to the variables that affect construction emissions, quantification of construction period emissions is difficult. The initial phases of construction that generate the highest emissions of PM_{10} from fugitive dust would be of most concern. The site would be constructed in four phases, each lasting about 5 years and assumed to begin in 2008.

Grading plans were not available, so the extent of earth disturbance and the need for import or export of fill material is not known at this time. Therefore, detailed construction emissions cannot be quantified. During other construction phases, additional material would be imported to the site. This would include base rock, select soil/gravel for trenches and building pads, concrete, and asphalt for paving. Building materials would also be imported to the site.

Fugitive dust emissions would occur during each of the construction phases. The greatest amount of dust emissions would be generated during the initial grading phase where the soil disturbance activities would be the most intense (i.e., cut and fill activities involving scrapers and other equipment). The other construction phases would generate dust emissions, but of a lesser degree than grading since the intensity of soil disturbance activities would be reduced.

Uncontrolled daily fugitive dust emissions can be approximated for grading construction activities using emission factors developed as part of a study conducted for the South Coast Air Quality Management District (MRI, 1996). This study developed fugitive dust (PM_{10}) emission factors for construction activities at seven sites in Las Vegas, Coachella Valley, the South Coast area, and in the San Joaquin Valley. A general overall emission factor of 0.11 tons per acre per month would represent typical daily emissions. On the most active days during grading, emissions may be higher. The identified a worst-case overall emission factor that would apply to the most intense construction sites was 0.42 tons per acre per month. The study developed specific emission factors that require specific construction information such as the amount of

earthwork and the detail of control measures. Since that type of information is generally not available, overall emission factors were used to estimate daily emissions.

One of the sites studied in the MRI report was in the San Joaquin Valley, a 40-acre commercial development in Fresno (Site 5.2). This site was the most similar to the proposed project site, and therefore, those emission factors were applied to this project. For the Fresno site, an overall typical worst-day construction emission factor of 4.1 pounds per acre per work hour was developed. This emission factor includes emissions associated with general construction activities, as well as those from intensive earth-moving activities. Using this emission factor for the proposed project would result in emissions of 82 pounds per day if 2.5 acres were actively graded in one day with some dust control measures. Grading activity that encompasses more than 2.5 acres in a single day could result in on-site PM_{10} emissions exceeding 82 pounds per day without additional mitigation. When specific project details and grading activities are known, better emission estimates could be made to refine construction plans and possibly remain below the 82 pound per day threshold with a larger area of disturbance.

In addition, PM_{10} emissions would occur as a result of wind erosion over disturbed areas during dry windy conditions and from vehicle track out. These emissions are not accounted for in the emission factors applied to grading and construction activities. Ordinarily, these emissions would be considerably small in comparison with grading activities. Emissions from wind erosion are difficult to predict since one has to know the area that is disturbed enough so that wind could cause erosion and then a wind speed above a certain threshold has to occur for a known duration. Wind erosion emissions would vary considerably, but could be controlled through active watering of the site throughout the construction period, including days that construction is not occurring, but soils are disturbed.

Given the size of the project sites likely to be built out under the specific plan and the possibility that construction could occur simultaneously on different areas throughout the site, grading activity areas could exceed 2.5 acres per day. This would result in a ***significant impact*** to air quality.

Mitigation Measure AQ-1:

Impacts can be greatly reduced by implementing fugitive dust control measures. The significance of construction dust air quality impacts is typically determined by the control measures that will be implemented. Implementation of the measures listed below would reduce the dust impacts associated with grading and new construction to a *less-than-significant* level.

Prior to start of construction, the project applicant or contractor shall submit to the City of Soledad Public Works Department a construction dust mitigation plan. This plan shall specify the methods of dust control that would be utilized, demonstrate the availability of needed equipment and personnel, use of reclaimed water for dust control, and identify a responsible individual who, if needed, can authorize implementation of additional measures. The construction dust mitigation plan shall, at a minimum, include the following measures:

- Limit grading activity to a maximum of 2.5 acres daily. As more detailed construction information becomes available, emissions from grading activities could be reassessed to determine if the area of grading could be increased. Such an assessment would have to be

conducted using appropriate assumptions and mitigation measures. The dust control plan shall include any such assessment.

- Water all active construction areas at least twice daily and more often during windy periods. Active areas adjacent to existing businesses should be kept damp at all times. If necessary during windy periods, watering is to occur on all days of the week regardless of onsite activities.

- Cover all hauling trucks or maintain at least two feet of freeboard.

- Pave, apply water at least twice daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas.

- Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas at construction sites.

- Sweep streets daily (with water sweepers) if visible soil material is deposited onto the adjacent roads.

- Hydro-seed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas that are inactive for 10 days or more).

- Enclose, cover, water twice daily, or apply (non-toxic) soil binders to exposed stockpiles.

- Limit traffic speeds on any unpaved roads to 15 mph.

- Replant vegetation in disturbed areas as quickly as possible.

- Suspend excavation and grading activity when hourly-averaged winds exceed 15 mph and visible dust clouds cannot be contained within the site.

The combined effect of the above measures, including the use of a dust suppressant, which represent Best Management Practices, and limiting the size of the grading area would reduce project impacts to a l*ess-than-significant* level only if emissions can be limited to 82 pounds per day or subsequent dispersion modeling of construction activities demonstrates that PM_{10} concentrations from construction activity would not cause an exceedance of the State ambient air quality standard, as averaged over 24 hours. Since limits to construction activities are probably not feasible for this project and dispersion modeling conducted at this time (due to lack of detailed construction plans), the impact is considered to remain ***significant with mitigation***.

Impact AQ-2: **Construction Period Impacts –Diesel exhaust from equipment**
Construction activities would involve use of heavy-duty off-road equipment and large trucks that use diesel fuel resulting in emissions of diesel particulate matter and NOx. This would be a ***potentially significant impact.***

The California Air Resources Board has identified diesel particulate matter as a toxic air contaminant. It is one of many toxic air contaminants; however, it is estimated to contribute

about 70% to the overall potential inhalation cancer risk. Improved diesel engines technologies along with reformulated diesel fuel are expected to substantially lower the risk from diesel exhaust.

The heavy construction equipment utilized to construct this project would be diesel fueled. Grading of the site is expected to result in the highest emissions of diesel particulate matter during the construction period. Grading plans are not known at this time, therefore, the amount and types of equipment and their schedule cannot be determined. The projects could be constructed in a series of projects over many years. There are typically two different periods of grading: a "rough" grading phase that requires excavators and a dozers and then a "fine" grading phase that may include motor graders, rollers, scrapers, and loaders. These equipment are typically used from 4 to 8 hours per day. Other phases of construction use smaller sized equipment (e.g., some loaders, forklifts, etc.), but include numerous heavy-duty truck deliveries for cement, asphalt, building materials, and landscape materials.

The Miravale III site is fairly open and flat. There are residential neighborhoods bounding the southern project border. Since the projects are likely to be constructed in phases, new occupants of earlier phases of the project could become sensitive receptors affected by construction.

Construction equipment can emit substantial amounts of NOx that could have a small, but cumulative affect on ozone concentrations. The MBUAPCD CEQA guidelines do not have thresholds that apply to these emissions. Therefore, the impact is considered less than significant if reasonable and feasible measures to reduce emissions are employed.

Diesel exhaust includes air contaminants that can cause health effects. The increased health risk from these types of emissions (i.e., increased cancer risk) are calculated over a 70-year continuous exposure period at locations of sensitive receptors. Truck travel and construction equipment exhaust may result in elevated levels of diesel particulate matter for short time periods. However, these activities would occur for such a relatively short period that the impact would be considered as l*ess-than-significant* provided that mitigation measures (Mitigation Measure AQ-2) are implemented to minimize exposure to sensitive receptors.

Mitigation Measure AQ-2:

Projects developed under the specific plan should be evaluated for individual construction period air quality impacts. Project-specific mitigation measures would be identified at that time. However, the following mitigation measures should be implemented for all projects to reduce diesel particulate emissions from on-site construction equipment:

- Use off-road construction equipment, manufactured during or after 1996 that meets the NO_x emissions standard of 6.9 grams per brake-horsepower hour or use alternative fuels (such as biodiesel) that result in lower particulate emissions.

- The contractor shall install temporary electrical service whenever possible to avoid the need for independently powered equipment (e.g. compressors).

- Diesel equipment standing idle for more than two minutes shall be turned off. This would include trucks waiting to deliver or receive soil, aggregate, or other bulk materials. Rotating

drum concrete trucks could keep their engines running continuously as long as they were onsite and staged away from residential areas.

- Properly tune and maintain equipment for low emissions.
- Stage large diesel powered equipment at least 200 feet from any active land uses (e.g., residences).
- Limit the pieces of equipment used at any one time.
- Minimize the use of diesel-powered equipment (i.e., wheeled tractor, wheeled loader, roller) by using gasoline-powered equipment to reduce NO_x emissions.
- Limit the hours of operation for heavy-duty equipment.

The combined effect of the above measures would reduce project impacts to a *less-than-significant* level**.**

Impact AQ-3: **Plan Generated Operational Impacts**

Implementation of the proposed specific plan would result in increases in long-term operational emissions of ozone precursor pollutants. These emissions would exceed significance thresholds established by the MBUAPCD. *This represents a* ***significant impact*** *since these emissions could cumulatively contribute to potential exceedances of ambient air quality standards for ozone. Mitigation measure AQ-3 suggests measures to reduce emissions of these air pollutants that could be provided for the entire specific plan.*

The Specific Plan proposes development of 1,470 single-family residences and 2,730 multi-family residences, in addition to a 120-room hotel, 275,000 square feet of retail, an 18-hole golf course as well as schools and parks. The plan would be built out over a 20-year period in four phases. The project's traffic analysis forecasts that the Miravale III specific plan would generate about 35,504 daily vehicle trips at full build out. Emissions from these trips would affect regional air quality in terms of contributing to possible exceedances of ambient air quality standards for ozone. Direct and indirect emissions from each phase of the proposed specific plan were calculated using the latest available version of the URBEMIS model (i.e., URBEMIS 2002 ver. 8.7) distributed by Rimpo Associates through www.urbemis.com and the updated model template provided through the MBUAPCD website. Specific Plan related emissions were calculated in accordance with the proposed phasing schedule.

The model predicts daily emissions associated with land use developments. The model combines predicted daily traffic activity associated with the different land use types, with emission factors from the State's mobile emission factor model (i.e., EMFAC2002). The project sizes and estimated traffic generation were input to the URBEMIS 2002 model to predict daily emissions of ROG, CO, NOx and $PM_{10.}$

Specific plan traffic generation provided by Hexagon Transportation Consultants, Inc. for the DEIR, was used in the model to provide daily traffic generation estimates based on selected land uses. The URBEMIS2002 model default for passby trips was not used. Instead, trip reduction percentages provided by the traffic engineer based on the reduction of internal trips due to mixed uses were utilized. The trip rates used in URBEMIS2002 were adjusted to reflect these reductions.

The URBEMIS 2002 model also predicted area source emissions associated with build out of the specific plan uses. Area source emissions of ROG, NOx, and PM_{10} were predicted for summer, and the area source emissions of CO were predicted for winter in accordance with the MBUAPCD CEQA Guidelines. The project emissions were predicted for a normal weekday representative of the traffic generation used for the traffic study. Daily emissions from the build out of the specific plan are reported in Table 4. Model output is provided in Attachment 1.

Table 4 Daily Project Emissions based on URBEMIS2002 Modeling

Scenario	Volataile Organic Compounds (VOC) - Summer	Nitrogen Oxides (NOx) - Summer	Carbon Monoxide (CO) - Winter	Respirable Particulates (PM_{10}) - Summer
Phase 1 (2008-2013)				
Area Emissions	35 lbs	7 lbs	394 lbs	>1.0
Operational Emissions	51 lbs	69 lbs	658 lbs	133 lbs
Total	86 lbs	76 lbs	1052 lbs	133 lbs
Phase 2 (2013-2018)				
Area Emissions	168 lbs	25 lbs	2204 lbs	>1.0
Operational Emissions	98 lbs	117 lbs	1197 lbs	358 lbs
Total	266 lbs	141 lbs	3401 lbs	358 lbs
Phase 3 (2018-2023)				
Area Emissions	216 lbs	32 lbs	2869 lbs	>1.0
Operational Emissions	81 lbs	90 lbs	907 lbs	358 lbs
Total	297 lbs	122 lbs	3776 lbs	358 lbs
Phase 4 (2023-2028)				
Area Emissions	329 lbs	46 lbs	4380 lbs	>1.0
Operational Emissions	82 lbs	82 lbs	887 lbs	426
Total	411 lbs	128 lbs	5267 lbs	426

Source: URBEMIS2002 Air Emissions From Land Use Ver. 8.7

Emissions from the project would vary over time as the project is built out and emission rates change due to improvements in overall vehicle emission controls. During the interim build-out period, NOx emissions would be highest after build out of Phase 2, which is assumed to occur in 2018. Emission rates of NOx would decrease at a rate faster than traffic would increase under cumulative build out of the project. Therefore, future total NOx emissions after 2020 with Phases 3 and 4 would decrease below Phase 1 and 2 levels. That is cumulative build out of Phase 1 through 4 in 2028 would have emissions below the cumulative build out of Phase 1 and 2 in 2018 even though additional traffic trips would be generated. This is due to the implementation of more stringent vehicle emissions standards and fleet turnover. Turnover occurs when older, more polluting vehicles, are replaced with newer and cleaner vehicles that have durable emission control systems.

On the other hand, VOC emissions are affected by use of consumer products and new motor vehicle trips. Substantial VOC emissions would occur from increased emissions of consumer products associated with new residential development in the air basin. A wide variety of consumer products that include air fresheners, household cleaners, automotive products, and personal care products result in VOC emissions. The emissions reported by URBEMIS2002 tend to be slightly higher than current CARB estimates, since the model is based on older data. CARB does develop requirements for consumer products aimed at reducing VOC emissions. Current CARB estimates used to develop the countywide emissions inventory indicate that these emissions are about 18% lower than reported in Table 4. In any event, emissions of ROG/VOC would be expected to exceed the MBUAPCD thresholds when projects under this specific plan are developed. This would continue to be mostly attributable to the use of consumer products by new residences. As a result, *significant* impacts to regional air quality, with respect to emissions of ozone precursors are predicted.

The MBUAPCD thresholds for PM_{10} only apply to onsite emissions of PM_{10}. These would include wood smoke emissions. The addition of new residences for all phases could result in significant emissions from wood burning in open-type fireplaces. Use of low-emitting wood burning devices would mitigate this impact and should be considered in the Specific Plan.

Since build-out of the Miravale III Specific Plan would result in emissions of NOx and VOCs that exceed MBUAPCD thresholds, the impact is considered *significant*.

Mitigation Measure AQ-3:

The Specific Plan should incorporate design features that could be implemented to reduce emissions of ozone precursor air pollutants. As discussed above, much of the future project emissions of VOCs would be attributable to the use of consumer products. These are not possible to control at a project level. However, mobile sources would contribute to these VOC emissions. Reducing mobile source and area source emissions from specific plan development would reduce VOC and NOx emissions, but not to a less than significant level. Controlling PM_{10} emissions through requirements for fireplaces and wood heating devices would substantially reduce on-site PM_{10} emissions associated with future specific plan projects.

The project shall apply the following measures to the extent appropriate for the specific land uses proposed:

- Develop a Transportation Demand Management Program with the intent of reducing vehicle trips and vehicle miles traveled associated with build out of the specific plan. Components of this plan may include:
    - Develop parking strategies for commercial and retail uses that reduce single occupant vehicle trips
    - Provide bicycle storage/parking facilities.
    - Provide shower/locker facilities in light industrial and office uses.
    - Provide onsite or near site child care centers for large employment centers.
    - Develop park-and-ride lots.
    - Provide opportunities to include or increase transit service to the plan area

- Include plans to incorporate safe and efficient modes of bicycle and pedestrian transportation. Bicycle routes and pedestrian paths should include amenities such as signs and traffic signal activation (e.g., loop activators).
- Identify energy efficiency goals for new developments that would conserve energy beyond requirements of the State Title 24 building code.
- Provide exterior electrical outlets on new buildings that encourage use of electrical landscape equipment.
- Prohibit open wood burning fireplaces in new residences unless they are natural gas-fired or EPA certified wood heaters that meet EPA's particulate emission standard of 7.5 grams per hour.

Impact AQ-4: **Local Carbon Monoxide Concentrations**
Development of the project would result in higher traffic volumes that could exceed significance thresholds established by the MBUAPCD. This would be a ***potentially significant impact.***

Emissions thresholds established for carbon monoxide apply to direct or stationary sources. Emissions of carbon monoxide (CO) emitted from traffic generated by the project are first evaluated by assessing the impacts of specific plan-generated traffic on existing and future traffic conditions. The MBUAPCD guidelines require CO hotspot analysis under the following project conditions:

- Intersections where the Level of Service (LOS) would degrade below D

- Volume to capacity ratio increases by 0.05 at LOS E or F intersections

- The delay at LOS E or F intersections increases by 10 seconds or more

- Reserve capacity at unsignalized LOS E or F intersection decrease by 50 or more

Highest CO concentrations typically occur during the winter where traffic congestion occurs. Congested intersections with high volumes of traffic could cause CO “hot spots”, where localized high concentrations of CO occur. This specific plan area is located in a fairly rural

setting where traffic volumes are much lower than urban settings such as Salinas. The highest CO level measured in the District, which is representative of more urban settings, is well below the State standards.

The traffic study for the specific plan evaluated operations at intersections in the area. Several intersections with stop sign controls were predicted to have LOS E or F conditions in the future. However, these intersections would not have large enough volumes to warrant a CO "hot spot". The degraded LOS is the result of a single approach being delayed by a Stop sign. Mitigation measures were identified by the Traffic Engineer to improve the LOS to an acceptable level. As a result, modeling of CO concentrations was not conducted to analyze the specific plan impacts. CO impacts associated with acceptable intersection operation would not exceed State or federal ambient air quality standards. As a result, the impact is considered l*ess than significant.*

Mitigation Measure AQ-4: None required.

Impact AQ-5: **Project Stationary Sources**
The Miravale III project does not include any known light industrial or commercial uses with potential air pollutant sources that could adversely impact adjacent or nearby residences proposed as part of the project. This would be a ***less-than-significant impact.***

Stationary sources of air pollutants that could be associated with uses of the light industrial or commercial uses have not been identified. Light industrial or commercial uses could include sources of air pollution that may adversely affect sensitive receptors such as nearby proposed residences. Such common sources are emergency generators that use diesel fuel, dry cleaning operations, gas stations, and truck loading areas. The exact nature of possible on-site stationary sources cannot be determined at this time; thus specific air impacts from these potential sources to future occupants of project cannot be estimated. However, these types of sources may require construction and operational permits from the MBUAPCD, which would include new source review and possible application of Best Available Control Technology emission control measures. Since they would need to comply with all applicable MBUAPCD regulations, regulated stationary on-site sources are generally not considered to have a significant air quality impact. Stationary sources that are exempt from MBUAPCD permit requirements because they fall below emission thresholds for permitting would not be considered to have a significant air quality impact. For this reason, this impact is considered *less-than-significant*.

Mitigation Measure AQ-5: None required.

Impact AQ-6*:* **Nuisances and Odors**
The project would not include any activities that are typical sources of objectionable odors. However, future agricultural activities adjacent to the west-northwest of the site could affect some planned residences. This would be a ***significant impact***.

Typical sources of objectionable odors include chemical plants, sewage treatment plants, large composting facilities, rendering plants, and other large industrial facilities that emit odorous

compounds. This specific plan would not include any such activities and thus would not create objectionable odors. The project is not considered to create significant odors.

Land uses near the specific plan area are generally vacant undeveloped land or lands used for agricultural uses. Vacant or undeveloped lands with no approved future uses do not pose a potential for nuisances caused by odors or dust generation. The plan would include residences along the western boundary that would be adjacent to active farming lands. Agricultural activities could result in short-term nuisances that could affect these lands. The most common nuisance could be blowing dust. The project would lie downwind of these fields most of the time, especially during spring and summer when northwest winds are persistent. New residences may experience frequent episodes of dust blowing across their property. This would result in conflicts between existing agricultural and new residential uses. As a result, this would be considered a ***significant impact***.

Mitigation Measure AQ-6: Include buffers and vegetation to reduce wind blown dust from adjacent agricultural fields.

The specific plan should include an adequate buffer with planted trees that would reduce wind blown dust from active agricultural field that border the western portion of the site adjacent to planned residential uses.

Impact: **Cumulative Air Quality Impacts**

The specific plan consists of mostly residential with commercial retail uses and schools that were found by AMBAG to be consistent with the 2004 regional forecasts and the Air Quality Management Plan; therefore, it would not conflict with regional efforts to attain and maintain ambient air quality standards. Projects developed under the specific plan may have individually significant impacts that may not be mitigated to a less than significant level. As a result, the specific plan may contribute significantly to a ***significant cumulative*** air quality impact.

Specific plans are evaluated for cumulative impacts both by determining the consistency of the proposed project with the applicable regional air quality plan and the specific plan's individual impacts to air quality.

The MBUAQMD *2004 Air Quality Management Plan for the Monterey Bay Region* (AQMP) addresses attainment of the State ozone standard. MBUAPCD has included emissions related to population growth in the AQMP using projections adopted by the Association of Monterey Bay Area Governments (AMBAG). For this specific plan, consistency with population forecasts is determined by comparing plan build-out population at the year of project completion with the appropriate five-year forecast increment for the jurisdiction that the project is located (i.e., Soledad). Projects or plans that would not cause the estimated cumulative population to exceed forecasts are considered consistent with air quality planning efforts. According to AMBAG, this project is consistent with the 2004 regional forecasts for Monterey County and the Air Quality Management Plan. A letter from AMBAG documenting the consistency determination is included as Attachment 2.

As described in impact AQ-3, individual projects developed could have significant air quality impacts with respect to direct and indirect emissions of ozone precursor pollutants. These impacts are typically identified at the time project-level analyses are conducted. Current modeling indicates the potential for projects to have VOC emissions in excess of the MBUAPCD thresholds. Therefore, this was identified as a potentially significant impact. Mitigation measures to reduce this impact (i.e., Mitigation Measure AQ-3) were suggested to apply to the entire specific plan. Because much of the emissions from projects would be associated with use of consumer products that cannot be mitigated, the impact could be considered significant and unavoidable. This represents a potentially significant cumulative impact to air quality.

Attachment 1

URBEMIS2002 MODEL OUTPUT

Attachment 2

AMBAG CONSISTENCY LETTER

TECHNICAL APPENDIX T-3

Preliminary Biological Assessment Report (DD&A)

June 18, 2008

Don Fleming
Community Development Director
City of Soledad
248 Main Street
Soledad, CA 93960
(831)678-3963 Ext. 114

Subject: Preliminary Biological Assessment Report for the Proposed Miravale Phase III Specific Plan, City of Soledad, CA.

Dear Mr. Flemming,

Thank you for providing Denise Duffy & Associates, Inc. (DD&A) with the opportunity to provide additional environmental services for the proposed Miravale Phase III Specific Plan in the City of Soledad, CA. The purpose of this Preliminary Biological Assessment is to identify the potential occurrence of special-status plant and wildlife species, and sensitive habitats at the project site, characterize the existing biotic resources located in the area, and discuss potential project impacts to those resources. In addition, this report recommends measures to avoid or reduce any potential impacts that have been identified.

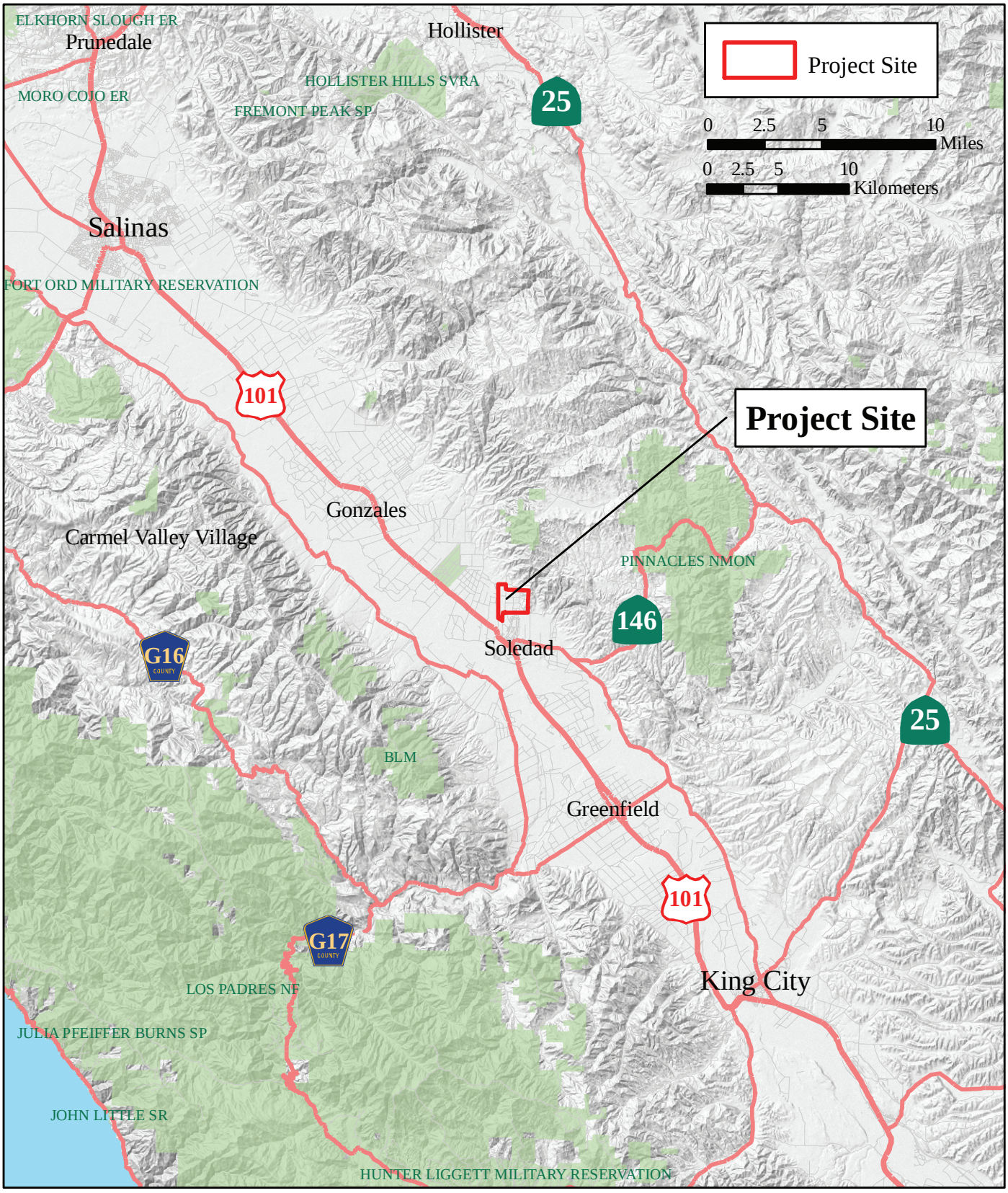
Project Location

The project is located within unincorporated lands of Monterey County (County) on the northern edge of the City of Soledad, approximately 35 miles southeast of the Monterey Peninsula and 85 miles southeast of the San Francisco Bay Area (Figure 1). The 920-acre project site is generally between San Vicente Road and Orchard Lane and is surrounded by agricultural land to the north and west, an existing residential subdivision to the south, and undeveloped foothills of the Gabilan Mountain Range to the east.

The City of Soledad is located in the Salinas Valley; downtown Soledad is located approximately 1 mile south of the project site. Two freeway interchanges connect the local surface streets to Highway 101, providing access to the remainder of the County. These interchanges are located 1.75 miles south and 0.5 mile southwest of the project. The Salinas River is located 1.25 miles south of Metz Road, which is located 1.25 miles south of the project site (2.5 miles to Salinas River from project site).

Project Description

The project consists of the development and implementation of the Miravale Phase III Specific Plan. The Specific Plan calls for a mixed-use development including 1,470 single-family residential units, 2,730 multi-family residential units (includes affordable housing, workforce housing, and senior housing units), 120 hotel rooms, 275,000 square feet of retail commercial space and an 18-hole golf course. Conceptual



N	Vicinity Map	Figure 1

plans include a variety of residential types, including apartments, townhouses, and attached homes on small and large lots (Figure 2). The project also proposes three school sites (2 elementary schools and 1 middle school), a fire and police substation, a recycled water plant, and approximately 75 acres of open space and recreation areas, including parks, playgrounds, and a trail system.

The project site is zoned for farmland and permanent grazing uses and is currently being used for agricultural cultivation. Large portions of the site are fallow. The project site includes two existing single family units, which will be removed as part of the proposed project.

Methods

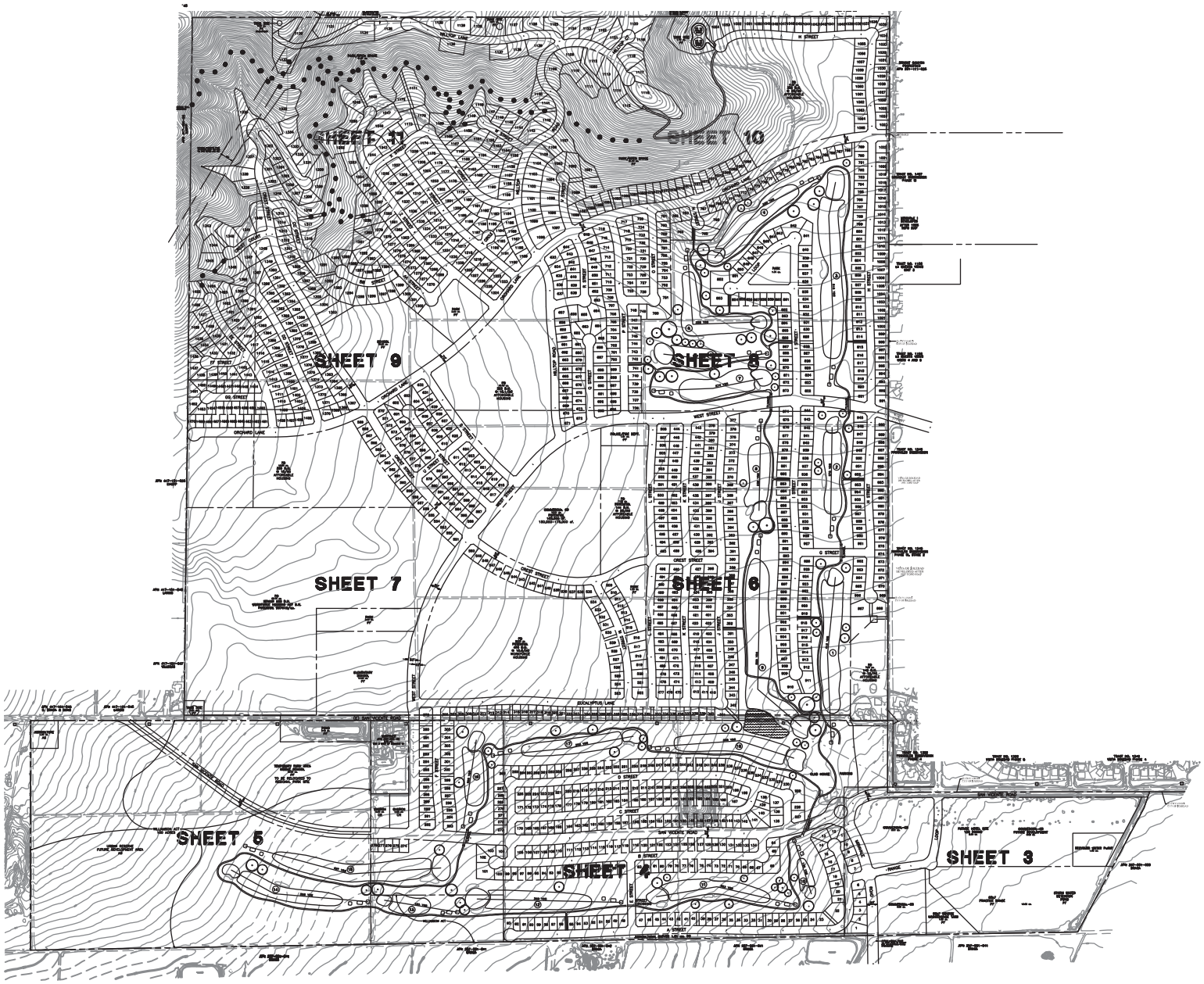
Special-status Species

The project site was surveyed for special-status plant and wildlife species, and appropriate habitat for these species. Special-status species are those plants and animals that have been formally Listed or Proposed as Endangered or Threatened, or are Candidates for such listing under the federal Endangered Species Act (ESA) or the California Endangered Species Act (CESA). Listed and Proposed species are afforded protection under these acts. Plants on the California Native Plant Society (CNPS) lists 1A, 1B, and 2 are also treated as special-status species, as well as CDFG species of special concern. Species of special concern are those that face extirpation in California if current trends continue. Although they have no special legal status, these species (and federal species of concern) are given management consideration whenever possible. Impacts to these species may be considered significant according to the California Environmental Quality Act (CEQA).

In order to determine which special-status species are known or have the potential to occur at the proposed Miravale III project site, California Natural Diversity Data Base (CNDDB) occurrence records for the Soledad quad and all surrounding quads (9 quads total) were reviewed. In addition, the United States Fish and Wildlife Service (USFWS) list of federally protected species known to occur in County was reviewed. DD&A also contacts other knowledgeable biologists familiar with the region for any additional occurrence information that may not appear in the CNDDB. From these sources, combined with personal knowledge and experience, a list of special-status plant and wildlife species known, or with the potential to occur, in the vicinity of the project site was compiled. Appendix A lists these species along with their legal status, habitat requirements, and a brief statement of the likelihood to occur. Figure 3 presents the nearest occurrence records for special-status plant and wildlife species.

Sensitive Habitats

The project site was surveyed for sensitive habitats. Sensitive habitats include riparian corridors, wetlands, habitats for legally protected species and California Department of Fish and Game (CDFG) species of special concern, areas of high biological diversity, areas providing important wildlife habitat, and unusual or regionally restricted habitat types. Habitat types considered sensitive include those protected on the CNDDB's working list of "high priority" habitats (i.e. those habitats that are rare or endangered within the borders of California) (Holland 1986; CDFG 1997) and those that are Critical Habitat in accordance with the Endangered Species Act

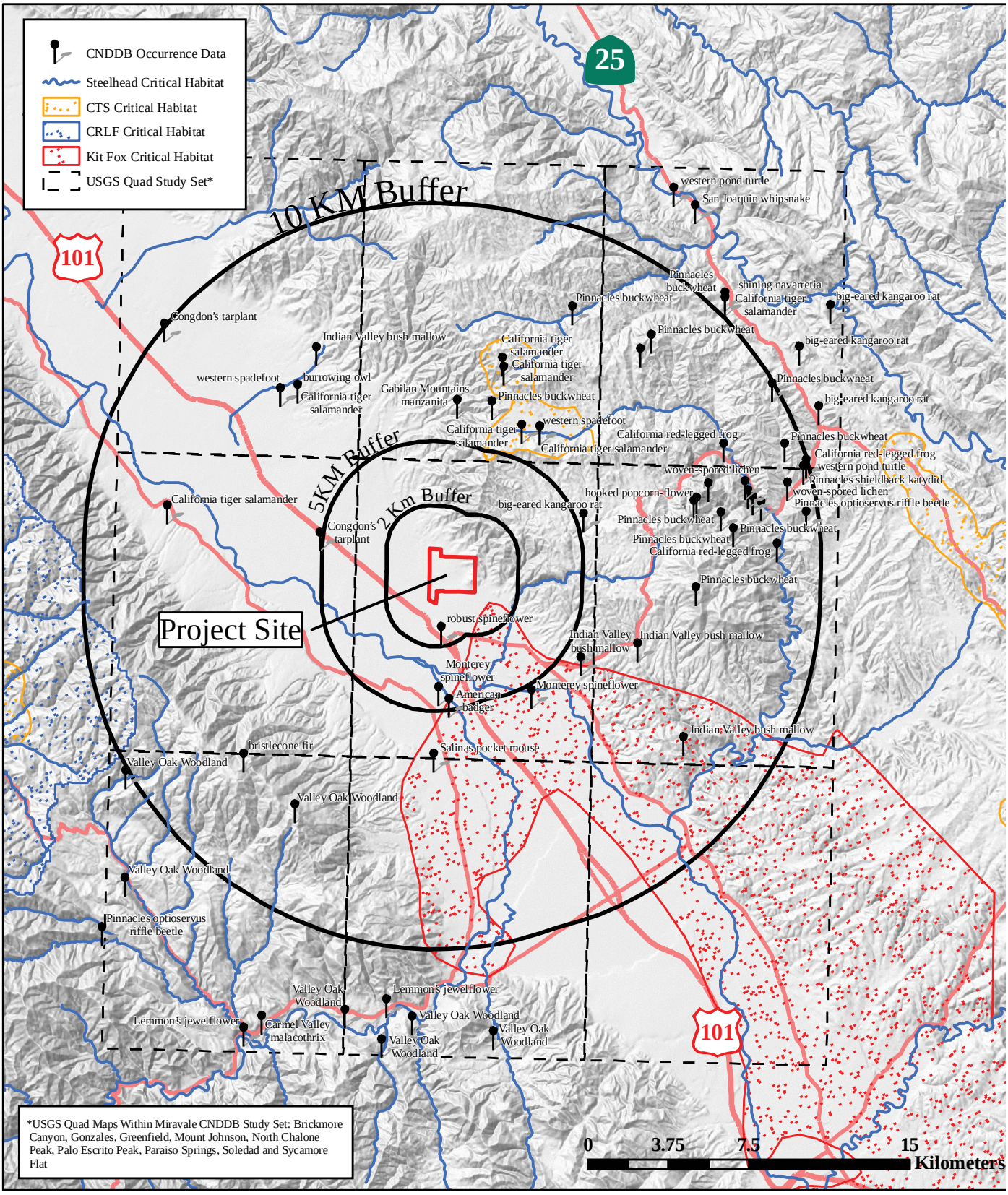


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Miravale Phase III Specific Plan Site Plan Map

Figure 2

DENISE DUFFY & ASSOCIATES, INC.



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CNDDB Occurrence Data Map

Figure 3

Botany

Also reviewed were habitat and distribution information in local and state floras (Howitt and Howell 1964, 1973; Munz and Keck 1973; Hickman 1993; Matthews 1997). Current status information for plant species protected as Threatened or Endangered under the federal ESA and for federal Proposed and Candidate species was obtained from USFWS (2007). The CNPS Inventory (Tibor 2002) was reviewed to identify species on CNPS Lists 1 and 2.

The plants present within the project site were surveyed on more than one occasion. All plant species were identified to the intraspecific taxon necessary to exclude them as being special-status using keys and descriptions in Hickman (1993) and Matthews (1997). Scientific nomenclature for plants in this report follows Hickman (1993); common names follow Matthews (1997). A list of plants observed within the project area is included in Appendix G.

Habitats within the project site were characterized during field surveying. Data was recorded on physiognomy of the vegetation and on dominant and characteristic species, as well as basic ecological factors, including topography, slope, aspect, soil type, hydrologic regime, and evident disturbance. The generalized vegetation classification schemes for California of Holland (1986) and Sawyer and Keeler-Wolf (1995) were consulted in classifying the vegetation of the project site. The final classification and characterization of the vegetation of the project site is based on field observations.

Wildlife

A focused review of literature and data sources was conducted in order to determine which special-status wildlife species have potential to occur at the proposed project site, and field surveys were conducted on several occasions. Current agency status information was obtained from USFWS (2007) for species protected as Threatened or Endangered, as well as Proposed and Candidate species for listing, under the federal ESA. Agency status information was obtained from CDFG (2007) for species protected as threatened or endangered by the state of California under the CESA, or protected as "species of special concern" by CDFG. In addition, the following literature and data sources are standard reference used in document preparation: CDFG reports on special-status wildlife (Remsen 1978; Williams 1986; Jennings and Hayes 1994; Thelander 1994); California Wildlife Habitat Relationships (CWHR) species-habitat models (Zeiner et. al. 1988, 1990a, 1990b); as well as general wildlife references (Stebbins 1985 and 2003, Peterson, 1990, Sibley 2002, etc.). A list of all special-status species reported to occur in the vicinity of the project site was compiled by review of the CNDDB (within the Soledad quad or any surrounding quad) and USFWS species-list, is presented in Appendix A. A list of all wildlife species observed within project boundaries is included as Appendix H.

Federal Laws and Regulations

Federal Endangered Species Act

Provisions of the federal Endangered Species Act (ESA) of 1973 (16 USC 1532 *et seq.*, as amended) protects federally listed threatened or endangered species and their habitats from unlawful take. Listed species include those for which proposed and final rules have been published in the Federal Register U.S. Fish and Wildlife Service or NOAA Fisheries (formerly known as the National Marine Fisheries Service). The ESA is administered by the USFWS and NOAA Fisheries. In general, NOAA Fisheries is responsible for the protection of ESA-listed marine species and anadromous fish, whereas other listed species are under USFWS jurisdiction.

Federal Candidate species are "taxa for which (USFWS) has on file sufficient information on biological vulnerability and threats to support issuance of a proposed rule to list, but issuance of the proposed rule is precluded." Federal Candidate species are not afforded formal protection, although USFWS encourages other federal agencies to give consideration to Candidate species in environmental planning. In 1996, the USFWS discontinued the Category 3 and 4 classifications for federal Candidate species (USFWS, 1996). Species either are identified as Candidate species with a listing priority classification, designated as federal "species of concern," or are no longer given any federal status.

Section 9 of ESA prohibits the take of any fish or wildlife species listed under ESA as endangered. Take, as defined by ESA, is "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." Harm is defined as "any act that kills or injures the species, including significant habitat modification." In addition, Section 9 prohibits removing, digging up, and maliciously damaging or destroying federally listed plants on sites under federal jurisdiction. Section 9 does not prohibit take of federally listed plants on sites which are not under federal jurisdiction. If there is the potential for take of a federally listed species, a Section 7 (federal agency) or Section 10 (private land owner) USFWS Incidental Take Permit may be required to authorize the "incidental take" of that species. Federal agency actions include activities that are on federal land, conducted by a federal agency, funded by a federal agency, or authorized by a federal agency (including issuance of federal permits).

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918 prohibits killing, possessing, or trading migratory birds except in accordance with regulation prescribed by the Secretary of the Interior. Most actions that result in taking or in permanent or temporary possession of a protected species constitute violations of the MBTA. The USFWS is responsible for overseeing compliance with the MBTA.

Wetlands and Waters of the U.S.

Natural drainage channels and wetlands are considered Waters of the United States (Waters). The U.S. Army Corps of Engineers (ACOE) regulates the filing or grading of such Waters under Section 10 o the Rivers and Harbors Act and Section 404 of the Clean Water Act. The extent of jurisdiction within drainage channels is defined by Ordinary High Water (OHW) marks on the banks of the feature. Jurisdictional wetlands are delineated by the presence of hydrophytic soils, hydrology, and vegetation. Activities that involve discharge or fill into jurisdictional waters are subject to the permit requirements of the ACOE. Discharge permits are typically issued on the condition that the project proponent provides mitigation which results in no net loss of wetland function or value. In addition to individual discharge permits, he ACOE issues nationwide permits applicable to certain activities. Under the nationwide permits, discharge of fill must e minimized to the extent practicable. No discharge permit can be issue until the Regional Water Quality Control Board (RWQCB) issues a certification (or waiver) that the proposed activity will meet state water quality standards. The RWQCB is also responsible for enforcing National Pollutant Discharge Elimination System (NPDES) permits, including the General Construction Activity Storm Water Permit.

State Laws and Regulations

California Endangered Species Act

The California Endangered Species Act (CESA) was enacted in 1984. The California Code of Regulations (Title 14, Section 670.5) lists animal species considered endangered or threatened by the state. Section 2090 of CESA requires state agencies to comply with endangered species protection and recovery and to promote conservation of these species. Section 2080 of the Fish and Game Code

prohibits "take" of any species that the commission determines to be an endangered species or a threatened species. "Take" is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." It does not include habitat destruction in the definition of take. A Section 2081 Incidental Take Permit from the CDFG is required to "take" any state listed species.

Native Plant Protection Act

The California Native Plant Protection Act (NPPA) of 1977 directed the CDFG to carry out the legislature's intent to "preserve, protect and enhance rare and endangered plants in the state." The Act prohibits importing rare and endangered plants into California, taking rare and endangered plants, and selling rare and endangered plants. The CESA and NPPA authorized the California Fish and Game Commission to designate endangered, threatened and rare species and to regulate the taking of these species (§2050-2098, Fish and Game Code). Plants listed as rare under the NPPA are not protected under CESA.

California Fish and Game Code

CDFG has jurisdiction over the bed and bank of natural drainages according to provisions of Section 1601 and 1603 of the California Fish and Game Code. Activities that would disturb these drainages are regulated by CDFG via a Stream bed Alteration Agreement. Such an agreement typically stipulates certain measures that will protect the habitat values of the hydrologic feature being impacted.

Raptors (e.g., eagles, hawks, and owls) and their nests are protected under both federal and state laws and regulations. Section 3503 of the CDFG Code prohibits the killing, possession, or destruction of bird eggs or bird nests. Section 3503.5 and 3513 prohibit the killing, possession, or destruction of all nesting birds (including raptors and passerines). Section 3503.5 states that it is "unlawful to take, possess, or destroy the nest or eggs of any such bird except otherwise provided by this code or any regulation adopted pursuant thereto." Section 3513 prohibits the take or possession of any migratory nongame birds designated under the federal MBTA. Section 3800 prohibits take of nongame birds.

The classification of Fully Protected was the state's initial effort in the 1960's to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish (Section 5515), mammals (Section 4700), amphibians and reptiles (Section 5050), and birds (Section 3511). Most Fully Protected species have also been listed as threatened or endangered species under the more recent endangered species laws and regulations. Fully Protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

The CDFG also maintains a list of animal "species of special concern," most of which are species whose breeding populations in California may face extirpation if current population trends continue. Although these species have no legal status, the CDFG recommends considering these species during analysis of proposed project impacts to protect declining populations and avoid the need to list them as endangered in the future.

The Natural Heritage Division of the CDFG administers the state Rare Species Program. The CDFG maintains lists of designated endangered, threatened, and rare plant and animal species. Listed species either were designated under the NPPA or designated by the Fish and Game Commission. In addition to recognizing three levels of endangerment, the CDFG can afford interim protection to Candidate species while they are being reviewed by the CDFG Commission.

Other State Conservation Programs

Under provisions of Section 15380(d) of CEQA, the project lead agency and CDFG, in making a determination of significance, must treat non-listed plant and animal species as equivalent to listed species if such species satisfy the minimum biological criteria for listing. In general, the CDFG considers plant species on List 1 or 2 of the California Native Plant Society's (CNPS) *Inventory of Rare and Endangered Vascular Plants of California* (Tibor 2001) as qualifying for legal protection under this CEQA provision. Species on CNPS List 3 or 4 may, but generally do not, qualify for protection under this provision.

Surveying Personnel

DD&A was contracted to assess the potential presence of special-status plants, animals, and/or habitats within the proposed Miravale III residential development in the City of Soledad, CA. Prior to conducting the site assessment, DD&A reviewed all available site plans and created a GIS figure presenting all California Natural Diversity Database (CNDDB) reported occurrences of special-status species within 10 kilometers of the project site (Figure 3).

David Keegan, DD&A Senior Wildlife Biologist, conducted an initial site visit on July, 19, 2006 with the project engineer (Jim Wurtz, Bestor Engineers), and was onsite between approximately 1000-1300 hours (note: other DD&A staff present included Brett Becker, Tyler Potter, and Elizabeth Guzman). David Keegan and Josh Harwayne, DD&A Senior Environmental Scientists, conducted a site review on July 28, 2006, and were onsite between approximately 1000-1500 hours; a preliminary wetland assessment was completed. As the proposed development site is relatively large (920-acres), the site was reviewed via meandering transects. All data were recorded on site plans and/or aerials and in "Rite-in-the-rain" notebooks. Site photographs were recorded using a digital camera.

DD&A contracted Don Roberson (noted Monterey Bay Ornithologist) to assess the "reservoir" portion of the Miravale III site for the potential presence of nesting bank swallows *(Riparia riparia)*. David Keegan and Don Roberson visited the site on August 10, 2006 for approximately 2.5 hours.

DD&A contracted Mark Allaback (Wildlife Biologist) and David Laabs (Wildlife Biologist) of Biosearch to prepare studies on a number of species, including: presence/absence of the Salinas pocket mouse *(Perognathus inornatus psammolphilus*) via a small mammal trapping study (Appendix B); preparation of a San Joaquin Kit Fox *(Vulpes macrotis mutica*) Early Evaluation Report for USFWS review (Appendix C); California tiger salamander Habitat Assessment Report (Appendix D); and, Protocol-level Western burrowing owl *(Athene cunicularia*) surveys at the site (Appendix F). Small mammal trapping and San Joaquin Kit fox habitat evaluation occurred August 28-September 1, 2006. David Keegan, Mark Allaback, and David Laabs were onsite together on August 28, 2006 from 1800-2100 hours to design and initiate the study. David Keegan baited the traps on August 29 and 30th, 2006, requiring approximately 3 hours just before sunset each evening (1700-2000 hours per visit). David Keegan and David Laabs checked and closed the traps during 0700-1000 hours on August 30th and 31th, 2006. David Laabs and Mark Allaback checked and closed the traps during 0700-1000 hours on September 1, 2006, then discontinued the study and removed all associated materials. See Appendix B for additional information. The site visits conducted in the course of the small mammal trapping were sufficient to prepare the SJKF Early Evaluation Report for USFWS (see Appendix C).

David Laabs conducted an additional site visit on October 17, 2006 to assess all onsite aquatic basins for the potential presence of California tiger salamander (*Ambystoma californiense*, CTS), and was onsite approximately 3 hours (Appendix C). Based on the USFWS review of the habitat assessment, protocol-level surveys for this species were initiated by David Keegan on May 8, 2007 (initial round of aquatic

sampling at each basin); DD&A biologists were onsite for approximately 5 hours. A second round of aquatic sampling occurred on May 24, 2007; DD&A biologists were onsite for approximately 5 hours. The third round occurred on June 12, 2007; DD&A biologists were onsite for approximately 5 hours. DD&A biologists completed a fourth sampling event at the onsite reservoir on June 26, 2007 to capture CTS larvae and/or paedomorphs and to collect tissue from each individual for genetic analysis at the Shaffer Lab (U.C. Davis). Mark Allaback was also present on June 12, 2007.

The first non-breeding season burrowing owl survey was conducted on January 18, 2007; DD&A and Biosearch biologists were onsite for approximately 4 hours. The second survey was conducted January 31, 2007; DD&A and Biosearch biologists were onsite for approximately 4 hours. The first breeding season survey (third survey total) was conducted on June 26, 2007; biologists were onsite for approximately 4 hours. The second and final breeding season survey was completed on July 11, 2007; biologists were onsite for approximately 4 hours. DD&A and Biosearch biologists were onsite for approximately 4 hours for the final survey, with an additional 7 hours dedicated to mapping ground squirrel burrow clusters present sporadically throughout the site. The results of these surveys are presented in Appendix F.

Results:

General Site Characteristics

The 920-acre Miravale III site is located immediately north of the edge of urban development associated with the City of Soledad and extends into the Gabilan Range foothills in the northern portion of the site. The Salinas River is located approximately 2.5 miles south of the project site. The Salinas River Watershed covers approximately 4,600 square miles of San Luis Obispo and Monterey counties. The Salinas River flows northwesterly through the Salinas valley, emptying into the Monterey Bay National Marine Sanctuary. The Salinas Valley lies in the Coast Ranges and is defined to the west by the Sierra de Salinas and to the east by the Gabilan Range. The valley is approximately 10 miles wide and 155 miles long. The primary land uses in the Salinas Valley (Salinas River watershed) are row crops, vineyards, pasture and grazing lands, as well as urban areas, military bases and public open space. The County portion of the watershed includes the Salinas River and its primary tributaries, the Arroyo Seco, Nacimiento, and San Antonio rivers.

The project site is bisected by San Vicente Road. Approximately 20% of the project site is located to the west of San Vicente Road, with the remaining 80% located to the east of this feature (Figure 4). West of San Vicente Road, all lands present within the proposed project boundaries currently support active agricultural production and the associated network of irrigation channels/ditches/basins. To the east of San Vicente Road, the vast majority of the proposed project site currently supports active and fallow agricultural land uses (and associated irrigation ponds and channels). In addition to active and fallow agricultural lands present to the east of San Vicente Road, the northwestern portion of the site abruptly transitions into mixed grasslands as proposed development extends into the Gabilan Range foothills. An existing farm road runs along much of the border between agricultural portions of the site and the foothill/grassland portions of the site.

Habitat Types

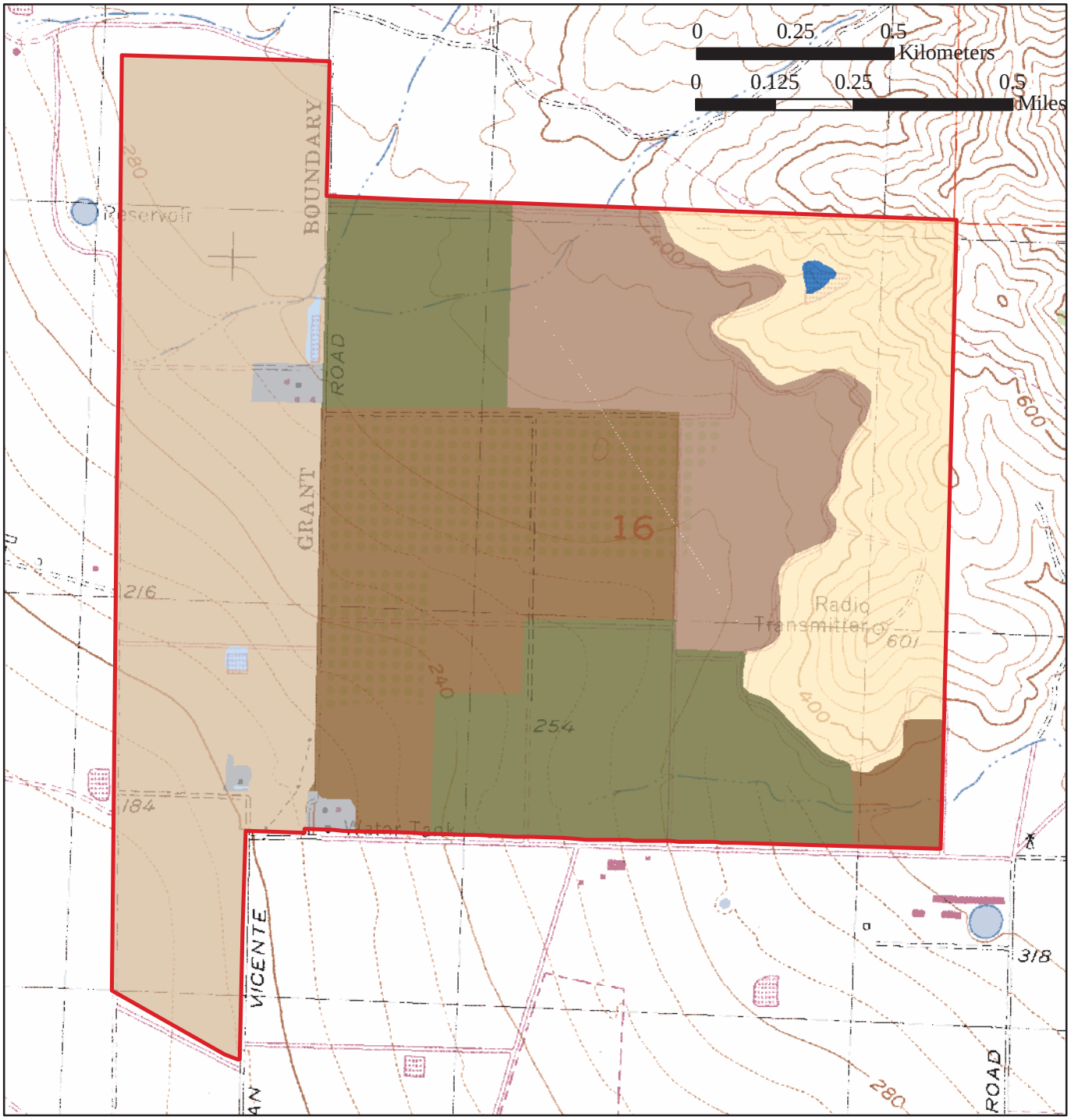
Habitats present within project boundaries can be divided into seven generalized types: active agriculture, fallow agriculture, mixed grassland, rocky-outcrops, “reservoir,” agricultural basins, and “home-sites” (including residential homes, out-buildings, driveways, etc.).

Active Agriculture

Agriculture is the dominant land use in the vicinity of the project site, and approximately 461.7 acres of the site currently supports active agricultural production (Figure 4, Figures 5a and 5b). As agricultural areas are generally maintained to eradicate non-desirable vegetation (anything but the focus crop), plant diversity is typically quite low in these areas. As such, those portions of the site currently supporting grape production contain limited amounts of understory development. The limited amount of ground vegetation that persists within active agricultural portions of the site are dominated by black mustard (*Brassica nigra*), dandelion (*Agoseris grandiflora*), and bristly ox tongue (*Picris echioides*). Please note that active agricultural portions of the site contain a network of dirt-roads; a linear windbreak of non-native trees (Tamarisk [*Tamarisk* sp.] and Eucalyptus [*Eucalyptus* sp.]) is present along the dirt road separating the east side of the site from San Vicente Road. Roads within this habitat type are typically denuded and/or support only ruderal vegetation species. Agricultural areas represent potential wildlife dispersal and foraging habitat and may provide connectivity to adjacent habitats. Many avian species are attracted to active grapevines. In addition, some wildlife species may persist in active agricultural lands despite eradication efforts, such as California ground squirrel (*Spermophilus beecheyi*) and Botta's pocket gopher (*Thomomys bottae*). The presence of ground squirrel burrows within active agricultural lands may provide habitat for other denning wildlife species, including Western burrowing owls (*Athene cunicularia*) and San Joaquin kit fox (*Vulpes macrotis mutica).* The presence of large mature Eucalyptus *(Eucalyptus sp.)* and Tamarisk (*Tamarix sp.*) trees along San Vicente road represents potential nesting/denning sites for bats and/or raptors.

Fallow Agriculture

For the sake of this report, the "fallow agriculture" habitat type includes all portions of the site currently supporting arable lands that are not under rotation, and/or lands which recently supported crops but are not currently being used for that purpose. Approximately 314.8-acres of fallow agricultural lands are present within project boundaries. Fallow agricultural portions of the site are currently dominated by mustard and ripgut brome (*Bromus diandrus*). As presented on Figure 4, approximately 130.3-acres (40%) of the "fallow agriculture" habitat onsite has been disked in the past several years, with the remaining 192.9-acres (60%) undisced. Disked fallow agricultural portions of the project site currently support very limited numbers/amounts of small mammal burrows and/or mature vegetation, but would likely support greater amounts of mature vegetation and small mammal burrows if left fallow. Undisced fallow agricultural portions of the project site currently support relatively mature vegetation and numerous mammalian burrows. Undisced portions of the site were observed to support a variety of wildlife species (California ground squirrel, Botta's pocket gopher, California vole [Microtus californicus], black-tailed jackrabbit [*Lepus californicus*], Brewer's blackbird [*Euphagus cyanocephalus*], red-winged blackbird [*Agelaius phoeniceus*], American crow [*Corvus bracyrhynchos*], etc.) Please note that fallow agricultural portions of the site contain a system of dirt-roads. Roads within this habitat type are typically denuded and/or support only ruderal vegetation species. As noted above in the description of active agricultural areas, a linear arrangement of mature Tamarisk and Eucalyptus trees line the dirt road separating the eastern portion of the site from San Vicente Road. These trees may represent potential bat and/or raptor nesting/roosting sites.



Habitat Classification

- Active Agriculture - Row Crops
- Active Agriculture - Vineyard
- Agricultural Basin
- Disced Fallow Agriculture
- Homeland
- Mixed Grasslands
- Reservior
- Un-disced Fallow Agriculture

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Miravale Project Habitat Map

Figure 4



Photo 1. Active Agriculture on West Side of San Vicente Road



Photo 2. North East View of Mixed Grasslands



Photo 3. Northern View of Fallow Agriculture



Photo 4. South East View from Grasslands, Fallow and Active Agriculture



Photo 5. Typical Active Agricultural Lands East of San Vicente Road (Vineyard)



Photo 6. Typical Disced Fallow Agcriculture

	Site Photos	Figure 5A



Photo 7. Central Agricultural Basin on West Side of San Vicente Road



Photo 8. Northern Agricultural Basin West of San Vicente Road



Photo 9. Southern Agricultural Basin on West Side of San Vicente Road



Photo 10. View of Reservoir from Mixed Grasslands



Photo 11. View of Reservoir With Grasslands and Rocky Outcrops

	Site Photos	Figure 5B

Mixed Grassland

Approximately 141.3-acres of the Gabilan Range-foothill associated portions of the site are included in this habitat description (Figure 5b). This habitat type includes all onsite mixed grasslands and is composed of both introduced grass species and native perennial grasses. Although ruderal plants have reduced native perennial grasses throughout much of the site as a result of past disturbance and the recent removal of grazing (reported to have occurred in 2005 by Mike Mirassou the onsite grower), both native and non-native species remain onsite. Dominant species in the "mixed grassland" habitat type include: wild oat (*Avena fatua*), rattail fescue *(Vulpia myorus)*, soft-chess (*Bromus hordaceous)*, and needle grass (*Nasella sp.)*. Subdominate herbs and/or forbs included naked buckwheat (*Eriogonum nudum*), yarrow (*Achillea millefolium*), Lessingia (*Lessingia* sp.), deerweed (*Lotus scoperious*), and chamise (*Adenostoma fasciculatum*), storksbill (*Erodium botrys*), curly dock (*Rumex crispus*), English plantain (*Plantago lanceolata*), and poison-hemlock (*Conium maculatum)*. Vegetation throughout the grasslands is relatively sparse on south facing slopes. Please note that a limited network of dirt roads is also present within the mixed grassland portions of the site (from past ranching/grazing activities). These roads are typically denuded of vegetation or support limited ruderal species.

In general, grasslands provide an important foraging resource for a wide variety of wildlife species. The invertebrate fauna of grasslands is diverse and abundant, and many species perform important regeneration functions, such as pollinating grasses and wildflowers. The grasses and forbs in the grasslands produce abundant seeds, roots, and leaves, providing food for many wildlife species. Common wildlife species that eat foliage and seeds which likely occur in the grasslands within the project area include: mourning dove (*Zenaida macroura*), savannah sparrow (*Passerculus sandwichensis*), red-winged blackbird, house finch (*Carpodacus mexicanus*), American goldfinch (*Carduelis tristis*), Botta's pocket gopher, California vole, and California ground squirrel. The numerous insects and invertebrates that thrive on grassland plants attract vertebrate species, such as the Western fence lizard (*Sceloporus occidentalis)*, American robin (*Turdus migratorius*), and Brewer's blackbird. Passerine birds, typical of grasslands include: Western bluebird (*Sialia mexicana*), Western meadowlark (*Sturnella neglecta*), and several swallow species (*Hirundo and Petrochelidon* sp.).

Rocky Outcrops

Dozens of various-sized rocky outcrops are present throughout the foothill/grassland portions of the project site (particularly near the onsite reservoir). These outcrops vary in size from <5 square feet to >50 square feet. Vegetative species composition at these rocky outcrops overlaps broadly with the surrounding foothill/grasslands portions of the site, with slight variation. In addition to the dominant vegetative species presented in relation to the foothill portions of the site above, these rocky outcrop areas also support sticky monkey flower (*Mimulus aurantiacus*), coyote bush (*Baccharis* sp.), cudweed (*Gnaphalium* sp.), and Dudleya (*Dudleya* sp.). Small mammal utilization of these areas may differ slightly from surrounding grasslands (i.e. kangaroo rats) and these rocky outcrops provide possible denning and/or basking sites for a variety of wildlife (fox, badger, snakes, raptors, etc.). Mike Mirassou, the current onsite grower, reports that a "rattlesnake den" was observed in the Spring of 2006 in a rocky outcrop located just north of the onsite reservoir. David Keegan observed a rattlesnake at a den entrance associated with a rocky outcrop in 2007. Western burrowing owls were observed utilizing rocky outcrops in the vicinity of the onsite reservoir as a temporary roost while foraging in the early morning hours (personal observation, David Keegan and David Laabs).

Reservoir

As presented on Figure 5b and in Appendix D, an onsite "reservoir" (a.k.a "Pond 1") is situated in the northeast corner of the site at an elevation of 450 feet. This basin is approximately 1.2 acres. Emergent

vegetation is present in approximately 5% of its surface. It is permanent and is impounded with a large berm. The depth of this pond was approximately 25 feet in July, 2007. Uplands surrounding this reservoir consist of annual grasslands and rocky outcrops. Water from this reservoir is pumped for agricultural use, and water levels may fluctuate widely throughout the year. Until approximately 5 years ago, the reservoir was utilized as a stock-pond by onsite cattle. Vegetation in this pond is not currently maintained with herbicides and/or pesticides, but rather, is managed through raising and lowering water levels.

The onsite reservoir represents aquatic and fringe wetland habitat and is utilized by a variety of wildlife given the surrounding mixed grassland/foothill habitat. Emergent vegetation at the reservoir is dominated by bulrush (*Typha latifolia*), nut-sedge (*Cyperus eragrostis*) and dock. A relatively low (<12 feet tall) earthen bank is present immediately east and south of the reservoir. The earthen bank separates the "reservoir" and "mixed grassland" habitat types in this portion of the project site. A levee and road separate the southwestern portion of the "reservoir habitat" from adjacent grasslands and agricultural lands. Mixed grasslands and rocky outcrops are present to the north of the site, and the slope of this area exceeds 30%.

Avian species observed at the pond included American kestrel, killdeer (*Charadrius vociferous*), red-winged blackbirds, Brewer's blackbird, brown-headed cowbirds (*Molothrus ater*), cliff swallows, barn swallows, and morning doves (*Zenaida macroura*). Mammalian species observed at the reservoir included California ground squirrel and Botta's pocket gopher (note: several small mammal species included in Appendix H were trapped immediately north of the reservoir). Only one reptile species was observed at the reservoir: Western fence lizard. Although no adult amphibians were observed at the reservoir, hundreds of Pacific treefrog larvae were clearly visible during early site assessments. According to the grower that lives at the property, this pond was drained to remove warm water fish approximately 5 years ago, and no fish have been reintroduced since that time. In addition, no pesticides or herbicides are being applied to the emergent vegetation at this reservoir, and small mammal eradication efforts are not currently undertaken in the surrounding uplands. Given that this reservoir is perennial, free of non-native/invasive aquatic predators and competitors, and is surrounded by appropriate upland/estivation habitat, this site represents a potential breeding location for sensitive and/or listed amphibian species which historically occurred in the area. The presence of tiger salamander larvae in the reservoir was confirmed via aquatic sampling on March 8, 2007; tissue samples were subsequently collected and sent to the Shaffer Lab (U.C. Davis) for genetic analysis where it was determined that these tiger salamanders are between 89-100% non-native (see tiger salamander discussion below for more information).

Agricultural Basins

Three agricultural basins are present within the Miravale III Specific Plan project boundaries west of San Vicente Road; these are referred to as Pond 2, Pond 3, and Pond 4. Each of these agricultural basins are associated with an extensive irrigation network operated to deliver water to the surrounding row crops (Figures 4-5). Each basin was observed to be fully enclosed by silt fencing during aquatic sampling for CTS in May of 2007. Monterey County encourages growers to erect fencing around crops at this time given an e-coli contamination incident in the Salinas Valley in 2006. This fencing is intended to exclude deer, pigs, and other large mammals from entering and potentially contaminating crops.

"Pond 2" is a basin located along San Vicente Road in the northwestern portion of the site. This basin covers approximately 0.5 acres and is situated at 280 feet above sea level. Pond 2 is ephemeral and sandy soils indicate it does not hold water well. Water has not been observed in "Pond 2" during any of the DD&A site visits. An inlet pipe is the hydrologic source for this pond. No emergent vegetation is supported. Upland habitats surrounding Pond 2 are in active agricultural production on three sides.

"Home-sites" are situated to the south. The nearest grassland habitat is approximately 1.0 km to the northeast.

"Pond 3" is a basin in the southwestern corn of the site. This pond covers approximately 0.1 acres and is situated at 180 feet above sea level. This pond has consistently been observed to hold water throughout various DD&A site assessment and may be managed as a perennial water source. Approximately 2% of the surface area supports emergent vegetation. Water levels are expected to be highly variable and the pond is dependent on piped water to fill. Upland habitats surrounding Pond 3 are in active agricultural production on all sides. The nearest grassland habitat is approximately 1.3 km to the east. Ground squirrel burrows are absent from the area surrounding Pond 3; limited pocket gopher burrows were observed.

"Pond 4" is a small basin in the southwestern corner of the site. It covers approximately 0.1 acres and is situated at 80 feet above sea level. This pond has consistently been observed to retain water during DD&A site visits, however, water levels fluctuate widely. The hydrologic source at this site is piped in agricultural run-off. No emergent vegetation is supported at this pond. The banks of this aquatic resource are quite steep; the maximum depth is assumed greater than 10 feet. Upland habitats surrounding Pond 4 are in active agricultural production on all sides. The nearest grassland habitat is approximately 1.8 km to the northeast. Burrowing mammals are largely absent from the area surrounding Pond 4.

As noted in the CTS Habitat Assessment in Appendix D, numerous additional agricultural basins are located outside of project boundaries but within 2km of the project site.

Home-sites

Two "home-sites" (including a labor camp) are present west of San Vicente Road within the Miravale III project site; each of these areas is proposed for future development. Additional home-sites are present immediately adjacent to project boundaries. For the sake of this report, "home-sites" include residential homes, barns, out-buildings, driveways, roads, and any associated landscaping. In general, these home-sites do not support any separate or unique habitats different than those identified above, but they do support mature trees (mixed species composition), and older barns and out-buildings. The presence of older barns and outbuildings within these home-sites presents potential habitat for a variety of raptors (i.e. barn owls) and bat species. Likewise, the presence of mature trees within these home-sites represents potential nesting raptor (and other bird) habitat and may represent potential bat roosting habitat. Please note that "Pond 2" described above is associated with a home-site but is presented as a separate habitat type (agricultural basin) for ease of discussion.

Sensitive Habitats

Based on a review of the CNDDB in combination with the DD&A site assessments, the following sensitive habitat types are present; aquatic resources and federal and state listed wildlife species habitat.

No wetland delineations were undertaken at the Miravale III project site, but a wetland assessment was completed that documented the presence of fringe wetlands. A small vegetated fringe wetland exists adjacent to the onsite reservoir. In addition, fringe wetlands are associated with the agricultural basins to the east of San Vicente Road. Please note that these types of fringe wetlands are not typically ACOE jurisdictional given current regulations regarding Section 404 of the Clean Water Act, but only ACOE may determine their jurisdictionality. While the onsite fringe wetlands are not likely jurisdictional to the ACOE (but subject to ACOE review), impacts to these resources are subject to review under CEQA Impacts to these areas would also be regulated by ESA if any listed or special-status wildlife species utilize these areas as breeding habitat.

As previously noted, tiger salamander larvae and paedomorphs were documented at Pond 1 and tissue samples were collected for genetic analysis by the Shaffer Lab at U.C. Davis (n=22) . The Shaffer Lab documented that these tissue samples were between 89-100% non-native at the specific loci tested; this information was forwarded to USFWS Ventura for their evaluation. USFWS subsequently determined that onsite tiger salamanders are not included within the species "California tiger salamander" and are not afforded protection under ESA (pers. comm.. Doug Cooper, USFWS Ventura). As such, USFWS has declined to take jurisdiction over onsite tiger salamanders.

While the onsite aquatic habitats are not regulated for utilization by hybridized/non-native tiger salamander, these areas provided potential habitat for other regulated amphibian species including California red-legged frog and spadefoot toad. If either of these species is present at any onsite aquatic resource, additional coordination and/or permitting with the regulatory agencies will be required.

Although mixed grassland habitats are not typically considered a "sensitive habitat," San Joaquin kit fox (*Vulpes macrotis mutica*) are assumed present within project boundaries, particularly in the mixed grassland portions of the site. Any impact to a habitat which is known or assumed to support a federally listed wildlife species may represent "take" under the Endangered Species Act. Consultation with USFWS is recommended to satisfy ESA prior to project initiation (i.e. issuance of grading permits). In addition to supporting kit fox, these areas were documented to support the following California species of special concern; American badger (*Taxidea taxus*), Salinas pocket mouse (*Perognathus inornatus psammolphilus*), western burrowing owl (*Athene cunicularia*), loggerheard shrike (*Lanius ludovicianus*), northern harrier (*Circus cyaneus*), and white-tailed kite (*Elanus leucurus*). As such, impacts to grassland habitat would impact a variety of federal and/or state protected species and this habitat; mixed grasslands represent a sensitive habitat under CEQA.

Special-status Plant Species

The CNDDB reports an occurrence of robust spineflower (*Chorizanthe robusta* var. *robusta*) approximately 2 km south of the project site. In addition, the CNDDB reports occurrences of Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*), Indian valley bush mallow (*Malacothamnus aboriginum*), and Gabilan Mountains manzanita (*Arctostaphylos gabilanensis*) within 5 miles of the project site. The CNDDB presents an occurrence of Lemmon's jewelflower (*Caulanthus coulteri* var. l*emmonii*) approximately 10 miles from the project site. The CNDDB presents an occurrence of Jolon's clarkia (*Clarkia jolonensis*) approximately 1.25 east of the project site. The CNDDB does not report the presence of any special-status plant species within or immediately adjacent to proposed project boundaries. Please note that the CNDDB also presents that Monterey spineflower (*Chorizanthe pungens* var. *pungens*) critical habitat is present within 2 km of the project site. DD&A biologists did not observe any special-status plant species within the study site. The only plant species with the potential to occur within the project boundaries, Lemmon's jewelflower and Jolon's clarkia, are discussed below. The following plant species are discussed due to their known or potential presence in the vicinity of the project site and/or their "high profile" local status. Please note that no other special-status plant species are anticipated within project boundaries for the species-specific reasons provided in Appendix A.

Robust spineflower

The robust spineflower is a Federal Endangered species. Robust spineflower is a small annual plant originally found throughout the central coast of California but is currently limited to seven known populations, all occurring in Santa Cruz and Monterey Counties. The robust spineflower is a wiry, annual herb with large notched, white to pinkish flowers growing in a dense cluster. The shrub grows in a variety of postures, from erect to spreading or growing flat along the ground. This species is endemic to sandy soils along the central coast. Robust spineflower is believed to have been extirpated in four of the seven counties where it formerly occurred and is threatened in the remaining areas. Robust spineflower

occurs primarily in clay-rich valley soils that flood in winter and dry hard in summer. Habitats within much of the historic range of this species have been converted to agriculture or urban expansion. This is an annual herb which typically blooms between April and September.

Species potential presence within project boundaries:
The CNDDB reports an occurrence of this species approximately 1.75 km south of the project site (Figure 3). The project site does not support appropriate sandy soils for this species. DD&A biologists did not identify any robust spineflower within project boundaries, and did not identify appropriate habitat within project boundaries. This species is not present at the Miravale III site.

Monterey spineflower

Monterey spineflower is Federal Threatened species. This species is also recognized as rare by the CNPS as a List 1B species. According to the CNDDB and USFWS records, the species occurs from the Monterey Peninsula northward along the coast to southern Santa Cruz County and inland to the Salinas Valley. The CNDDB lists 21 populations, the largest population occurring on the former Fort Ord lands. Monterey spineflower grows in coastal dunes, coastal scrub, and further inland on sandy soils derived from ancient stabilized dunes. This species tends to occur more often on bare, sandy patches where there is little vegetation cover. Dispersal of seeds is facilitated by the spines that help attach the seeds to passing animals. The preference of these species for sandy substrate allows seedlings to establish in areas that are relatively free from competing species. The blooming period is typically from April through June (USFWS, 1995).

Species potential presence within project boundaries:
The CNDDB reports an occurrence of this species approximately 3 km south of the project site, and Monterey spineflower critical habitat is present within 1.5 km of the site (Figure 3). The project site does not support appropriate sandy soils for this species. The DD&A biologists did not identify any Monterey spineflower within project boundaries, and no appropriate habitat is present. This species is not present within Miravale III project boundaries.

Congdon's tarplant

Congdon's tarplant is a California State Species of Special Concern. Congdon's tarplant is an erect to prostrate, summer-flowering annual herb. Typically, growth begins in mid- to late-spring. The first-formed leaves are often thin, with lower ones often divided into narrow lobes. Secondary clusters of stiff, spine-tipped leaves are soon produced along the main stem and branches. Flowering begins in mid summer and may continue into early autumn. The tiny yellow flowers are borne in small, stalkless, daisy-like flower heads along the upper branches. Each flower head is surrounded by a cluster of rigid, spine-tipped bracts. As the plants gradually dry up and die in autumn, the seed heads shatter. Historically this species was distributed from Contra Costa and Solano counties south to San Luis Obispo County. Annual herb; blooms June-November.

Species potential presence within project boundaries:
The CNDDB reports an occurrence of this species approximately 3 km northeast of the project site (Figure 3). DD&A biologists did not identify this species within project boundaries, and this site does not contain appropriate habitat (flood-prone clayey and/or alkaline soils) for this species. This species is not present within Miravale III project boundaries.

Lemmon's jewelflower

Lemmon's jewelflower is a CNPS List 1 B species. Lemmon's jewelflower is an annual herb associated with open, grassy areas; on hillside slopes and in fields, canyons, and arroyos. Leaves basal with toothed to wavy edge. Flowers contain 5 sepals, and 8 petals. Typical soils include alkaline, shaley clay, sandstone talus, and decomposed serpentine. This species is predominantly found within Valley Grassland community, occasionally in Pinyon-Juniper Woodland, and grows at elevations between 256 - 3904 feet. Blooms March - May.

Species potential presence within project boundaries:
As this species is associated with valley grassland communities, and was not identifiable at the time of the site assessments, it is possible that this species occurs within project boundaries but was not identified. For this reason, it is recommended that a Spring-time (March-May) floristic survey of appropriate portions of the site be conducted to assess the presence/absence of this species within project boundaries.

Jolon's clarkia
Jolon's clarkia is a CNPS List 1 B species. The CNDDB presents the nearest occurrence of Jolon's clarkia approximate 1.25 miles east of the proposed project site. Jolon's clarkia is an annual herb associated with cismontane woodlands, chaparral, scrub, and riparian woodland habitats and edges. Jolon's clarkia is generally less than 2 feet tall, has glabrous and glaucous stems, and pink to lavender inflorescence flecked with red; seeds are grey. This species is generally found between 60-2165 feet elevation, and blooms April to June.

Species potential presence within project boundaries:
The project site does not support or contain cismontane woodlands, chaparral, scrub, or riparian woodland habitats. Jolon's clarkia is assumed to be absent from the Miravale III site given a lack of appropriate habitat for this species.

Indian valley bush mallow

Indian valley bush mallow is California State Species of Special Concern and is a CNPS List 1B species. This species is known to occur in San Diego County, Fresno County, Monterey County, and San Benito Counties. Bush mallow is an herbaceous shrub typically associated with montane chaparral and lower montane coniferous forest. Indian valley bush mallow exhibits a tendency to grow in minor rocky outcrops within a relatively diverse chaparral flora, at elevations ranging from 150-1700 meters. Shrub species; booms April-October.

Species potential presence within project boundaries:
The CNDDB reports an occurrence of this species approximately 4 km southeast of the project site (Figure 3). DD&A biologists did not identify this species within project boundaries, and the project site does not support or contain any chaparral or coniferous forest. This species is not present within project boundaries.

Pinnacles buckwheat

Pinnacles buckwheat (*Eriogonum nortonii*) is a CNPS List 1B species. Pinnacles buckwheat is typically associated with chaparral and valley/foothill grasslands habitats, often with sandy soils, and may be observed on recent burn sites. The elevational distribution of this species is approximately 300-900 meters. Pinnacles buckwheat is an annual herb that typically blooms between May and June.

Species potential presence within project boundaries:

The CNDDB reports several occurrence records of this species associated with Pinnacles National Park, approximately 6 km to the northeast of the Miravale III project site. DD&A biologists did not identify this species within project boundaries. The Miravale project site is located well below the 300 meters in elevation (the lower threshold of Pinnacles buckwheat), and appropriate habitat for this species is not present. This species is not present within Miravale III project boundaries.

Bistlecone fir

Bristlecone fir (*Abies bracteata*) is a CNPS List 1b species. Bristlecone fir is a rare species, endemic to the bottoms of rocky canyons on the west slope of the Santa Lucia Mountains near Monterey and reaches sizes of 90-150 feet tall. This tree has a slender, spire-like form. The bark is reddish-brown with wrinkles, lines and resin vesicles ('blisters'). The branches of this tree (evergreen) are typically downswept.

Species potential presence within project boundaries:
The CNDDB reports an occurrence of this species approximately 5 km southwest of the project site. DD&A biologists did not observe this species within project boundaries. The project site is not located within or adjacent to the Santa Lucia Mountains. No rocky canyons are present, and this conspicuous species was not observed during site assessments. This species is not present within project boundaries.

Gabilan Mountains manzanita

Gabilan mountains manzanita (*Arctostaphylos gabilanensis*) is a CNPS List 1B species. This species of manzanita is endemic to chaparral and chaparral/pine woodland habitats of the Gabilan Mountains of California, along the borders of San Benito and Monterey counties.

Species potential presence within project boundaries:
The CNDDB reports an occurrence of this species approximately 4.5 km north of the Miravale III project site. DD&A biologists did not identify this species within project boundaries. The proposed project site does not contain chaparral and/or pine woodlands, and this species was not observed during the site assessment. This species is not present within Miravale III project boundaries.

Special-status Wildlife Species

The CNDDB reports occurrences of the following special-status species within 10 km of the project site: big-eared kangaroo rat (*Dipodomys elephantinus*), American badger, Salinas pocket mouse, Western spadefoot (*Spea hammondii*), Western burrowing owl, California tiger salamander, and California red-legged frog (*Rana draytonii*), San Joaquin whipsnake (*Masticophis flagellum* ssp. *ruddocki*), and a variety of bat and raptor species. Please note that the CNDDB also reports that California tiger salamander critical habitat is present approximately 3 miles northeast of the project site. The following species are assessed for their potential presence/absence within project boundaries (also see Appendix A). Please note that no other special-status wildlife species included in Appendix A are anticipated within project boundaries for the species-specific reasons provided in Appendix A.

American badger

The American badger is a California State Species of Special Concern. Badgers occupy a diversity of habitats within California. The principal requirements seem to be sufficient food, friable soils, and relatively open, uncultivated grounds. Grasslands, savannas, and mountain meadows near timberline are preferred. Badgers feed primarily of burrowing rodents, such as gophers, squirrels, mice, and kangaroo rats, as well as some insects and reptiles. Badgers also break open bee hives to eat both the brood and honey.

Species potential presence within project boundaries:
The CNDDB reports an occurrence of this species approximately 3.5 km south of the project site. DD&A and Biosearch biologists observed a badger emerge from an onsite den on July 11, 2007. In addition, DD&A and Biosearch observed badger burrows/dens in multiple locations of the grassland portions of the site and noted the presence of "badger diggings" in both grassland and fallow agricultural portions of the site. American badger are therefore known to be present within project boundaries.

Salinas pocket mouse

The Salinas pocket mouse is a California State Species of Special Concern. This species occurs in the Salinas Valley from the vicinity of Soledad south to the vicinity of Hog Canyon near San Miguel. The subspecies was originally described from near Arroyo Seco, approximately 5 mouths to the south of the proposed Miravale III project site. Conversion of natural habitats has occurred throughout much of the range of the subspecies, including in the vicinity of the nearest reported occurrence of this species, and habitat connectively between these sites is virtually non-existent. Little information is available about the specific life history of this species as it has been captured infrequently since initially described in 1937. It has been found in grassland, savannah, and scrub habitats, typically associated with sandy soils. This subspecies is nocturnal and spends its days below ground in burrows. It is a granivore that feeds on the seeds of grasses, shrubs, and forbs. The species typically breeds between March to July and becomes inactive during the fall and winter months.

Species potential presence within project boundaries:
The CNDDB reports an occurrence of Salinas pocket mouse approximately 6.5 km south of the project site. DD&A contracted Biosearch to initiate a small mammal trapping study in the mixed grassland portion of the site to determine the presence/absence of Salinas pocket mouse and Big-eared kangaroo rat (Appendix B). Presence of the pocket mouse subspecies was confirmed on September 1, 2006 when a male Salinas pocket mouse was trapped in grassland habitat in the northeast corner of the site. Based on the results of this trapping effort, Salinas pocket mouse are known to occur in the mixed grassland/foothill portions of the project site (also refer to Appendix B).

Big-eared kangaroo rat

The Big-eared kangaroo rat is a California State Species of Special Concern. One of the largest kangaroo rats overall, big-eared kangaroo rats have the longest ears of any kangaroo rat species. This species lives only in the southern part of the Gabilan Range in San Benito and Monterey Counties. Due to brush fires, and human-related habitat encroachment, this species is considered on the decline. Big-eared kangaroo rats are typically associated with chaparral covered slopes. Predators of this species include owls, foxes, and coyotes.

Species potential presence within project boundaries:
The CNDDB reports an occurrence of this species approximately 5 km east of the project site. However, the proposed project site does not contain appropriate habitat for this chaparral-associated species. DD&A contracted Biosearch to initiate a small mammal trapping study in the mixed grassland portion of the site to determine the presence/absence of Salinas pocket mouse. No big-eared kangaroo rats were trapped in the course of the study (nor would they be anticipated given a lack of chaparral habitat). Based on the results of the small mammal trapping study undertaken by BioSearch, and a lack of appropriate habitat, big-eared kangaroo rats are not anticipated within project boundaries.

San Joaquin kit fox

The San Joaquin kit fox is a federal Endangered and state Threatened species. Its present range extends from the southern end of the San Joaquin Valley, north to Stanislaus County along the east, and along the interior Coast Range valleys and foothills to central Contra Costa County. The kit fox typically inhabits valley alkaline scrub, valley and foothill grasslands, and open oak woodlands of low to moderate relief. Kit foxes are known to occupy human-altered habitats such as vineyards, orchards, and petroleum fields, where denning opportunities and suitable prey are available. Kit foxes are thought to be weak excavators and largely dependent on rodent burrows, which they enlarge as den sites. Studies of kit fox in the northern part of their range support this presumption, as kit foxes are largely dependent on California ground squirrel (*Spermophilus beecheyi*) burrowing for the creation of den sites. Man-made features, such as culverts in roadbeds and pipes, are frequently used in developed landscapes in the southern range of the kit fox. In the course of a year, up to 70 different dens may be used by a single individual. Mating occurs from December to February, with pups born between February and late March. Pups emerge above ground, and are fed primarily by the male adult, at approximately one month old. Pups are fed 4 to 5 months, after which, the pups begin to forage independently. Juveniles disperse as far as 19 kilometers away from natal dens. Home ranges vary in size, depending on prey availability. Average home range is approximately 500 hectares.

Species potential presence within project boundaries:
The CNDDB reports several occurrences of San Joaquin kit fox approximately 10 km east of the project site (Figure 3). In addition, the CNDDB reports the presence of SJKF critical habitat within 10 km of the Miravale III site. DD&A and BioSearch biologists mapped the presence of California ground squirrel burrow "clusters" throughout the mixed grassland potions of the site and in portions of the fallow and active agricultural portions of the site; many of the burrows observed were of appropriate size to support this species. In addition, one active "natal den" was mapped and recorded by the Biosearch biologists.

The Miravale III project site is located within the historic distribution of SJKF and represents an encroachment in the foothills of the Gabilan Range (a known corridor for this species). Biosearch wildlife biologists prepared a "San Joaquin Kit Fox Early Evaluation Report" of the project site for USFWS review (Appendix C). Based on USFWS Ventura review of this early evaluation report, protocol-level SJKF northern-range protocol-level surveys were recommended (pers. comm. Roger Root, USFWS). A determination of San Joaquin kit absence from the proposed project site could only be supported by completing the protocol for this species and having a negative finding. Rather than completing protocol-level surveys for this species, the City of Soledad is assuming SJKF presence.

Pallid bat

The pallid bat (*Antrozous pallidus*) is a California State Species of Special Concern and is a year round resident in California. This species of bat occurs in a wide variety of habitats including grasslands, shrublands, arid desert areas, oak savanna, coastal forested areas, and coniferous forests of the mountain regions of California and forests ranging from sea level up through mixed conifer forests. Pallid bats are most common in open, dry habitats with rocky areas for roosting. Day roosts of this species include caves, crevices, mines, and occasionally in hollow trees and buildings. This species seems to prefer rocky outcrops, cliffs, and crevices with access to open habitats for foraging. Pallid bats make use of similar structures for night roosting and will use more open sites such as eaves, awnings, and open areas under bridges for feeding roosts. Pallid bats feed on large insects (20 to 70 mm in length). Foraging takes place over open ground, at heights generally not greater than 7.5 feet, although prey is most often caught on the ground. Jerusalem crickets, scorpions and beetles make up most of the diet of pallid bats in central California. Copulation occurs in the fall, October through December. Females store the sperm, and ovulation occurs in the following spring. Parturition timing is determined by local climate, and embryonic development usually

takes about 9 weeks with birth occurring in May or June. Twins are the norm in northern California, but in other areas, they are known to have triplets. Maternity colonies range from 20 to 200 individual adult bats. Males roost in much smaller groupings (Hermanson and O'Shea 1983).

Species potential presence within project boundaries:
The CNDDB does not report any occurrences of this species within 10km of the project site, but occurrences of this species often go unreported. Pallid bats are known to occur at Pinnacles National Park, approximately 17 km northwest of the Miravale III project site. DD&A biologists did not observe or identify any pallid bats while onsite (site assessments were conducted during daylight, and identification typically requires acoustic recordings and associated software). However, pallid bats (and other general bat species) are considered potentially present within and/or adjacent to the Miravale III project site given the mixed availability of appropriate foraging (active and fallow agricultural lands, mixed grasslands) and roosting habitat (trees, rocky outcrops, barns, out-building).

Townsend's big-eared bat

Townsends' big-eared bat (*Corynorhinus townsendii townsendii*) are a federal species of concern and California State Species of special concern. The Townsend's big-eared bat is a year round resident in California occurring from low desert to mid-elevation montane habitats. It is found primarily in rural settings from inland deserts to coastal redwoods, oak woodland of inner Coast Ranges and Sierra foothills, and low to mid-elevation mixed coniferous-deciduous forests.

Townsend's big-eared bats typically roost during the day in caves and mines, but can roost in buildings that provided suitable shelter and conditions. Night roosts are in more open settings and included bridges, rock crevices, and trees. It hibernates in mixed sex aggregations of a few to several hundred individuals. Hibernation is more prolonged in colder areas. This species arouses periodically and moves to alternative roosts, and actively forages inland drinks throughout the winter. A single young is born per year between May and July. Females form maternity colonies of 35-200 individuals, while males roost individually. Townsend's big-eared bats feed primarily on small moths that are gleaned from vegetation.

Species potential presence within project boundaries:
The CNDDB does not report any occurrences of this species within 10km of the project site. Pallid bats are known to occur at Pinnacles National Park, approximately 17 km northwest of the Miravale III project site. DD&A biologists did not observe or identify any bats while onsite (site assessments were conducted during daylight and identification typically requires acoustic recordings and associated software). Big-eared bats (and other bat species) are considered potentially present within and/or adjacent to the Miravale III project site given the mixed availability of appropriate foraging habitat (active and fallow agricultural lands, mixed grasslands) and roosting habitat (trees, rocky outcrops, barns, out-building).

Western mastiff bat
Western mastiff bats (*Eumops perotis*) are a California State Species of Special Concern. Mastiff bats are an uncommon resident in southeastern San Joaquin Valley and Coastal Ranges from Monterey County southward through southern California. This species occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban environments. This species ss reliant on crevices in cliff faces, high buildings, trees, and tunnels for roosting. When roosting in rock crevices, Mastiff bats require a vertical face to drop off and take flight. Nursery roosts may be in tight rock crevices at least 35 inches deep and 2 inches wide. Suitable habitat for this species consists of extensive open areas with abundant roost locations provided by crevices in rock outcrops and buildings. Insects are caught in flight, generally from ground to tree-level.

Species potential presence within project boundaries:
The CNDDB reports occurrences of Western Mastiff bats approximately 6 miles east and northeast of the project site. Western mastiff bats are considered potentially present within and/or adjacent to the Miravale III project site given the mixed availability of appropriate foraging habitat (active and fallow agricultural lands, mixed grasslands) and roosting habitat (rocky outcrops).

Western spadefoot

Western spadefoot are a California State Species of Special Concern. Western spadefoots are distributed throughout the Central Valley and adjacent foothills, and may be quite common where it occurs. In the Coast Ranges, it is found from Point Conception, Santa Barbara County, south to the Mexican border. Elevations of occurrence extend from near sea level to 1360-meters. Rarely found on the surface, spadefoots spend most of the year in underground burrows, which they may construct themselves or may improve (started by small mammals). Breeding and egg deposition occur almost exclusively in shallow, temporary pools formed by heavy winter rains. Egg masses are attached to plant material or the upper surfaces of submerged rocks. Tadpoles consume planktonic organisms and algae but are also carnivorous and may consume dead aquatic larvae of amphibians (including cannibalism). Recently metamorphosed juveniles seek refuge in the immediate vicinities of breeding ponds.

Species potential presence within project boundaries:
The CNDDB reports an occurrence of this species approximately 5km northwest of the project site. DD&A biologists did not observe any adult spadefoot within project boundaries nor did we observe any larvae present at the "reservoir" (breeding season "ends" in May) in the course of three rounds of aquatic sampling for CTS. However, the project site is within the range of spadefoot and marginally appropriate breeding habitat is present at the onsite reservoir and associated fringe wetlands. As such, spadefoots are potentially present within project boundaries (note: spadefoots "typically" breed in ephemeral pools).

California tiger salamander

California tiger salamander were listed as a federally Threatened species on August 4, 2004 (69 FR 47211-47248), and are also a designated California state species of special concern. Critical Habitat was designated for CTS on August 23, 2005 (70 FR 49379-49458), and went into effect on September 22, 2005. CTS are a large, stocky salamander that inhabits grasslands and oak savanna habitats in the valleys and low hills of central and coastal California. Adults spend most of their lives underground, typically in burrows of ground squirrels and other animals (69 FR 3064-3094). During winter rains between November and February, adults emerge from underground retreats to breed (Stebbins, 2003). Adults may travel long distances between upland sites and breeding sites, and above-ground activity may occur under suitable environmental conditions through May. During breeding migrations, individuals are sometimes found under surface objects such as rocks and logs. CTS persist in disjunct remnant vernal pool complexes in Sonoma County and Santa Barbara County, in vernal pool complexes and isolated stockponds scattered along a narrow strip of rangeland on the fringes of the Central Valley from southern Colusa County south to northern Kern County, and in sag ponds and human maintained stockponds in the coast ranges from the San Francisco Bay Area south to the Temblor Range. Tiger salamanders breed and lay eggs primarily in vernal pools and other temporary rainwater ponds following relatively warm rains in November to February. Adults have been found more than 2 km (1.24 miles) from breeding sites (69 FR 3064-3094). Permanent human-made ponds are sometimes utilized if predatory fishes are absent; streams are rarely used for reproduction. Males typically spend 6-8 weeks at breeding ponds, while females typically spend only 1-2 weeks (Loredo et al. 1996). Eggs are laid singly or in clumps on both submerged and emergent vegetation and on submerged debris in shallow water (Stebbins, 1972; Jennings and Hayes, 1994). In years of below average rainfall, or when rains occur late in the season, females may forego

breeding (Trehnam et al. 2000). The California tiger salamander has been eliminated from an estimated 55 to 58 percent of its documented historic breeding sites. Currently, about 150 known local populations of California tiger salamanders are extant.

Species potential presence within project boundaries:
The CNDDB reports several occurrences of this species approximately 4.5 km north of the project site. In addition, the CNDDB reports the presence of CTS critical habitat within 4.5 km of the project site. Upland grassland habitat surrounding the pond represents appropriate estivation habitat for CTS. Tiger salamander larvae and paedomorphs were routinely detected at the onsite reservoir in the course of protocol-level surveys (aquatic sampling only) for this species (see below).

Brad Shaffer of U.C. Davis reports that multiple introductions on non-native tiger salamanders occurred in the nearby city of Gonzales, and that this portion of the Salinas Valley is a known "epicenter" of non-native genes in Monterey County (David Keegan, pers. comm.). The Shaffer Lab conducted genetic testing on 23 larval CTS tissue samples collected at the reservoir and reports that these animals range between highly hybridized to completely non-native (note: only 22 samples were successfully analyzed). The "nativeness" of these animals is summarized by the Shaffer Lab Report (Appendix E) via a Hybrid Index Score (HIS). HIS can range from 0.00 (pure native) to 1.00 (pure non-native). For the samples collected from the onsite reservoir, HIS values ranged from 0.8889-1.00 (i.e., 89-100% non-native). No genotyped individual can be described as "pure native." As such, coordination with USFWS regarding ESA jurisdiction over onsite hybrid/non-native tiger salamanders was initiated by DD&A on November 6, 2007. USFWS Ventura subsequently determined that tiger salamanders known to occur at Pond 1 (onsite reservoir) are not included in the species "California tiger salamander" and are not subject to regulation under ESA or the jurisdiction of USFWS (USFWS Ventura concurrence letter presented in Appendix I).

California red-legged frog

California red-legged frogs are federally Threatened and are a California State Species of Special Concern. This species has been extirpated from 70 percent of its former range and now is found in coastal drainages of central California from Marin County, California, south to northern Baja California, Mexico and in isolated drainages in the Sierra Nevada northern Coast, and northern Transverse Ranges (USFWS 1996). Populations of California red-legged frogs have declined due to exotic aquatic predators, habitat degradation from agricultural and grazing practices, a decrease in water quality from human manipulation of habitats, and water diversion. It is estimated that 50 percent of the historical populations in the Coast Ranges have disappeared. California red-legged frogs are known to use and breed in marshy habitats, springs, both natural and artificial ponds, and slack water pools of rivers and streams (Stebbins 2003). In addition, California red-legged frogs are known to occur and reproduce in tidally influenced coastal marshes under certain conditions (Smith and Reis 1996). Juvenile red-legged frogs appear to have different habitat needs than adults. Juvenile frogs were recorded mostly from sites with shallow water and limited shoreline or emergent vegetation. It is important that there be small one-meter breaks in the vegetation or clearings in the dense riparian cover to allow juveniles to sun themselves, forage, and also have close escape cover from predators. Tadpoles have different habitat needs. In addition to vegetation cover, Jennings and Hayes (1988) note that tadpoles use mud. It is speculated that red-legged frog larvae are algae grazers; however, foraging larval ecology remains unknown (Jennings, Hayes, and Holland 1993). As California red-legged frogs have been observed to move up to 3 miles overland in non-riparian habitats, a site assessment usually includes the known presence of frogs within two to five miles. Critical Habitat for California red-legged frogs has been designated by the United States Fish and Wildlife Service.

Species potential presence within project boundaries:
The CNDDB reports several occurrences of this species approximately 8 km northeast of the project site. In addition, the CNDDB reports the presence of CRLF critical habitat approximately 10 km west of the project site. DD&A biologists did not observe any CRLF within project boundaries; however, observation of this species during daylight hours is relatively unlikely unless adults are present at pond margins. No CRLF larvae have been encountered at any of the onsite agricultural basins and/or the "reservoir" in the course of three aquatic sampling efforts for CTS. However, given the presence of potential breeding habitat at the onsite reservoir and associated upland/estivation habitat, combined with the fact that the project site is located within the historic range of this species, CRLF are considered potentially present within project boundaries.

Coast horned lizard

The coast horned lizard (*Phrynosoma coronatum frontale*) is a California State Species of Special Concern. Horned lizards occur in valley-foothill hardwood, conifer, and riparian habitats, as well as in coastal scrub, pine-cypress, juniper, chaparral, and annual grassland habitats. This species generally inhabits open country, especially sandy areas, washes, flood plains, and wind-blown deposits in a wide variety of habitats. Coast horned lizards rely on camouflage for protection and will often lay motionless when approached. Horned lizards often bask in the early morning on the ground or on elevated objects, such as low boulders or rocks. This lizard is active between April and October, with mating occurring during April (Jennings and Hayes 1994). The young hatch in July and August. Predators and extreme heat are avoided by burrowing into loose soil. Periods of inactivity and winter hibernation are spent burrowed into the soil or under surface objects. Little is known about the habitat requirements for breeding and egg-laying of this species. Prey species include ants, beetles, wasps, grasshoppers, flies, and caterpillars.

Species potential presence within project boundaries:
The CNDDB does not report any occurrences of this species within 10 km of the project site. However, this species has been observed in Stonewall Canyon, 4.3 km (2.7 miles) east of the site (David Laabs, pers. comm.). DD&A biologists did not observe this species during our site assessments. As horned lizards are known to occur in grasslands with open areas, the mixed grassland/rocky outrcop portions of the project site represent potential habitat for this species. Given the availability of relatively undisturbed appropriate habitat for this species in the foothill portions of the site, it is anticipated that this species may be present at the project site.

San Joaquin coachwhip

The San Joaquin coachwhip (a.k.a. San Joaquin whipsnake) is a California State Species of Special Concern. Coachwhips seek cover in rodent burrows, bushes, trees, and rock pies. They hibernate in soil or sand approximately 0.3 m (1 ft) below the surface, sometimes at the bases of plants. Little is known about nest sites. In desert regions, coachwhips may be attracted to water to drink or ambush prey. Open terrestrial habitats are preferred, but coachwhips will occasionally climb trees and bushes to bask, seek prey, or take cover. Diet consists of rodents, lizards and eggs, snakes (including rattlesnakes), birds and eggs, young turtles, insects, and carrion. Coachwhips search actively for prey, with their heads elevated. They pole their heads in burrows, or climb trees, using both vision and olfaction to detect prey (Stebbins 1985). Coachwhips are diurnal. Mating occurs in April and May, eggs are laid in June and July, and the frist young appear in late August to early September.

Species potential presence within project boundaries:
The CNDDB reports an occurrence of this species approximately 8 miles south of the Miravale III project site. DD&A biologists did not observe this species during our site assessments. As coachwhips are known to occur in grasslands with open areas, the mixed grassland, rocky outcrop, and ruderal agricultural portions of the project site represent potential habitat for this species. Due to the availability of relatively undisturbed appropriate habitat for this species in the foothill portions of the site, it is anticipated that this species may be present at the project site.

Black-legless lizard

The black legless lizard (*Anniella pulchra* ssp. *nigra*), is a California State Species of Special Concern. Black-legless lizards and silvery legless lizards (*Aniella pulchra* ssp. *pulchra*) are each found within Monterey County, and while color patterns mark phenotypic differences in these two subspecies (with BLL being much darker dorsally and bright yellow ventrally), genetic testing regarding speciation is inconclusive at this time along the central coast of California. Both black-legless and silvery-legless lizards are a fossorial (burrowing) species that typically inhabits sandy or loose (friable) soils. They forage on invertebrates beneath the leaf litter or duff layer under bushes, trees, wood, and rocks, and slash in appropriate habitats. Habitats known to support this species include (but are not limited to) coastal dunes, valley and foothill grasslands, chaparral, and coastal scrub. The mating season for this sub-species is believed to begin late Spring or early Summer, with 1-4 live young born between September and November. The diet of these species consists primarily of native ants and probably overlaps to some extent with that of juvenile alligator lizards and perhaps some other salamanders. This species may be preyed upon by alligator lizards, snakes, birds, and small mammals.

Species potential presence within project boundaries:
The CNDDB does not report any occurrences of this species within 10 km of the project site, but occurrences of this species often go unreported. Appropriate habitat for this species is present in the foothill/grassland portions of the site, particularly where sandy and/or friable soils are supported. Given the availability of relatively undisturbed and appropriate habitat for this species in the foothill portions of the property, it is anticipated that this species may be present at the project site.

Western burrowing owl

Burrowing owls are a California State Species of Special Concern. Burrowing owls are a year round resident of open, dry grassland and desert habitats and of grass, forb and open shrub stages of pinyon-juniper and ponderosa pine habitats. In general, burrowing owls frequent open grasslands and shrublands with perches and burrows. Burrowing owls use rodent burrows (often California ground squirrel) for roosting and nesting cover. These burrows are lined with excrement, pellets, debris, grass, and feathers (occasionally are unlined). Pipes, culverts, and nest boxes may be substituted for burrows in areas where burrows are not available. Breeding occurs from March through August, with the peak occurring in April and May. This species is semicolonial and is among the most gregarious owls in North America. Burrowing owls eat mostly insects, but small mammals, reptiles, birds, and carrion are also taken. This species usually hunts from a perch, hovers, hawks, dives, and hops after prey on the ground. Conversion of grassland to agriculture, poisoning of ground squirrels, and other forms of habitat destruction have led to the reduction in their numbers in the recent decades.

Species potential presence within project boundaries:
The CNDDB reports an occurrence of this species approximately 5 km northwest of the project site. On January 18, 2007 (non-breeding season), DD&A and Biosearch biologists documented the presence of 2 burrowing owls and multiple active dens/burrows in the grassland/foothill and fallow agricultural portions of the site (Appendix F). One adult burrowing owl and several occupied (or frequently utilized) burrows

were observed in the southeastern fallow-agricultural portion of the site during the second protocol-level survey. In addition, an adult burrowing owl was observed emerging from a burrow near the center of the Miravale III project site (slightly east of center) during the second survey, within an active agricultural portion of the site (grape production). Breeding season protocol-level surveys for this species did not identify the presence of any burrowing owls or active dens/burrows, but additional dens occupied in the non-breeding season were noted (assumed abandoned based on the presence of old white wash and/or pellets). Although an onsite grower related that burrowing owls had been observed in active agricultural portions of the site during the breeding season as recently as June 2006, the recent removal of grazing from grassland portions of the site may have reduced overall breeding season habitat quality for this species. Based on these observations, Western burrowing owls are known to utilize various habitats within the Miravale III project site during the non-breeding season.

Tricolored blackbird

The tricolored blackbird (*Agelaius tricolor*) is a California State Species of Special Concern. They nest in freshwater marshes, stock ponds, and willow thickets. They prefer dense cattails, tules, and rushes where they can build deep cup nests. They breed in large colonies of 50-100+ pairs, from April to mid-May. During fall and winter, tricolored blackbirds are nomadic and may be observed in pastures, grasslands, cattle pens, and marshes throughout the county (Roberson and Tenney 1993).

Species potential presence within project boundaries:
The CNDDB does not report any occurrences of this species within 10 km of the project site, but the species likely occurs within that offset. DD&A biologists have not observed this species in any portion of the Miravale III project site (red-winged blackbirds observed at the reservoir and fallow agricultural portions of the site). DD&A biologists have been onsite several times during the nesting season for this species (i.e. during aquatic sampling for CTS), and no tricolored blackbirds have been observed at any time. Emergent vegetation at the onsite reservoir is likely insufficient to support tricolored blackbird breeding (a colonial nester).

Bank swallow

The bank swallow (*Riparia riparia*) is a state Threatened species. Bank swallows are primarily found in riparian and other lowland habitats in California west of the deserts during the spring-fall period. Formerly a more common breeder in California, approximately 110-120 colonies remain within the state. This species forages by hawking insects over open riparian areas, brushland, grassland, wetlands, water, and cropland. Bank swallows feed on a wide variety of aerial and terrestrial, soft-bodied insects including flies, bees, and beetles. Bank swallows generally use holes dug in cliffs and river banks for cover but occasionally roost on logs, shoreline vegetation, and telephone wires. Colonies range in size from 10-1500 nesting pairs, averaging approximately 100-200 nesting pairs. Bank swallows require fine-textured, sandy banks, or cliffs to dig a horizontal nesting tunnel and burrow. Nests are almost always near water and are lined with grasses and other plant material and feathers. Burrows are 2.5 to 5.5 cm wide and up to 140 cm deep. A small chamber at the end of the burrow contains the nest.

Species potential presence within project boundaries:
The CNDDB does not report any occurrences of bank swallow within 10 km of the project site. However, as previously noted, an earthen cliff is present immediately east of the onsite reservoir. During an initial site visit, DD&A biologists observed this cliff to be inundated with small mammal burrows and possibly some avian nesting sites, however, no bank swallows were observed. DD&A subcontracted Don Roberson (Monterey Bay Ornithologist and author) to assess the site. The following language was supplied by Mr. Roberson following the site visit:

”Yesterday, 10 Aug 2006, I (Don Roberson) participated in a site survey at the pond on Mirravale II property located at 121.19.4W, 36.27.29N. Specifically, I considered whether the burrows in hard-bank cliffs along the south and east sides of the pond might have been made or used by Bank Swallows, a California Threatened Species. The date of this inspection (10 August) was too late in the season for Bank Swallows to be present (typically April-July only at breeding sites), and none were observed in the vicinity. [Several Barn Swallows were foraging over the pond.] After a physical inspection of the site, I am confident these burrows were not made or used by Bank Swallows.

Compared to known current and recent colonies of Bank Swallows in Monterey County in the vicinity of King City, the cliffs at the Miravale pond are (a) much too low in height (only 10-12' high maximum) and (b) lack smooth-faced soft-soil vertical cliff faces required by Bank Swallows. The vertical faces of the banks are irregular and all appear to be composed of rather hard material.

More importantly, the vast majority of the burrows are too large to have been made or used by Bank Swallows, which have typical dimensions of 1.5 inches by 2 inches. Even the smaller burrows I inspected had entrances measuring 3-4 inches by 6-8 inches. Further, the burrows were too deep for Banks Swallows and, in the only ones in which nesting material was discovered via flashlight, that material was composed solely of grasses, stems, and other woody debris and did not include any feathers, which are used in all Bank Swallow nests. None of the burrows appeared to be used by birds at all; it is my opinion they are mammal (i.e., rodent) burrows.”

Given the lack of available nesting habitat throughout the site, bank swallows are not present within project boundaries.

White-tailed kite

The white-tailed kite is listed as a California fully protected species. In addition, this species is protected under both federal and state laws and regulation, including the Migratory Bird Treaty Act (1918, as amended) and CDFG Fish and Game Code Section 3503.5. This bird usually nests in trees along riparian areas, and in oak savannah. During egg development, the male does all the hunting while the female kite incubates the eggs and broods the nestlings. They prefer nest trees with adjacent open fields for hunting. They build their large, stick nests atop large closed-canopy trees such as live oak. The favored prey of the white-tailed kite is voles and mice. Nesting occurs from April through July. In the fall and winter, kites form communal roosts (Roberson and Tenney 1993).

Species potential presence within project boundaries:
The CNDDB does not report any occurrences of this species within 10 km of the Miravale III location; however, this species certainly occurs within that offset. Appropriate foraging habitat for this species is present throughout the mixed grassland and fallow agricultural portions of the site; however, typical nesting habitat is sparse. DD&A and BioSearch biologists have consistently observed white-tailed kites foraging over mixed grassland and fallow agricultural portions of the site during site assessments conducted in preparation of this report. White-tailed kites are assumed present, or occasionally present, within project boundaries.

Northern harrier

The northern harrier is a California State Species of Special Concern. This raptor is an uncommon permanent resident in open grasslands, marshy areas, and edges of estuaries in Monterey County (Roberson and Tenney 1993). Nesting begins in late March with young fledged during June and July.

They build nests of sticks and grass on the ground hidden by tall grass or reeds. Harriers hunt a variety of prey, including other birds and small mammals.

Species potential presence within project boundaries:
The CNDDB does not report any occurrences of this species within 10km of the Miravale III location; however, northern harriers certainly occur within that offset. DD&A and BioSearch biologists consistently observed Northern harriers foraging over the mixed grassland, fallow agricultural, and active agricultural portions of the site during our site assessments and field surveys. Appropriate foraging habitat for this species is present throughout the site, and this species is assumed present, or occasionally present, within project boundaries. Potential nesting habitat for this species is present in the grassland portions of the site.

Golden eagle

Golden eagles (*Aquila chrysaetos*) are a California fully protected species and are an uncommon permanent resident and migrant throughout California, except in the center of the Central Valley. This species ranges from sea level up to 3800 m (0-11,500 ft). Golden eagles are associated with rolling foothills and mountain terrain, wide arid plateaus deeply cut by streams and canyons, open mountain slopes, and cliffs and rock outcrops. Nests are built on cliffs of all heights and in large trees in open areas. Alternative nest sites are maintained, and old nests are reused. Breeding occurs from late January through August, with peak activity between March and July. This species generally preys upon lagomorphs and rodents, but also takes other mammals, birds, reptiles, and some carrion. Hunting is carried out in open terrain such as grasslands, deserts, savannahs, and early successional stages of forest and shrub habitats.

Species potential presence within project boundaries:
The CNDDB does not report any occurrences of this species within 10 km of the project site. However, Biosearch biologists monitor a known golden eagle nest in Stonewall Canyon, 3.9 km (2.4 miles) east of the site (Laabs, pers, com.). Appropriate foraging habitat for this species is present throughout the site (particularly the grasslands), and this species is anticipated to occur (or occasionally occur) within project boundaries. Nesting eagles are not anticipated within project boundaries given the lack of appropriate nesting habitat for this species.

Merlin

The merlin (*Falco columbarius*) is a California State Species of Special Concern. This bird is a rare to uncommon spring and fall transient and winter visitor, occurring in California between late September to mid-April (Small 1994). They do not nest in California. Wintering individuals occur in a variety of habitats, including riparian, open woodlands, grasslands, agricultural fields, tidal estuaries, marshes, and developed areas. Merlins prey primarily on small birds but also take small mammals and insects.

Species potential presence within project boundaries:
The CNDDB does not report any occurrences of this species within 10 km of the project site, although occurrences of California species of special concern often go unreported. DD&A biologists did not observe this species during our site assessments. Although this species does not breed in Monterey County, appropriate wintering hunting/foraging habitat for this species is present throughout the project site. No resident merlins are present at the project site, but it is anticipated that this species may occasionally hunt/forage within project boundaries during the winter.

Prairie Falcon

The prairie falcon (*Falco mexicanus*) is a California State Species of Special Concern. This falcon is an uncommon permanent resident and migrant that ranges from southeastern deserts northwest along the inner-coast Ranges and Sierra Nevada. Generally distributed from annual grasslands to alpine meadows, the species is associated primarily with perennial grasslands, savannas, rangeland, some agricultural fields, and desert scrub areas. Prairie falcons mainly prey upon small mammals, some small birds, and reptiles. Prey is taken in the air and on the ground in open areas. Prairie falcons require sheltered cliff ledges for cover. Nests are generally a scrape on the sheltered ledge of a cliff overlooking a large, open area. Nests are sometimes built on old raven or eagle stick nests on cliffs, bluffs, or rocky outrcops. Aerial courtship displays occur near the nest site.

Species potential presence within project boundaries:
The CNDDB does not report any occurrences of this species within 10 km of the project site, but observations of California species of special concern often go unreported. DD&A biologists did not observe this species during our site assessments. Although appropriate nesting habitat is not present within or immediately adjacent to the Miravale III project site, appropriate hunting/foraging habitat for this species is present throughout the project site (particularly the grasslands and fallow agricultural portions). While nesting falcons are not anticipated within or adjacent to project boundaries, this species may occasionally hunt/forage within project boundaries.

Coopers Hawk
Cooper's hawks *(Accipiter cooperii)* are a California species of special concern. Cooper's hawks are a breeding resident throughout most of the wooded portions of the state. This species ranges from sea level to above 2700 m (0-9000 ft). Dense stands of live oak, riparian, deciduous, or other forest habitats near water are used most frequently. This species is seldom found in areas without dense tree stands, or patchy woodland habitat. Cooper's hawks nest in deciduous trees in crotches 3-23 m (10-80 ft), but usually 6-15 m (20-50 ft) above the ground, and in second-growth conifer stands as well as in deciduous riparian areas. Breeding occurs between March and August, with peak activity May through July. Prey for this species includes small birds (especially young during the nesting season), small mammals, and some reptiles and amphibians. Cooper's hawks hunt in broken woodland and habitat edges. Cooper's hawks are fairly common as migrants.

Species potential presence within project boundaries:
The CNDDB report several occurrences of Cooper's hawk approximately 8-10 miles east to northeast of the Miravale III project site. Please note, however, that DD&A biologists did not observe this species during our site assessments. Appropriate nesting habitat for this species is not present within or adjacent to the project site. Marginally appropriate foraging habitat is present, but this species hunts more commonly along forest edge habitats. While Coopers' hawks are not anticipated to nest within or adjacent to Miravale III project boundaries, this species may occasionally hunt/forage within project boundaries.

Loggerhead shrike

The loggerhead shrike is a California State Species of Special Concern. Loggerhead shrikes are a common resident and winter visitor in lowlands and foothills throughout California though rare on coastal slopes north of Mendocino County and occurring only in winter). The highest densities of this species generally occur in open-canopied valley foothill hardwood, valley foothill hardwood-conifer, valley foothill riparian, pinyon-juniper, juniper, desert riparian, and Joshua tree habitats. This species prefers open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches. Prey items include large insects, small birds, mammals, amphibians, reptiles, fish, carrion, and various other invertebrates. Shrikes often search for prey from a perch, making short predatory flights, and may impale prey on

thorns, sharp twigs, barb wire, or force it into a crotch to feed on or to cache for later feeding. Shrikes typically build their nest on a stable branch in a densely-foliated shrub or tree, usually well-concealed.

Species potential presence within project boundaries:
The CNDDB does not report any records of this species within 10km of the project site. Scattered trees and shrubs, which could be used as nesting sites for the species, are present in the foothills area and surrounding the residences onsite. The project site supports appropriate foraging habitat for this species. Two loggerhead shrikes were observed foraging over fallow agricultural and mixed grassland portions of the site by DD&A and BioSearch biologists on January 1, 2007. The species was also observed in several locales in the eastern portion of the site on July 11, 2007. Loggerhead shrikes are known to occur within project boundaries. Project build-out would result in the loss of all available foraging and nesting habitat for this species.

California horned lark

California horned larks (*Eremophila alpestris*) are a California State Species of Special Concern. Horned larks are a common to abundant resident in a variety of open habitats, and are frequently found in grasslands with low, sparse vegetation. This species builds a grass-lined cup nest in a depression on the ground, generally in the open. Breeding occurs between March and July, with peak activity occurring in May. Horned larks often form large flocks which forage and roost gregariously after breeding. This species eats mainly insects, snails, and spiders during the breeding season, and add grass and forb seeds (as well as other plant material) to their diet seasonally.

Species potential presence within project boundaries:
The CNDDB does not report any occurrences of this species within (or immediately adjacent to) project boundaries, but observations of this species often go unreported. Appropriate nesting and foraging habitat for this species is present within project boundaries, particularly as associated with fallow agricultural and mixed grasslands habitats. No horned larks have been observed onsite during site visits thus far. Given the presence of appropriate habitat, however, this species is deemed potentially present within project boundaries.

Thresholds of Significance:

In accordance with CEQA Guidelines, a project impact would be considered significant if the project would:

- have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service;

- have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service;

- have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

- interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

- conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance;

- conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan; or

- impede the use of native wildlife nursery sites or directly harm nesting species protected under the provisions of the Migratory Bird Treaty Act.

Impacts and Mitigation:

The proposed project would represent a significant and unavoidable impact to on federally listed species; San Joaquin kit fox. Hybridized/non-native tiger salamanders known to occur at Pond 1 (onsite reservoir) are not jurisdictional under ESA and impacts to this species do not require mitigation (pers. comm. Doug Cooper, USFWS Ventura). If it is determined that California red-legged frog are present onsite (protocol-level surveys required below), the project would represent a significant and unavoidable impact to this species.

The proposed project would represent a significant and unavoidable impact to several California species of special concern: American badger, Salinas pocket mouse, black-legless lizards (if present), coast-horned lizard (if present), and western spadefoot (if present),

The proposed project would represent a potentially significant impact to several other California species of special concern, but these impacts can be reduced to less-than-significant with implementation of the measures presented below. These species include: nesting birds and raptors (other than burrowing owl), bats (pallid, Townend's big-ear, Western Mastiff), San Joaquin coachwhip, burrowing owl, golden eagle, merlin, white-tailed kite, northern harrier, loggerhead shrike, and California horned lark.

Impacts to Sensitive Habitats

Development of the proposed project has the potential to directly impact sensitive habitat types, including 0.17 acres of wetlands. According to the US Army Corps of Engineer's Wetland Delineation Manual (1987), wetlands are defined as "[t]hose areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." As detailed above, a wetlands assessment was conducted to determine whether on-site aquatic features (i.e. agricultural ponds) contained characteristics consistent with wetlands. The wetlands identified on-site exist as a thin band of emergent vegetation on the fringe of four small man made reservoirs/ponds used in conjunction with routine agricultural operations. It is assumed that this resource satisfies the soils, vegetation and hydrologic criteria set forth by the U.S. Amy Corps of Engineers (USACOE) for wetlands. However, the USACOE does not regulate wetlands that are hydrologically isolated and geographically distinct from other jurisdictional resources in the vicinity. The individual aquatic features are not contiguous with other jurisdictional wetlands and/or waters of the U.S and do not have any hydrologic connectivity or abut any permanent water body. As a result, the fringe wetlands identified on site are not under the Jurisdiction of the USACOE. Further, impacts to these wetlands would not be in conflict with federal regulation.

The function and value of these man-made wetland resources are marginal as a result of ongoing disturbance from agricultural uses. In addition, the value of the existing reservoir located in the uplands portions of the site as wildlife habitat is limited as it supports a non-native predatory amphibian; the barred tiger salamander. This salamander is known to prey on native special status amphibian species such as the California tiger salamander and the California red-legged frog when present. In addition, hybridization between the non-native barred salamander and the native tiger salamander has been identified by the U.S. Fish and Wildlife Service as a significant threat to the native California tiger salamander.

Although development of the proposed project would impact approximately 0.17 acres of fringe wetlands of marginal habitat value, impacts are considered to be less-than-significant as development of the proposed project would entail the construction of a number of aquatic resources as a component of golf course development, and storm water drainage facilities. More specifically, as identified in Section 5.1.3 of the Specific Plan, two of the existing retention ponds would be converted to storm water facilities as part of project development. While formal plans have not been submitted at this time for development of the golf course, future on-site ponds and other resources would significantly exceed the size of the existing on-site aquatic resources.

In summary, development of the proposed project would result in the removal of existing on-site agricultural ponds and reservoirs to facilitate new urban uses on the predominately undeveloped project site. These wetlands are not considered to be jurisdictional for the reasons identified above and the project would provide suitable replacement wetlands through the construction of various stormwater drainage facilities and ponds associated with the golf course. Impacts to wildlife and other sensitive species associated with the removal of on-site aquatic features are addressed in greater detail below. *Based on this analysis, development of the proposed project would result in a less-than-significant impact on a wetland.*

General Impacts to Vegetation

Impact The proposed project would represent temporary and permanent impacts to all habitats and the vast majority of vegetation within project boundaries and will result in the removal of 3 or more oak trees. Temporary impacts to vegetation included grubbing and grading associated with development of the site; permanent impacts include the conversion of open vegetated areas to

urban housing through placement of structures, homes, roads, driveways, etc. *This is a less-than-significant impact with implementation of the following measures.*

Mitigation

1. A Forest Management Plan shall be prepared by a qualified professional forester; this plan must be approved by the City of Soledad.

2. Trees and vegetation not planned for removal shall be protected during construction to the maximum extent feasible. This shall include the use of exclusionary fencing of herbaceous and shrubby vegetation, such as hay bales, and protective wood barriers for trees. Only certified weed-free straw shall be used to avoid the introduction of non-native, invasive species.

3. Following construction, the disturbed areas that are proposed as parks and native landscaping areas shall be restored to pre-project contours to the maximum extent feasible and revegetated using locally-occurring native species and native erosion control seed mix.

4. Protective fencing shall be placed so as to keep construction vehicles and personnel from impacting vegetation adjacent to the project site outside of work limits.

5. Grading, excavating, and other activities that involve substantial soil disturbance shall be planned and carried out in consultation with a qualified hydrologist, engineer, or erosion control specialist, and shall utilize standard erosion control techniques to minimize erosion and sedimentation to native vegetation.

6. No construction equipment shall be serviced or fueled outside of designated staging areas.

Impacts to Special-Status Plant Species

Lemmon's jewelflower, a California species of special concern, is the only special-status plant species deemed potentially present within project boundaries. All other special-status plant species are eliminated for the species-specific reasons provided within this document, and in Appendix A.

Impact The presence/absence of jewelflower has not been determined at this time, but appropriate habitat is present within project boundaries. This species could be permanently impacted by proposed grading, excavation, and other activities that may result in the permanent loss or disturbance of individual jewelflowers and/or jewelflower habitat. *This impact is considered less-than-significant given implementation of the mitigation below.*

Mitigation

7. A qualified botanist shall be retained to conduct preconstruction surveys for Lemmon's jewelflower during the typical flowering season of this species (March-May), to determine the presence/absence of this species. If no Lemmon's jewelflower is present, no additional mitigation is required. If Lemmon's jewelflower is present, a qualified biologist shall prepare a mitigation plan to be approved by CDFG prior to initiation of construction. The Monterey County Planning and Building Department shall be provided verification of CDFG concurrence and satisfaction prior to issuance of grading permits.

Impacts to Special-Status Wildlife Species

Based on a review of project plans, background literature, and extensive field surveys, two listed species are documented to occur or have the potential to occur within the site: California tiger salamander (federally threatened), San Joaquin Kit fox (federally endangered). In addition, appropriate habitat is present for the federally threatened California red-legged frog and the project site is within the historic range of this species.

One California fully protected species is known to occur onsite; white-tailed kite. In addition, the following California species of special concern may occur, or are known to occur onsite: American badger; Salinas pocket mouse; pallid bat; Townsend's big-eared bat; Western Mastiff bat; black legless lizard; Western spadefoot; coast horned lizard; San Joaquin coachwhip; burrowing owl; Golden eagle; merlin; prairie falcon; white-tailed kite; northern harrier; loggerhead shrike; and California horned lark.

General Impacts:

Impact Project development would fragment (i.e., divide and disrupt) virtually all existing wildlife habitat on the site, and would represent an urban encroachment into the foothills of the Gabilan Range (an important wildlife corridor). The ongoing presence of homes, roads, cars, people, firearms, pets, etc. would adversely impact any wildlife currently utilizing the site, particularly in the grassland portions of the site (i.e. deer, coyote, fox, jackrabbits, squirrels, and raptors). Comparable development is present immediately south of the proposed project, but does not extend into the grassland/foothill portions of the site. *This fragmentation of habitat is considered a significant impact that can be partially reduced by implementation of the required mitigation below; however, cannot be fully mitigated without project redesign. Therefore, the fragmentation of habitat is considered a significant, unavoidable impact of the project as currently designed.*

Mitigation

8. Prior to approval of each final map, the applicant shall prepare and submit draft Covenant, Conditions, and Restrictions (CC&Rs) applicable to that phase that shall include the following;
   a) restrict installation fencing to the immediate vicinity of residences, and where fencing is placed adjacent to open space areas and areas of natural, undisturbed habitat, fences shall be installed such that a six inch space is left between the bottom of the fence and the surface of the ground;
   b) prohibit off-road vehicle use;
   c) prohibit illegal discharge of firearms;
   d) prohibit the installation of road medians throughout the development.

   These CC&Rs shall be reviewed and approved by the City of Soledad prior to approval of each final map.

Mammals

Impact Suitable foraging/dispersal habitat for San Joaquin kit fox species is present throughout project boundaries, with potential denning habitat present in the annual grassland, rocky outcrop, and fallow agricultural portions of the site (see Early Evaluation Report in Appendix C). The vast majority of the habitats present within project boundaries would be directly impacted by the proposed project (grubbing and grading, construction phase impacts, permanent placement of structures and impermeable surfaces, etc.). Impacts proposed in the grassland portions of the site will likely result in kit fox abandonment of the property due to ongoing disturbance. For this reason, the project is assumed to have a significant and unavoidable adverse affect on San Joaquin kit fox (i.e. direct mortality, loss of habitat, loss of dens, etc.). *This impact may be reduced by implementation of the following mitigation measures; however, the impact will not be reduced to a less-than-significant level without USFWS consultation. Please note that the following measures are consistent with direction from USFWS on other projects, but greater or lesser measures may be required by the regulatory agencies (possibly including completion of protocol-level surveys to determine utilization of the site and/or project redesign).*

Mitigation

9. The applicants shall enter into consultation with USFWS and CDFG and shall provide evidence of their compliance with applicable requirements of the federal Endangered Species Act and California Endangered Species Act prior to the issuance of building permits.

10. Pre-construction surveys for kit fox dens shall be required for all development phases of the future project. Pre-construction surveys shall be conducted by a qualified biologist no less than 14 days and no more than 30 days prior to the start of any ground disturbing activities to locate kit fox den sites. In addition to pre-construction surveys, a qualified biologist, meeting the required qualifications described in the *U.S. Fish and Wildlife Service Standardized Recommendations for the Protection of the San Joaquin Kit Fox Prior to Ground Disturbance*, June 1999 (USFWS Recommendations for SJKF), shall be on-site to monitor construction activities for the San Joaquin kit fox. In the event that an active kit fox den is found, then the standard mitigation actions outlined in the USFWS Recommendations for SJKF, are recommended to avoid possible take of kit fox during future construction activities. These actions are general in nature; therefore, site specific strategies for the project site shall be based upon consultation with USFWS and CDFG, as stated above in Mitigation Measure #10. To ensure compliance with this mitigation measure, prior to issuance of any grading permits, the Planning and Building Inspection Department (PBID) shall be furnished with written correspondence from a qualified wildlife biologist documenting that no active kit fox den sites nor kit fox individuals were found on the site. If active kit fox den sites are found and/or kit fox individuals are observed during the survey, the applicant will be required to comply with all mitigation actions required by USFWS and CDFG and the County PBID shall monitor implementation of those actions.

Impact Multiple badger dens and badger diggings were observed in the vicinity of the onsite reservoir and within other portions of the annual grassland habitat. An adult badger was observed emerging from an onsite den by Biosearch biologists. Badger diggings were also observed in fallow agricultural portions of the site, demonstrating badger utilization of these areas as foraging habitat. Therefore, construction activities in grassland portions of the site have the potential to impact badger dens, and construction within fallow agricultural portion of the site will impact badger foraging habitat. Project-related construction activities (i.e. grading, excavation, development, etc.) may result in a permanent loss or disturbance of American

badgers and their habitat. *Given the proposed build-out of the project site and impacts to the vast majority of the grassland habitat, impacts to this species are considered significant and unavoidable impact. Mitigation is presented to reduce these impacts as much as feasible; greater or lesser measures may be required by CDFG.*

Mitigation

11. The applicant shall retain a qualified biologist to conduct focused preconstruction surveys for potential American badger dens. These surveys shall be conducted no sooner than 2 weeks prior to the start of construction. Surveys for badger dens may be conducted at the same time as burrowing owl surveys. Depending on the results of these surveys, one or more of the following measures shall be implemented.

    - If the qualified biologist determines that potential dens are inactive, the biologist shall excavate these dens by hand with a shovel to prevent badgers from re-using them during construction. If hand excavation is not practical, careful excavation with an excavator may occur provided that the biologist is onsite to monitor these activities.
    - If the qualified biologist determines the presence of active dens, the location of these dens shall be documented and reported to CDFG. Avoidance of active dens, particularly natal dens, is the preferred approach; Impacts to active badger dens shall be avoided by establishing a 100-meter exclusion zones around all active badger dens, within which construction related activities shall be prohibited until denning is complete and/or the den is abandoned. A qualified biologist shall monitor each den once per week in order to track the status and inform the project sponsor of when a den area has been abandoned.
    - If avoidance of an active badger den is not feasible, the biologist shall coordinate with CDFG on the appropriate way to evict/exclude badgers from their dens. Please note that special consideration of natal dens is required given the low likelihood that excluded young would survive; a CDFG depredation permit would be required to disrupt a natal den. For non-natal dens, CDFG has permitted badgers to be gradually excluded from their dens by placement of soil, sticks, and debris at den entrances, incrementally increasing the degree of blockage over a period of three to five days (please note that blockage cannot trap/entomb badgers). After the monitoring biologist determines that badgers have stopped using active dens within the project boundary, the dens shall be hand-excavated with a shovel to prevent re-use during construction. If hand excavation is not practical, careful excavation with an excavator may occur provided that the biologist is onsite to monitor these activities. Please note that eviction of onsite badgers will reduce construction phase impacts to this species, but given the large home ranges and territoriality of this species, emigration to alternative habitats may not be feasible without inter/intra specific competition (energetic stress possibly resulting in mortality). CDFG may require that appropriate onsite or adjacent habitat be conserved to allow relocation of excluded animals within their home range.

Impact Three special-status bat species may be present onsite (pallid bat, Townsend's big-eared bat, Western Mastiff bat); several other bat species may also be present. Removal of onsite trees (i.e. Eucalyptus and Tamarisk trees lining San Vicente Road, oaks in the northeast corner of the site), removal of onsite buildings, and development of the site (including encroachment/disruption of rocky outcrops) may result in direct impacts to bats and/or bat roosts (day, night, foraging, and maternity) and would remove the vast majority of onsite foraging habitat for these species. *This impact is considered less-than- significant with implantation of the following mitigation.*

Mitigation

12. A qualified bat specialist shall conduct site surveys to characterize bat utilization of the site and species composition present (techniques utilized to be determined by the biologist). Based on the results of these surveys, one or more of the following shall occur.

    - If it is determined that bats are not present at the site, no additional mitigation is required.
    - If it is determined that bats are utilizing the site and would likely be impacted by the proposed project, preconstruction surveys shall be conducted no more than 30 days prior to modification, demolition, or removal of onsite buildings and/or any other occupied habitat. If no bat or bat sign are observed in the course of preconstruction surveys, then demolition/removal of buildings and/or construction initiation may proceed. If bat and/or bat sign are observed during the preconstruction surveys, the biologists shall determine if disturbance will jeopardize a maternity roost, or another type of roost (foraging, day, night).
    - If a single bat and/or only adult bats are roosting, demolition or removal of the structure can proceed after the bats have been safely excluded from the roost. Exclusion techniques shall be determined by the biologist and depend on the type utilization; the biologist shall prepare a mitigation plan for provision of alternative habitat to be approved by CDFG and the City.
    - If an active maternity roost is detected, work in the vicinity of the roost (and/or demolition of the structure) shall be postponed until the qualified biologist monitoring the roost(s) determines that the young have fledged and are no longer dependent on the roost. The monitor shall ensure that all bats have left the building and or area of disturbance prior to initiation of construction and/or demolition activities. *If disruption of a maternity roost cannot be avoided, a depredation permit would be required.*

Impact Salinas pocket mouse are known to occur onsite; presence was confirmed on September 1. As the vast majority of the onsite grassland habitat will be converted to residential usage, and the remaining portions will be fragmented from surrounding habitat and subject to ongoing disturbance (cars, lights, noise, sound, vibration, etc.), significant impacts to this species are anticipated (direct and indirect mortality). *This would represent a significant and unavoidable impact. The following mitigation is presented to reduce this impact as much as feasible.*

Mitigation

13. The applicant shall contract a qualified biologist to coordinate with CDFG and prepare a mitigation and monitoring plan for Salinas pocket mouse. Verification of CDFG concurrence/approval shall be submitted to the City of Soledad prior to initial grubbing and grading of the site.

Special-Status Avian Species

The following special-status avian species were observed foraging within the project site: Western burrowing owl, Northern harrier, white-tailed kite, loggerhead shrike, and Northern harrier. In addition, golden eagle, merlin, prairie-falcon, horned lark, and to a lesser extent, Coopers hawk have the potential to utilize the site for foraging. Golden eagles, merlins, and prairie falcons have specific nesting habitat requirements (e.g., sheltered cliffs and/or large trees supporting cavities) or are known to only nest in certain geographic regions of California outside of the Monterey Bay region (e.g., Merlins), which are not present within the project site. Therefore, no suitable nesting habitat for these species occurs within the project site. However, suitable breeding habitat is present for burrowing owl, northern harrier, white-

tailed kite, and loggerhead shrike. The project would result in the loss of foraging and/or nesting habitat for any avian species utilizing the site.

Raptors and their nests are protected by both federal and state regulations (MBTA and CDFG Code Sections 30503 and 3503.5), which protect birds of prey and their eggs and nests. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "take" by CDFG. Any loss of fertile raptor eggs or nesting raptors, or any activities resulting in raptor nest abandonment, will constitute a significant impact. Construction activities such as tree removal or site grading that disturb any nesting raptors (or other avian species) on-site or immediately adjacent to the site will constitute a significant impact.

Impact Tree removal (i.e., Eucalyptus and Tamarisk trees along San Vicente Road and oaks in the northeast corner of the site) and disturbance associated with construction of the proposed project would likely impact any nesting birds and/or raptors present within project boundaries (harassment, stress, brood-less, nest abandonment, injury, mortality).

Per the CDFG Guidelines, impacts to burrowing owls are defined as disturbance or harassment within 160 feet of occupied burrows, destruction of burrows and burrow entrances, and degradation of foraging habitat adjacent to occupied burrows. In addition, the project would require grading, grubbing, tree removal, excavation, and other activities that may result in a permanent loss or disturbance of raptors and migratory birds and their habitat. *This would represent a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation measures.*

Mitigation

14. Burrowing owls are known to occupy burrows in mixed grassland, active agricultural, and fallow agricultural portions of the Miravale site during the non-breeding season (breeding season utilization not observed in the course of protocol-level surveys). A qualified biologist shall conduct preconstruction surveys to locate active breeding and/or wintering burrowing owls (depending on season) no more than 30 days prior to the start of construction. If ground disturbing activities are delayed or suspended for more than 30 days after the preconstruction survey, the site shall be resurveyed. The survey shall conform to the CDFG 1995 Staff Report protocol. Wherever burrows are identified, impact avoidance and mitigation measures shall be implemented (previously mapped burrow locations may not be occupied and/or new burrows may be occupied).

14a) Impact Avoidance is the preferred approach:

- Breeding Season:
  If active nests are found, then no ground-disturbing activities will be permitted within 250 feet of an active burrow during the breeding season (February 1 to August 31).

- Winter Season:
  If active burrows are found during winter months (September 1 through January 31), ground disturbing activities can proceed no closer than 160 feet from active burrows.

- Avoidance also requires that a minimum of 6.5 acres of foraging habitat be permanently reserved contiguous with occupied burrow site for each pair of breeding burrowing owls (with or without dependent young) or single unpaired resident bird.

14b) If active nests or burrows are found that cannot be avoided, the following mitigation measures would apply:

On-Site Passive relocation shall be implemented if the above avoidance measures cannot be met. Passive relocation is defined as encouraging owls to move from occupied burrows to alternate natural or artificial burrows that are beyond 160 feet from the impact zone, and that are within or contiguous to a minimum of 6.5 acres of foraging habitat for each pair of relocated owls. The land utilized for relocation shall be acquired and permanently protected at a location acceptable to CDFG. Existing unsuitable burrows shall be enhanced (enlarged or cleared of debris) or new burrows created (by installing artificial burrows) at a ratio of 2:1 on the protected lands site. Relocation of owls shall only be implemented during the non-breeding season. A time period of at least one or more weeks is necessary to accomplish the passive relocation methods, and allow the owls to move and acclimate to alternative burrows.

- If the qualified biologist determines that dens may be occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by CDFG verified through non-invasive methods that either: 1) the birds have not begun egg-laying and incubation; or 2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival.

- On-site habitat shall be preserved in a conservation easement and managed to promote burrowing owl use of the site.

- The applicant shall provide funding for long-term management and monitoring of the protected lands (if applicable). The monitoring plan shall include success criteria, remedial measures, and an annual report to CDFG.

Off-site If the project will reduce suitable habitat on-site below the threshold level of 6.5 acres per relocated pair or single bird, the habitat shall be replaced off-site. Off-site habitat must be suitable burrowing owl habitat, as defined in the Burrowing Owl Survey Protocol[1], and the site approved by the CDFG. Land shall be purchased and/or placed in a conservation easement in perpetuity and managed to maintain suitable habitat The land shall be funded by the applicant for long-term management and monitoring of the protected lands. The monitoring plan shall include success criteria, remedial measures, and an annual report to CDFG. Off-site mitigation shall use one of the following ratios:

- Replacement of occupied habitat with occupied habitat: 1.5 times 6.5 (9.75) acres per pair or single bird.

- Replacement of occupied habitat with occupied habitat: 1.5 times 6.5 (9.75) acres per pair or single bird.

- Replacement of occupied habitat contiguous to currently occupied habitat: 2 times 6.5 (13.0) acres per pair or single bird.

[1] In accordance with the Staff Report on Burrowing Owl Mitigation (Dept. of Fish and Game, 10/1995) and Burrowing Owl Survey Protocol and Mitigation Guidelines (The California Burrowing Owl Consortium, 1993).

- Replacement of occupied habitat with suitable occupied habitat: 3 times 6.5 (19.5) acres per pair or single bird.

- Alternatively, credits at an approved mitigation bank may be purchased.

15. If project activities will initiate during the typical avian nesting season (February 15– August 1), a qualified biologist shall conduct focused preconstruction surveys no more than 14 days prior to initiation of construction activities for nesting birds, including (but not limited to) white-tailed kite, northern harrier, loggerhead shrike, and horned lark, in all areas that may provide suitable nesting habitat within 300 feet of the construction area. If active nests are found, a suitable construction buffer shall be established by a qualified biologist, and no work shall occur within that buffer until August 1 when young are assumed fledged. Alternatively, a qualified biologist can conduct weekly nest checks to gauge nestling/fledgling status, and construction may proceed once fledglings have dispersed from the nest provided written concurrence from CDFG. No active nest shall be impacted or removed without a depredation permit from CDFG, and a depredation permit will not be issued for impacts to Fully Protected Species such as the white-tailed kite. For activities that occur outside of the nesting season (generally September 1 through February 14), preconstruction surveys are not required. If construction is initiated outside of the nesting season and continues into the nesting season, preconstruction surveys are required if construction will occur in areas not previously accessed and/or disturbed (>300 feet from previous construction activities).

16. A preconstruction survey shall be conducted no more than 14 days prior to modification, demolition, or removal of onsite buildings. If no owls or other nesting birds are observed, then demolition or removal may proceed. If barn owls (or any other nesting birds) are observed during the preconstruction survey, a determination shall be made on whether birds are roosting or nesting. If a single owl is roosting, demolition or removal of the structure can proceed after the owl has been persuaded to move from the roost area. Non-invasive techniques include light shining into the roost space for one or two nights and days. If barn owls (or other nesting avian species) are found to be actively nesting in the barn, work on or demolition of the structure shall be postponed until one of the following conditions have been met: 1) a qualified biologist monitoring the nest determines that the owls have abandoned the nest without any outside interference or 2) a qualified biologist monitoring the nest has determined that the young have fledged and are capable of relocating and using another roost site. Once the young have fledged, non-invasive techniques may be used to encourage the owls to leave the barn. Under either scenario, the monitor shall ensure that all owls have left the building prior to construction or demolition activities. The barn owl nesting period is typically between February 15 and July 15.

Reptiles and Amphibians

Protocol-level aquatic surveys began in May 2007 to determine the presence or absence of CTS at the onsite aquatic resources. The onsite reservoir was documented to support tiger salamander larvae on May 8, 2007 (personal observation, David Keegan). Please note that genetic testing of tissue collected from onsite tiger salamander larvae and/or paedomorphs was conducted by the Shaffer Lab of U.C. Davis; onsite tiger salamanders are highly hybridized to completely non-native (89-100% non-native). Coordination with USFWS regarding ESA jurisdiction over hybrids/non-native was initiated by DD&A in November of 2007; USFWS subsequently concurred that onsite tiger salamanders are not the regulated species "California tiger salamander" and are not subject to the jurisdiction of USFWS (USFWS Ventura concurrence letter presented in Appendix I). Given the presence of marginally appropriate habitat, both

California red-legged frog and Western spadefoot may likewise be present within project boundaries; these species would likely be associated with the same aquatic resources and surrounding upland habitats as the non-native/invasive tiger salamander.

Impact The presence of California red-legged frog and/or Western spadefoot has not been determined at this time. The project as currently designed would fill the onsite reservoir to establish home-sites, removing a potential breeding resource for these species. Pond 3 would likewise be permanently filled as a result of the proposed project. If CRLF or spadefoot are present, proposed impacts to onsite agricultural basins (particularly the reservoir) would result in direct impacts to these species including "take." (i.e. loss of individuals and habitat, loss of a breeding resource, direct mortality, etc.). In addition, grading and other earthmoving activities proposed would represent an adverse affect on upland estivation habitat for these species, if present. *Therefore, the proposed project would represent a significant and unavoidable impact to federal and state regulated wildlife species (if present,) as currently designed. However, implementation of the mitigation measures identified below will reduce these impacts as much as feasible; greater or lesser measures may be required by USFWS.*

Mitigation

17. Protocol-level CRLF surveys (USFWS, August 2005) shall be completed at each aquatic resource present within project boundaries. Protocol-level CRLF surveys would likely detect Western spadefoot, if present. If it is determined that CRLF are present, the applicant shall coordinate with the USFWS to determine the appropriate course of action per the requirements of the federal ESA (e.g., applying for an Incidental Take Permit [Section 7 and/or 10 depending on lead agency]) and implementing the permit requirements. Any mitigation and avoidance measures required by USFWS for potential impacts to CRLF (if applicable) would likewise reduce impacts to Western spadefoot given their overlapping habitat characteristics. If it is determined that spadefoot are present, but CRLF are not, coordination with CDFG regarding appropriate mitigation to reduce impacts to this species shall be required.

Impact Proposed development of the majority of the onsite grassland habitat and fragmentation of remaining grassland habitat represents a significant impact to coast horned lizards, black-legless lizards, and San Joaquin coachwhip (and other wildlife species). *Given the lack of unaffected portions of the grassland habitat for conservation of these species, this is considered a significant and unavoidable impact. The following mitigation is presented to reduce this impact as much as feasible; greater or lesser measures may be recommended by CDFG.*

Mitigation

18. The applicant shall retain a qualified biologist to conduct a construction monitoring program for black legless lizards, coast horned lizards, and San Joaquin coachwhip which shall include procedures for capture and release. The biologist shall remain on-site during initial grading activities to salvage and relocate these species that may be uncovered during earthmoving activities. Recovered individuals shall be placed in appropriate habitat outside of the project site in accordance with the MOU with CDFG. The biologist shall walk alongside the grading equipment in each new area of disturbance, and shall have the authority to halt construction temporarily if necessary to capture and relocate an individual. Any individual captured in the grading zone shall be relocated as soon as possible to adjacent suitable habitat outside of the area of impact, pursuant to the MOU.

19. The applicant shall conduct an employee education program for construction crew and City staff prior to construction activities. A biological monitor shall meet with the construction crew at the onset of construction to educate the construction crew on the following: 1) the appropriate access route in and out of the construction area; 2) how biological monitor will examine the area and agree upon a method which will ensure the safety of the monitor during such activities, 3) the special-status species that may be present; 4) the specific mitigation measures that will be incorporated into the construction effort; and 5) the proper procedures if a special-status animal or any other animal is encountered within the project site.

20. A representative shall be appointed by the City who will be the contact source for any employee or contractor who may inadvertently kill or injure a special-status species or find one dead, injured, or trapped. The representative shall be legally responsible to notify USFWS and CDFG immediately in the event that "take" of any special-status wildlife species occurs. The representative shall be identified during the Employee Education Program and his/her contact information shall be provided to USFWS and CDFG. It is imperative that this individual will be present onsite every day and will be accessible to regulatory agency personnel.

21. All food-related and other trash shall be disposed of in closed containers and removed from the project area at least once a week during the construction period, or more often if trash is attracting avian or mammalian predators. Construction personnel shall not feed or otherwise attract wildlife to the area. These instructions to the construction crew shall be reiterated during the employee education program and during update meetings with construction crews. The instructions shall also be posted conspicuously on the site.

Summary and Conclusion:

DD&A was contracted to provide environmental services for the proposed Miravale Phase III Specific Plan in the City of Soledad, CA. In an effort to analyze the potential biological issues associated with the proposed project, DD&A prepared this Preliminary Biological Assessment to identify any sensitive or special-status habitats, plants or animals potentially present within development boundaries. Based on a review of the Vesting Tentative Map for the proposed project and multiple site visits by qualified biologists and specialist subconsultants, DD&A has determined that the Miravale III project site may support one special-status plant species: Lemmon's jewel flower. As Lemmon's jewel flower is a California State Species of Special Concern, impacts to this species should be provided planning consideration under CEQA. Therefore, it is recommended that Spring-time floristic surveys occur within portions of the project site supporting appropriate habitat for this species (mixed grassland/rocky outcrop). If Lemmon's jewel flower is present, a mitigation and monitoring plan shall be prepared by a qualified biologist and approved by CDFG prior to disturbing areas supporting this species.

In addition, DD&A has determined that two biologically sensitive and/or regulated habitat present within project boundaries; fringe wetlands associated with the onsite reservoir and agricultural basins, and the mixed grassland habitat due to its value for a suite of listed and/or special-status wildlife species. Although a wetland delineation was not conducted at the agricultural basins, a preliminary wetland assessment suggests that fringe wetlands are present. Please note that these fringe wetlands are not likely jurisdictional to ACOE given the current regulation of Section 404 of the Clean Water Act; wetland delineations must be conducted at these sites prior to impacting them. Additional mitigation is presented.

DD&A biologists have also identified a number of special-status wildlife species which are now known and/or assumed present within project boundaries, including; San Joaquin kit fox, American badger, Salinas pocket mouse Western burrowing owl, White-tailed kite, Northern harrier, and loggerhead shrike.

In addition, DD&A identified the presence of highly hybridized to non-native tiger salamander at the onsite reservoir; USFWS subsequently determined that these tiger salamanders are not subject to regulation under ESA.

Finally, DD&A has identified a number of special-status wildlife species which may be present (or occasionally present) within project boundaries based on the available habitat and/or reported occurrences of these species in the vicinity of the project site, including: pallid bat, Townsend's big-eared bat, Western Mastiff bat, Cooper's hawk, golden eagle, merlin, California horned lark, California red-legged frog, Western spadefoot, black-legless lizard, coast horned lizard, and San Joaquin coachwhip.

This Biological Assessment presents mitigation measures intended to reduce impacts to special-status species, but significant impacts to a variety of special-status wildlife species are anticipated even with implementation of mitigation. Impacts to federally listed species will require consultation/coordination with USFWS and/or CDFG in order to satisfy ESA and CESA. USFWS and CDFG site-specific recommendations would supersede the measures presented in this document as these regulatory agencies are responsible for administering ESA and CESA.

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Personal Communications:

Allaback, Mark.
Wildlife Biologist, Biosearch
~Ongoing dialogue (in person, phone, fax, e-mail) since mid-August 2006.

Cooper, Doug
USFWS Ventura
~Ongoing dialogue regarding CTS and SJKF. Discussion of USFWS determination that onsite tiger salamanders are not afforded protection under ESA on 12/17/07.

Doane, Mary
Principal, Archaeological Consulting Services.
~Spoke with Mary on 9/29/06 to confirm rattlesnake observation

Laabs, David
Wildlife Biologist, Biosearch
~Ongoing dialogue (in person, phone, fax, e-mail) since mid-August 2006

Mirrassou, Mike
Onsite Vineyard Manager
~discussions regarding rattlesnake den, access to site, etc.

Roberson, Don
Author/Ornithologist/Attorney.
~Site visit and personal communications regarding the potential presence of bank swallows and identification of Odontates utilizing the onsite reservoir.

Root, Roger
USFWS Ventura
~Several discussions of the SJKF and CTS Site Assessments and USFWS requests for additional surveys.

Shaffer, Brad
UC Davis Professor and Principal of the Shaffer Lab
~discussion of hybrid CTS and proximity to Miravale III project site; discussion of tissue sampling and genetic analysis.

Steeck, Dianne
USFWS Ventura
~Several discussions at initiation of the project review regarding the potential presence of federally listed herpetofauna (CTS).

Wurtz, Jim
Project Engineer, Bestor Engineering
~Onsite communications during initial review. Discussion of CAD files during preparation of "Impacts by Habitat" GIS materials.

Vance, Julie
CDFG Fresno
~Discussion of recommended avoidance measures for Salinas Pocket Mouse. Discussion of avoidance measures for American Badger

Appendix A. Table of Special-status Species Potentially Present in the Project Vicinity. Sources: USFWS Listed Species in Monterey County, CNDDB occurrences from Soledad quad and all surrounding quads, published and unpublished data, and personal knowledge.

Species	Status (USFWS/ CDFG/ CNPS)	General Habitat	Potential Occurrence within Project Vicinity
MAMMALS			
Antrozous pallidus Pallid bat	--/CSC	A wide variety of habitat are utilized, including grasslands, shrublands, woodlands, and forest from sea level up through mixed conifer forests. Most common in open, dry habitats with rocky areas for roosting. Also relatively common on bridges.	**Medium.** No CNDDB occurrences within 10 miles of the project site. Appropriate foraging habitat and marginally appropriate roosting habitat is present within project boundaries.
Dipodomys elephantinus big-eared kangaroo rat	--/ CSC	Chaparral covered slopes of the southern part of the Gabilian Range, in the vicinity of the Pinnacles. Forages under shrubs and in open burrows for cover and nesting.	**Not Present.** Appropriate habitat not present. Species not captured during onsite small mammal trapping study.
Enhydra lutris nereis southern sea-otter	FT/	Found in nearshore marine habitats environments of California from Ano Nuevo to Point Sal. Often associated with giant kelp and bull kelp, these opportunistic foragers eat mainly abalones, sea urchins, crabs, and clams.	**Not Present.** Habitat absent.
Eumops perotis californicus Western mastiff-bat	FSC/ CSC	Many open habitats including conifer and deciduous woodlands, coastal scrub, grassland, and chaparral. Roost in crevices in cliff faces, high buildings, trees, and tunnels.	**Unlikely.** No CNDDB occurrences of this species within 10 miles of the project site. The project site supports marginally appropriate foraging and roosting habitat for this species.
Neotoma fuscipes luciana Monterey dusky-footed woodrat	--/ CSC	Dense chaparral, oak and riparian woodland, and in mixed coniferous forest that has a well developed understory. Prefers fairly moist habitat but is also found in drier habitats such as pinyon-juniper woodland.	**Not Present.** Appropriate habitat not present. No woodrat nests observed.
Perognathus inornatus psamnophilus Salinas pocket mouse	FSC/ CSC	Typically found in grasslands and blue oak savanna, needs friable soils.	**Present.** One male was captured during onsite small mammal sampling, and appropriate habitat is

Species	Status (USFWS/ CDFG/ CNPS)	General Habitat	Potential Occurrence within Project Vicinity
			present in foothill portions of the site.
Taxidea taxus American badger	--/CSC	dry, open grasslands, fields, and pastures	**Present.** CNDDB reports an occurrence of this species approximately 6 miles south of the project site. Appropriate habitat is present in foothill portions of the site. American badger dens observed near onsite reservoirs and in foothill habitats.
Vulpes macrotis mutica San Joaquin Kit fox	FE/ ST	Open, level areas with loose-textured soils supporting scattered, shrubby vegetation with little human disturbance. Live in annual grasslands or grassy open stages dominated by scattered brush, shrubs, and scrub.	**Present.** The CNDDB reports the presence of SJKF critical habitat within 2 km of project boundaries. Appropriate denning habitat is present in foothill portions of the site. Active and fallow agricultural lands may provide foraging and dispersal habitat for this species. This species is assumed present.
BIRDS			
Accipiter cooperii Cooper's hawk	--/ CSC	Resident throughout most of the wooded portion of the state. Dense stands of live oak, riparian deciduous, or other forest habitats near water used most frequently. Seldom found in areas without dense tree stands, or patchy woodland habitats.	**Low.** No CNDDB occurrences of this species within 10 miles of the project site. Appropriate nesting habitat not present within project boundaries.
Accipiter striatus sharp-shinned hawk	--/ CSC	Uses dense stands in close proximity to open areas. Roosts in intermediate to high-canopy forest. Nests in dense, even-aged, single-layered forest canopy. Winters in woodlands.	**Low.** No CNDDB occurrences of this species within 10 miles of the project site. Appropriate nesting habitat not present within project boundaries.

Species	Status (USFWS/ CDFG/ CNPS)	General Habitat	Potential Occurrence within Project Vicinity
Agelaius tricolor tricolored blackbird	--/ CSC	Nest in colonies in dense riparian vegetation, along rivers, lagoons, lakes, and ponds. Forages over grassland or aquatic habitats.	**Low.** No CNDDB occurrences within 10 miles of the project site. No tric's observed at the onsite reservoir and/or ag lands during multiple site visits by qualified biologists (Pers. Obs. David Keegan)
Aquila chrysaetos golden eagle	--/CSC	Use rolling foot-hills, mountain terrain, wide arid plateaus deeply cut by streams and canyons, open mountain slopes, cliffs, and rocky outcrops. Nest in secluded cliffs with overhanging ledges as well as large trees.	**Medium.** No CNDDB occurrences within 10 miles of the project site, however, appropriate foraging habitat is present throughout the project site. No nesting habitat present.
Athene cunicularia Western burrowing owl	FSC/ CSC	Burrows are protected. Require open grassland habitats with low-growing vegetation and abandoned burrows. Prefers these areas assoc. with some raised perches.	**Present.** No CNDDB occurrences within 10-miles of the project site, however, DD&A and Biosearch biologists have observed several burrowing owls and occupied burrows in the course of protocol-level surveys for this species.
Brachyramphus marmoratus marbled murrelet	FT/	Occur year-round in marine subtidal and pelagic habitats from the Oregon border to Point Sal. Partial to coastlines with stands of mature redwood and Douglas-fir. Requires dense mature forests of redwood and/or Douglas-fir for breeding and nesting.	**Not Present.** No appropriate habitat.
Buteo swainsoni Swainson's hawk	FSC/ ST	Generally found associate with plains, range, open hills, and sparse trees.	**Unlikley,** No CNDDB occurrences within 10-miles of the project site. This species typically forages in the vicinity of nesting habitat. No nesting habitat present within

Species	Status (USFWS/ CDFG/ CNPS)	General Habitat	Potential Occurrence within Project Vicinity
			or adjacent to the project site.
Circus cyaneus Northern harrier	--/ CSC	Generally found in flat open areas with tall, dense grasses, shrubs, and edges for cover and breeding. Use tall grasses in wetlands or at wetland borders for nesting.	**Present.** No CNDDB occurrences within 10-miles of the project site, however, appropriate foraging habitat is present, and one individual was observed foraging over foothill portions of the site.
Charadrius alexandrinus nivosus Western snowy plover	FT/ CSC	Sandy beaches on marine and estuarine shores, also salt pond levees and the shores of large alkali lakes. Requires sandy, gravelly or friable soil substrate for nesting.	**Not Present.** No habitat present.
Eremophila alpestris California horned lark	---/CSC	Variety of open habitats, usually where large trees and/or shrubs are absent. Found from grasslands along the coast to deserts at sea-level and alpine dwarf-shrub habitats are higher elevations. Builds open cup-like nests on the ground.	**Medium.** No CNDDB occurrences, but this species is often not reported. Appropriate habitat for this species is present within project boundaries, but none have been observed.
Elanus leucurus white-tailed kite	--/ CFP	Open groves, river valleys, marshes, and grasslands. Prefer such area with low roosts (fences etc.). Nest in shrubs and trees adjacent to grasslands.	**Present.** No CNDDB occurrences within 10-miles of the site, however, appropriate foraging habitat is present throughout grassland portions of the site, and DD&A and Biosearch biologists have observed this species within proposed development boundaries.
Falco columbarius Merlin	--/CSC	Uses a variety of habitats in both winter and during migration.	**Low.** No CNDDB occurrences within 10-miles of the site, however, appropriate foraging habitat is present throughout grassland portions of

Species	Status (USFWS/ CDFG/ CNPS)	General Habitat	Potential Occurrence within Project Vicinity
			the site. This species does not nest within Monterey County.
Falco peregrinus American Peregrine Falcon	FE/SE	Forages for other birds over a variety of habitats. Breeds primarily on rocky cliffs.	**Unlikely** No CNDDB occurrences within 10-miles of the site. No appropriate nesting habitat. Project site is >30 miles from the coast.
Riparian riparia bank swallow	--/ ST	Nest colonially in sand banks. Found near water; fields, marshes, streams, and lakes.	**Not Present.** Appropriate nesting habitat is not present within the project site or immediate vicinity (pers. comm. Don Roberson).
Sterna antillarum browni California least tern	FE/ SE	Sea beaches, bays; large rivers, bars.	**Not Present.** Appropriate habitat not present.
Vireo bellii pusillus Least Bell's vireo	FE/SE	Riparian habitats. Breed in willow riparian forest supporting a dense, shrubby understory. Oak woodland with a willow riparian understory is also used in some areas, and individuals sometimes enter adjacent chaparral, coastal sage scrub, or desert scrub habitats to forage.	**Not Present.** Appropriate habitat not present.
REPTILES AND AMPHIBIANS			
Ambystoma californiense California tiger salamander	FT/ CSC	Annual grassland and grassy understory of valley-foothill hardwood habitats in central and northern California. Need underground refuges and vernal pools or other seasonal water sources.	**Present.** CTS Critical Habitat is present within 5km of project boundaries. CTS occurrence records within 6 km. Project site is within historic distribution of the species, and DD&A biologists confirmed CTS breeding at the onsite Reservoir in the course of aquatic sampling for this species.
Gambelia silus blunt-nosed leopard lizard	FE/ SE	Suitable habitat for this species includes sparsely vegetated scrub and grassland habitats in areas of low topographic relief. In areas of high relief, distribution, distribution is usually confined	**Unlikely.** No CNDDB occurrences within 10-miles of the project site**.** Marginally appropriate habitat

Species	Status (USFWS/ CDFG/ CNPS)	General Habitat	Potential Occurrence within Project Vicinity
		to broad sandy washes. Found on alkali flats, large washes, arroyos, canyons, and low foothills from 100-3000ft.	present, but none observed during multiple site visits.
Masticophis flagellum ssp. *ruddocki* *San Joaquin coachwhip*	--/ CSC		
Phrynosoma coronatum frontale Coast horned lizard	--/ CSC	Associated with open patches of sandy soils in washes, chaparral, scrub, and grasslands.	**Medium.** No CNDDB occurrences within 10-miles of the site, however, appropriate habitat is present throughout the fallow and grassland portions of the site.
*Rana aurora draytoni*i California red-legged frog	FT/ CSC	Lowlands and foothills in or near permanent or late-season sources of deep water with dense, shrubby, or emergent riparian vegetation. During late summer or fall adults are known to utilize a variety of upland habitats with leaf litter or mammal burrows.	**Low.** CRLF Critical Habitat is present within 10 km of project boundaries. CRLF occurrence records within 7 km. Project site is within historic distribution of the species, and supports appropriate aquatic breeding habitat and associated upland habitat at the "reservoir" and surrounding foothills. However, no CRLF eggs, larvae, or adults have been observed onsite in the course of multiple breeding season site visits by qualified biologists (David Keegan, Pers. Obs.).
Scaphiopus hammondii Western spadefoot	--/ CSC	Grasslands with shallow temporary pools are optimal habitats for the Western spadefoot. Occur primarily in grassland habitats, but can be found in valley and foothill woodlands. Vernal pools are essential for breeding and egg laying.	**Low.** CNDDB reports one occurrence of this species within 6 km of the site. Project site is within historic distribution of the species, and supports appropriate aquatic breeding habitat and associated upland

Species	Status (USFWS/ CDFG/ CNPS)	General Habitat	Potential Occurrence within Project Vicinity
			habitat at the "reservoir" and surrounding foothills. However, no WST eggs, larvae, or adults have been observed onsite in the course of multiple breeding season site visits by qualified biologists (David Keegan, Pers. Obs.).
Taricha torosa torosa coast range newt	CSC	Occurs mainly in valley-foothill hardwood, valley-foothill hardwood-conifer, coastal scrub, and mixed chaparral but is known to occur in grasslands and mixed conifer types. Seek cover under rocks and logs, in mammal burrows, rock fissures, or man-made structures such as wells. Breed in intermittent ponds, streams, lakes, and reservoir.	**Unlikely.** No CNDDB occurrences within 10-miles of the project site**.** Coast range newts are only known from locations south of Salinas River in Monterey County. Salinas River is >2.5 miles south of project site.
FISH			
Eucyclogobius newberryi tidewater goby	FE/ CSC	Brackish water habitats, found in shallow lagoons and lower stream reaches.	**Not Present.** No navigable waters present.
Oncorhynchus mykiss irideus Steelhead-Central California Coast.	FT/ CSC	Coastal perennial and near perennial streams, with suitable spawning and rearing habitat and no major barriers.	**Not Present.** No navigable waters present.
INVERTEBRATES			
Branchinecta conservatio Conservancy fairy shrimp	FE/	Require ephemeral pools with no flow. Grasslands of the northern two-thirds of the Central Valley, spanning a north-south distance of about 300 km, at elevations of 5-145 meters. Require ephemeral pools with no flow.	**Not Present.** No appropriate aquatic habitat present.
Branchinecta longiantenna longhorn fairy shrimp	FE/ none	Require ephemeral pools with no flow. Restricted distribution; Eastern edge of the Central Coast Mountains Region. Require ephemeral pools, typically associated with clear to turbid, clay and grass-bottomed pools.	**Not Present.** No appropriate aquatic habitat present.
Branchinecta lynchii vernal pool fairy shrimp	FT/ --	Require ephemeral pools with no flow. Associated with vernal pool/grasslands from near Red	**Not Present.** No appropriate aquatic habitat present.

Species	Status (USFWS/ CDFG/ CNPS)	General Habitat	Potential Occurrence within Project Vicinity
		Bluff (Shasta County), through the central valley, and into the South Coast Mountains Region. Require ephemeral pools with no flow.	
Danaus plexippus Monarch butterfly	--/--	Overwinters in coastal California using colonial roosts generally found in Eucalyptus, pine and acacia trees. Overwintering habitat for this species within the Coastal Zone represents ESHA. Local ordinances often protect this species as well.	**Not Present.** Appropriate habitat (groves and microclimate) present.
Euphilotes enoptes smithi Smith's blue butterfly	FE/--	Most commonly associated with coastal dunes and coastal sage scrub plant communities in Monterey and Santa Cruz Counties. Plant hosts are *Erigonum latifolium* and *E. Parvifolium.*	**Not Present.** Obligate host plants not present.
Linderiella occidentalis California linderiella fairy shrimp	FSC/	Ephemeral ponds with no flow. Generally associated with hardpans.	**Not Present.** No appropriate aquatic habitat present.
PLANTS			
Abies bracteata Bristlecone fir	--/1B	Endemic to the Santa Lucia Mountains.	**Not Present.** No fir present.
Arctostaphylos gabilanensis Gabilan Mountains manzanita	--/1B	Endemic to chaparral and chaparral/pine woodland habitats of the Gabilan Mountains of California, along the borders of San Benito and Monterey counties.	**Not Present.** No manzanita present.
Astragalus tener var. *tener* alkali milk-vetch	-- / SE / 1B	Playas, valley and foothill grassland (adobe clay), vernal pools/ alkaline; elevation 1-60 meters. Annual herb, blooms March-June.	**Not Present.** No appropriate habitat.
Caulanthus coulteri var. lemmoniii Lemmon's jewel flower	--/1B	Open, grassy areas; on hillside slopes and in fields, canyons, and arroyos. Soils include alkaline soils, shaley clay, sandstone talus, and decomposed serpentine. Predominantly found within Valley Grassland community, occasionally in Pinyon-Juniper Woodland. 80 - 1600 m. Annual herb; blooms March-May.	**Medium.** Marginally appropriate habitat present in the mixed grassland/rocky outcrop portions of the project site, and not identifiable at the time of the DD&A site assessments. Spring-time floristic survey or preconstruction survey recommended.

Species	Status (USFWS/ CDFG/ CNPS)	General Habitat	Potential Occurrence within Project Vicinity
Centromadia parryi ssp. *congdonii* Congdon' tarplant	-- / -- /1B	Valley and foothill grassland (alkaline); elevation 1-230 meters. Annual herb, blooms June-November	**Not Present.** Lack of appropriate soils (lack of heavy soils).
Chorizanthe pungens var. pungens Monterey spineflower	FT/ 1B	Chaparral (maritime), cismontane woodland, coastal dunes, coastal scrub, valley and foothill grassland/ sandy; elevation 3-450 meters. Annual herb, blooms April-June.	**Not Present.** Lack of appropriate habitat (lack of sandy soils).
Chorizanthe robusta var. robusta robust spineflower	FE/ 1B	Cismontane woodland (openings), coastal dunes, coastal scrub/ sandy or gravelly; elevation 3-300 meters. Annual herb, blooms April-September.	**Not Present.** Lack of appropriate habitat (lack of sandy soils).
Clarkia jolonensis Jolon clarkia	-- / -- / 1B	Cismontane woodland, chaparral, coastal scrub, and riparian woodland.	**Not Present.** Lack of appropriate habitat (dunes, sandy/gravelly soils, etc.).
Cupressus goveniana ssp. goveniana gowen cypress	FT/ 1B	Closed cone coniferous forest, chaparral (maritime); elevation 30-300 meters. Tree (evergreen).	**Not Present.** Conspicuous species not present.
Eriogonum nortonii pinnacle buckwheat	FSC/ 1B	Chaparral, valley and foothill grassland/ sandy, often on recent burns; elevation 300-975 meters. Annual herb, blooms May-June.	**Not Present.** Conspicuous species not present.
Erysimum menziesii ssp. menziesii Menzie's wallflower	FE/ SE/ 1B	Coastal dunes. Perennial herb, blooms March-June.	**Not Present.** Appropriate habitat not present.
Holocarpha macradenia Santa Cruz tarplant	FT/ SE	Coastal prairies, valley foothill grasslands/ often clay. Annual herb, blooms June-October	**Not Present.** No mesic sites. No soils (lack of clay).
Layia carnosa Beach layia	FE/ SE/ 1B	Coastal dunes., coastal scrub (sandy; elevation 0-60 meters. Annual herb, blooms March-July.	**Not Present.** Appropriate habitat not present.
Lembertia congdonii	FE/ 1B	Chenopod scrub, valley and	**Not Present.**

Species	Status (USFWS/ CDFG/ CNPS)	General Habitat	Potential Occurrence within Project Vicinity
San Joaquin wollythreads		foothill grassland (sandy); elevation 60-800 meters. Annual herb, blooms February-May	No habitat. No soils (lack of sandy soils).
Lupinus tidestromii Tidestrom's lupine	FE/SE/1B	Coastal dunes; elevation 0-100 meters. Perennial herb (rhizomatous), blooms April-June.	**Not Present.** Appropriate habitat not present.
Malacothamnus aboriginum indian valley bush mallow	FSC/ 1B	Chaparral, cimontane woodland/ rocky.	**Not Present.** Appropriate habitat not present.
Malacothrix saxatilis var. arachnoidea Carmel Valley macothrix	FSC/ 1B	Chaparral (rocky); elevation 25-335 meters. Perennial herb (rhizomatous), blooms March-December.	**Not Present.** Appropriate habitat not present.
Navarretia negelliformis ssp. radians shining navarretia	FSC/ 1B	Cismontane woodland, valley foothill grasslands, vernal pools	**Not Present.** Appropriate habitat not present.
Potentilla hickmanii Hickman's cinqufoil	FE/ SE / 1B	Coastal bluff scrub, closed cone coniferous forests, meadows(vernally mesic), marshes and swamps (freshwater). Perennial herb, blooms April-August.	**Not Present.** Appropriate habitat not present.
Yadon's rein orchid *Piperia yadonii*	FE/-- 1B	Sandy soils in coastal bluff scrub, closed-cone coniferous forest, and maritime chaparral. Annual.	**Not Present.** Appropriate habitat not present.
Plagiobothrys uncinatus Hooked popcorn flower	--/1B	Chaparral, Cismontane woodlands, Valley-foothill grasslands.	**Not Present.** No mesic habitat.
Texosporium sancti-jacobi woven-spored lichen	FSC/1B	Found in arid to semi-arid grasslands, shrublands, or savannas. Parent materials are noncalcareous, including basalt, granite, and mixed alluviums. Soils developed on these parent materials vary greatly, from very fine textured soils on basalt to sandy loams, to soils with a very high content of fine or coarse sand. Soil depth varies greatly.	**Not Present.** Appropriate habitat not present.

Unlikely: The project area and/or immediate vicinity do not provide suitable habitat for a part particular species. Project area is outside of the species range.

Low Potential: Project area and/or immediate vicinity provides only limited habitat for a particular species. The known range for a particular species may be outside of the project area.

Medium Potential: The project area and/or immediate vicinity provide suitable habitat for a particular species, though there are no known sightings in the area.

High potential: The project area and/or immediate vicinity provide ideal habitat conditions for a particular species and/or the species is known to occur in the area.

Key to Status Codes

CSC	CDFG Species of concern
FSC	Federal Species of concern
CFP	CDFG Fully Protected Animal
SE	State Endangered
ST	State Threatened
FE	Federal Endangered
FT	Federal Threatened
PT	Officially proposed as Threatened
PX	Proposed as critical habitat essential to species recovery
C	Candidate to be Proposed
1B	CNPS 1B Listed, Endangered, Threatened or Rare in California

Appendix B. Salinas pocket mouse sampling report (Biosearch)

SALINAS POCKET MOUSE SURVEY
MIRAVALE III SUBDIVISION,
SOLEDAD, MONTEREY COUNTY

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22 September 2006

SALINAS POCKET MOUSE SURVEY
MIRAVALE III SUBDIVISION,
SOLEDAD, MONTEREY COUNTY

Introduction

The Salinas pocket mouse (*Perognathus inornatus psammophilus*) is designated as a Species of Special Concern by the California Department of Fish and Game (CDFG). Suitable habitat for the subspecies is present on a portion of the proposed Miravale III subdivision north of Soledad in Monterey County, and the subspecies has been recorded from the vicinity. This document provides the results of a live-trapping survey to determine the presence of the subspecies onsite in 2006.

Study Area

The Miravale III project site is situated at the northern edge of Soledad in Monterey County, California (Figure 1). It covers 920 acres and is bisected by San Vicente Road. The majority of the site is currently in agricultural production including vineyards and row crops. This area is flat and bisected by numerous dirt roads.

The eastern edge of the site is hilly, and has not been disked. This portion of the site supports grassland habitat and covers approximately 160 acres. Elevations range between 400 feet and 740 feet above sea level.

The sampling area was restricted to the hills along the eastern edge of the site (Figures 2-4). The portion of the site on the floor of the Salinas Valley does not provide suitable habitat for the Salinas pocket mouse due to ongoing agricultural operations.

Wildlife habitats to the north and east are relatively undisturbed and support grassland, oak savannah and scrub habitats. Lands to the west are in agricultural production, while lands to the south have been converted to residential use.

Salinas Pocket Mouse

The Salinas pocket mouse (*Perognathus inornatus psammophilus*) occurs in the Salinas Valley from the vicinity of Soledad south to the vicinity of Hog Canyon near San Miguel (Williams 1986; Best 1993; Williams, et al. 1993). The subspecies was originally described from near Arroyo Seco, approximately 5 miles to the south of the project site. Conversion of natural habitats has occurred throughout much of the range of the subspecies. It is designated as a Species of Special Concern by the California Department of Fish and Game (CDFG 2006).

Little is known of the natural history of the subspecies. It has been captured infrequently since it was described in 1937. It has been found in grassland, savannah and scrub habitats, typically with sandy soils (Williams 1986).

P. inornatus is nocturnal and spends its days below ground in burrows. It is a granivore that feeds on the seeds of grasses, shrubs and forbs. The species typically breeds between March to July and becomes inactive during the fall and winter months (Best 1993).

The Salinas pocket mouse is currently one of three subspecies of the San Joaquin pocket mouse, *P. inornatus*. There is a considerable degree of uncertainty regarding the taxonomy of the species, and it is likely that there is more than one species included within *Perognathus inornatus* as it is currently comprised (Best 1993; Williams, et al. 1993; Laabs and Allaback, unpub. data). It has been suggested that *P. i. psammophilus* is synonymous with *P. i. neglectus* from the San Joaquin Valley and Carrizo Plain. Resolving the systematic status of the Salinas pocket mouse in regards to the other members of the species complex has been identified as a key element in formulating a management strategy for the subspecies (Williams 1986).

Methods

Live-trapping was conducted by wildlife biologists David Laabs and Mark Allaback with assistance from wildlife biologist David Keegan between 29 August 2006 and 1 September 2006. Eight trap transects consisting of 25 Sherman live-traps (12" x 3.5" x 3") each with 10 meter spacing between traps were established throughout the site (Figure 2). We opted to use transect trapping since the purpose of the sampling was to generate a species inventory rather than gather data regarding relative abundance or density (Jones, et al. 1996). The transect locations were chosen to sample representative micro-habitats on the site. Traps were set and baited for three consecutive nights and checked on the following morning beginning at sunrise.

All small mammals captured were identified to species, and their age and sex were recorded. All individuals were marked with ink to identify if they had been captured previously. The number of new individuals captured per trap-night was used as an index of abundance for each species.

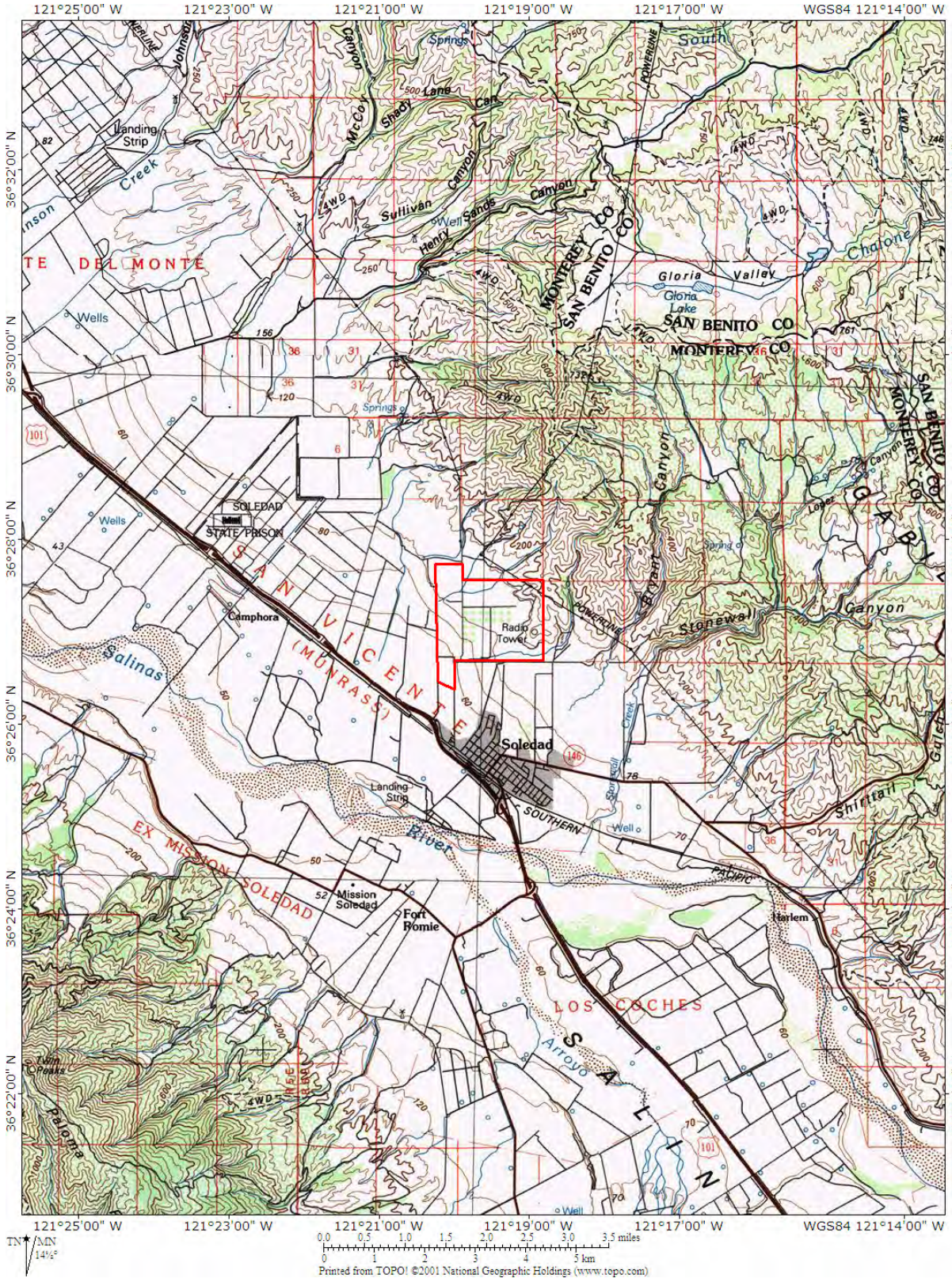


Figure 1. Location of Miravale III project site, Soledad, Monterey County

Results

Two hundred traps were opened for three consecutive nights for a total of 600 trap-nights. Sixty-two individuals belonging to five species were captured. Thirty-three recaptures of three species were made.

A single adult male Salinas pocket mouse was captured on 1 September 2006 in the northeastern part of the site (Figure 2). The capture location was midway up a south-facing slope at an elevation of 520 feet (Figures 3 and 4). Positive identification was made based on a unicolored, un-crested tail, smooth pelage and overall measurements. The individual was collected alive to allow for future chromosomal analysis.

The most common species was the California pocket mouse (*Chaetodipus californicus*), which was captured on all 8 transects and accounted for 59.7% of all individuals (Table 1). The deer mouse (*Peromyscus maniculatus*) was captured on 6 of the 8 transects and accounted for 19.4% of all individuals. The Heermann's kangaroo (*Dipodomys heermanni*) rat was captured on 4 of the 8 transects and accounted for 17.7% of all individuals. A single western harvest mouse (*Reithrodontomys megalotis*) was captured (1 of 8 transects; 1.6% of total individuals).

Small mammals were captured on all eight transects. Capture frequency varied greatly between transects, ranging from one individual to 22 individuals per transect (Table 1). Those transects situated on south-facing slopes supported more small mammals than those on north- or west-facing slopes. The presence of rock outcrops also appeared to contribute to higher capture frequencies.

Other small mammals observed or detected by sign onsite were California ground squirrel (*Spermophilus californicus*), Botta's pocket gopher (*Thomomys bottae*) and California vole (*Microtus californicus*).

Family/				Transect #						#/trap	%
Species	1	2	3	4	5	6	7	8	Total	-night	Total
Heteromyidae											
Dipodomys heermanni	3	5	0	0	0	1	0	2	11	0.018	17.7
Chaetodipus californicus	3	3	1	1	2	16	5	6	37	0.062	59.7
Perognathus inornatus	0	0	0	0	0	1	0	0	1	0.002	1.6
Muridae											
Peromyscus maniculatus	1	4	1	0	1	4	0	1	12	0.020	19.4
Reithrodontomys megalotis	0	0	0	0	1	0	0	0	1	0.002	1.6
Total	7	12	2	1	4	22	5	9	62	0.103	100.0

Table 1. Results of nocturnal small mammal trapping by transect.

Discussion

The Salinas pocket mouse was detected in the northeastern corner of the Miravale III project site. Suitable habitat is present throughout the undisked grassland portion of the site. Although typically associated with sparse vegetation, *P. inornatus* is also known to occupy dense grassland.

The development of the Miravale III subdivision as currently designed would result in the loss of approximately 160 acres of habitat for the Salinas pocket mouse. Direct loss of habitat and individuals would occur within the project footprint. Indirect impacts to grassland areas adjacent to the completed project are expected, resulting from habitat fragmentation and the introduction of cats and other human disturbance.

The active agricultural fields that cover the western part of the site no not provide habitat for the Salinas pocket mouse. Those fields onsite that are fallow have only been so for approximately five years, and it is not expected that they would have been re-colonized over such a short time period.

The Salinas pocket mouse has been observed infrequently since its description in the late 1930s. The subspecies was captured at Camp Roberts in 1994, approximately 50 miles south of the project site near the southern edge of the range of the subspecies (CNDDB). To our knowledge, this is the first time detection of the subspecies in the northern part of its range in over 50 years.

There is a considerable amount of confusion in the literature concerning the genus *Perognathus* in Central California. The most recent literature suggests that the subspecies *psammophilus* may be synonymous with the subspecies *neglectus*, which is found along the western edge of the San Joaquin Valley and on the Carrizo Plain (Best 1993; Patton and Rogers 1993). No genetic studies have been made of *psammophilus*, due to the lack of recent specimens from the Salinas Valley. The karyotype (diploid chromosome number) has not been determined (Patton and Rogers 1993), further inhibiting efforts to clarify the genetic affiliations within the species group.

The most critical needs for the subspecies are protection of habitat and additional information regarding its genetic affiliation (Williams 1986). Therefore, avoidance of grassland habitat is recommended. Furthermore, it is recommended that the specimen obtained during this study be analyzed to determine its karyotype. Additional specimens would be required for a more comprehensive phylogenetic analysis to determine its relatedness to other members of the species group.

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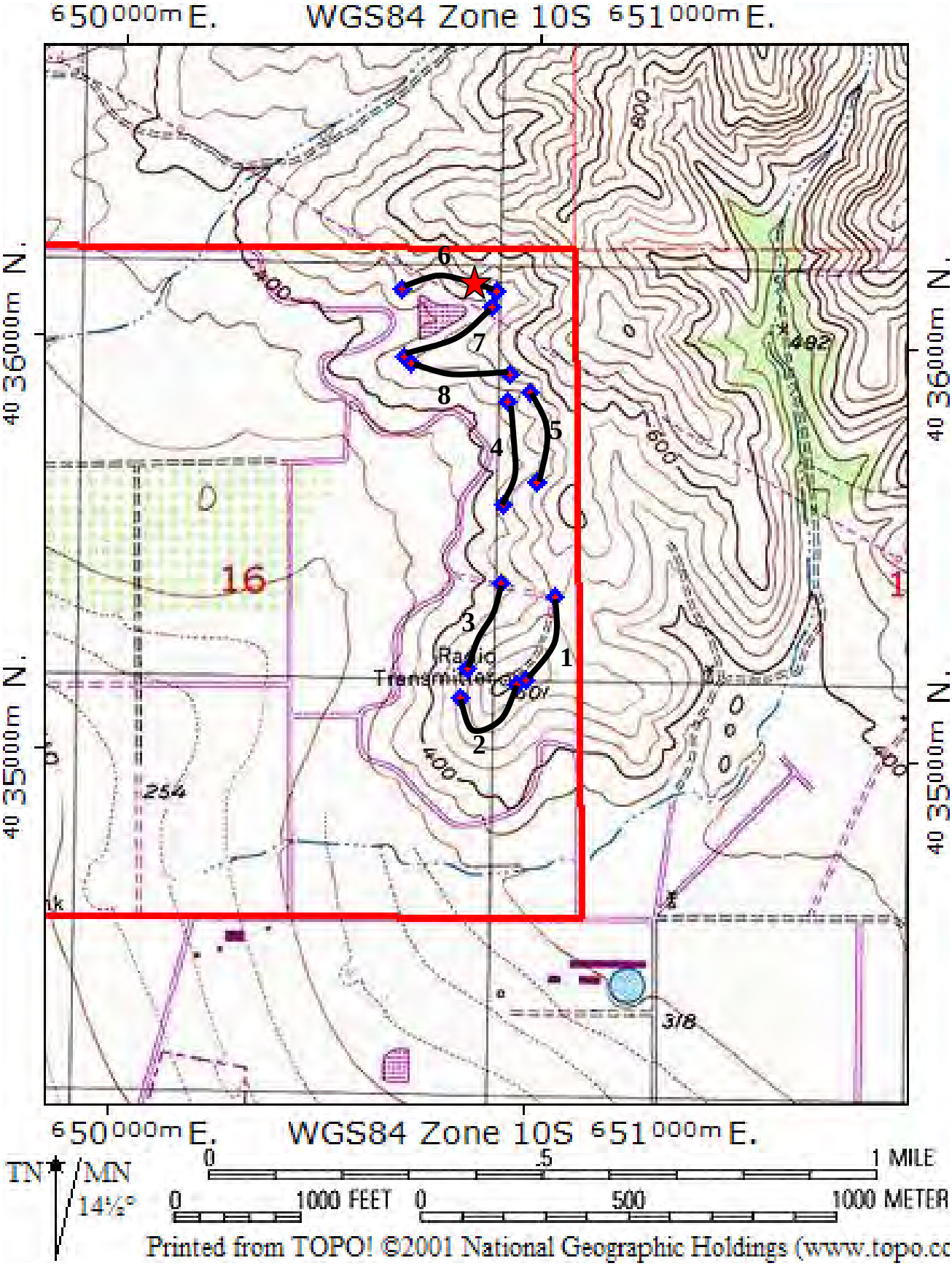


Figure 2. Locations of trap transects and capture location of Salinas pocket mouse (star).



Figure 3. Capture locale of Salinas pocket mouse at Miravale project site (flags).



Figure 4. Capture locale of Salinas pocket mouse at Miravale project site (center).

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Appendix C. San Joaquin Kit Fox Early Evaluation Form (Biosearch)

SAN JOAQUIN KIT FOX EARLY EVALUATION, MIRAVALE III SUBDIVISION MONTEREY COUNTY, CALIFORNIA

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17 November 2006

SAN JOAQUIN KIT FOX EARLY EVALUATION,
MIRAVALE III SUBDIVISION
MONTEREY COUNTY, CALIFORNIA

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SAN JOAQUIN KIT FOX EARLY EVALUATION,
MIRAVALE III SUBDIVISION
MONTEREY COUNTY, CALIFORNIA

SUMMARY

This document provides an early evaluation of habitat suitability for the federally-endangered and state-threatened San Joaquin kit fox (*Vulpes macrotis mutica*) at the site of a proposed subdivision north of Soledad in Monterey County, California. This evaluation follows guidelines disseminated by the United States Fish and Wildlife Service for the species in the northern part of its range.

The Miravale III Project site covers approximately 920 acres along the eastern edge of the Salinas Valley. The proposed project consists of a mixed-use development including 1,470 single-family residential units, 2,730 multi-family residential units, 120 hotel rooms, 275,000 square feet of retail commercial space and an 18-hole golf course. The project also proposes three school sites, a fire and police substation, a recycled water plant, and approximately 75 acres of open space and recreation areas.

The project site is near the northern edge of the range of the San Joaquin kit fox in the Salinas Valley. The species has been observed within 2 miles of the project site, although it has not been observed in the vicinity in over 20 years.

The eastern part of the site, covering approximately 140 acres, supports grassland habitat, which is suitable habitat for the San Joaquin kit fox. The majority of the project site, approximately 780 acres, is on the floor of the Salinas Valley and is currently used for row crops and vineyards. These habitats are known to be used by San Joaquin kit fox, particularly when they are in proximity to grassland habitats. Potential fox dens and a suitable prey base are present, particularly in the eastern portion of the site.

SAN JOAQUIN KIT FOX EARLY EVALUATION,
MIRAVALE III SUBDIVISION
MONTEREY COUNTY, CALIFORNIA

1.0 INTRODUCTION

The proposed Miravale III subdivision covers approximately 920 acres near Soledad in Monterey County, California. Denise Duffy & Associates (Monterey, California) is preparing an Environmental Impact Report for the project. The present evaluation was prepared to provide the United States Fish and Wildlife Service (USFWS) with the information necessary to determine if the project site provides suitable habitat for the San Joaquin kit fox and whether focused surveys are recommended (USFWS 1999a).

2.0 STUDY AREA

The Miravale III projects site is situated within unincorporated lands immediately north of Soledad in Monterey County, California (Figure 1). The project site is situated at the eastern edge of the Salinas Valley approximately 1.7 miles from the Salinas River. The bulk of the site is on a gently sloping plain. The eastern part of the site is situated in the foothills of the Gabilan Range (Figure 2). The 920-acre project site is situated between San Vicente Road and Orchard Lane, and is surrounded by agricultural land to the north and west, an existing residential subdivision to the south, and undeveloped foothills of the Gabilan Mountain Range to the east.

3.0 METHODS

Methods conform to those detailed in the early evaluation requirements provided by USFWS (1999a). Reconnaissance-level field surveys were performed between 29 August and 17 October 2006. The project area was surveyed by vehicle and foot to identify wildlife habitats. Habitat features for San Joaquin kit fox, including prey availability and den potential, were evaluated. Aerial photos of the site and of surrounding areas were reviewed.

A record search of the California Natural Diversity Data Base (CNDDB 2006) for the Soledad 7.5' series quadrangle and the eight surrounding quadrangles was conducted. The results of previous biological investigations in the area were reviewed. Scientists with experience working in the region were contacted (Johnson, pers. comm.; Mori, pers. comm.; Orloff, pers. comm.; Root, pers. comm.).

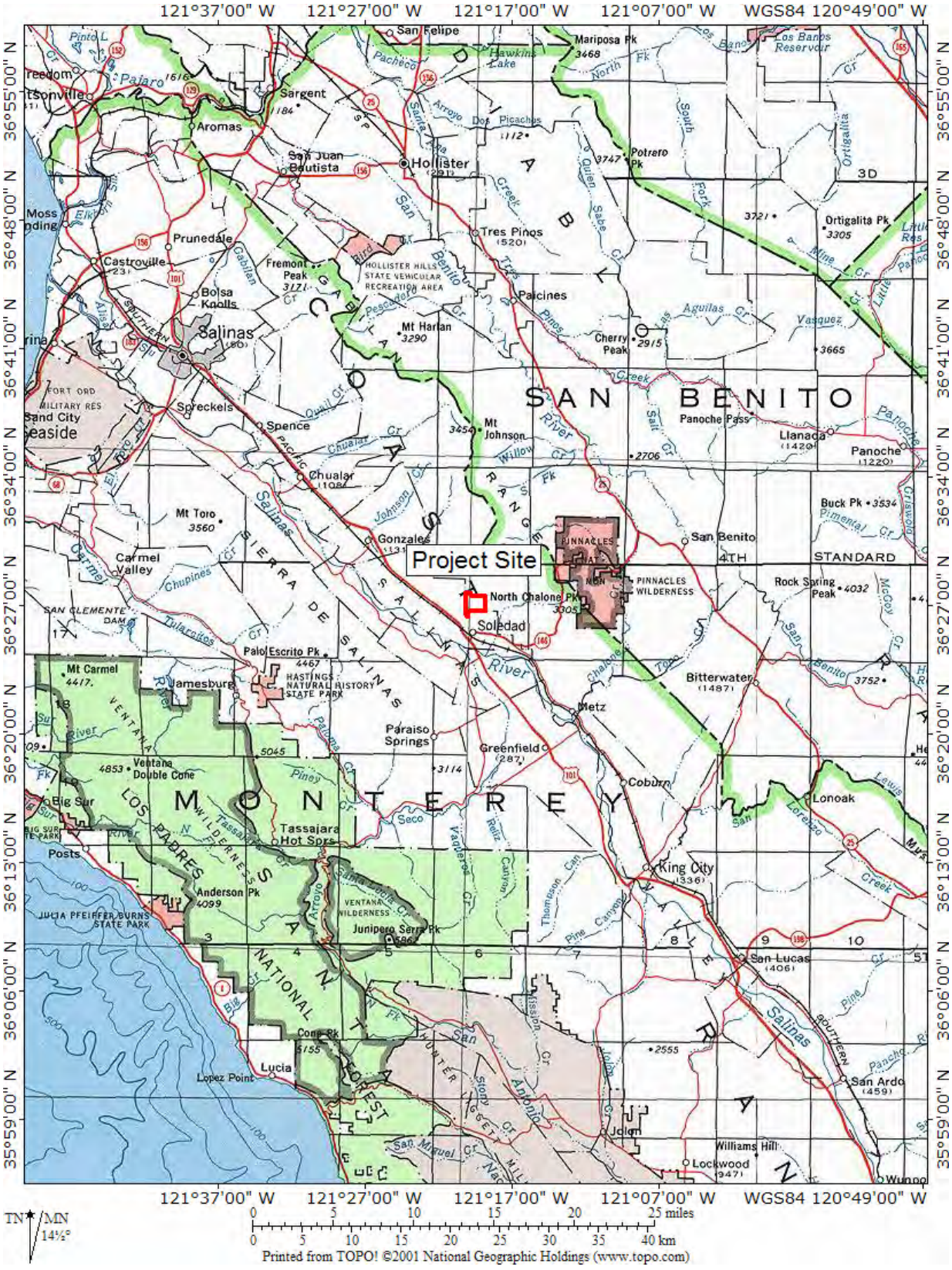


Figure 1. Miravale III project site vicinity map.

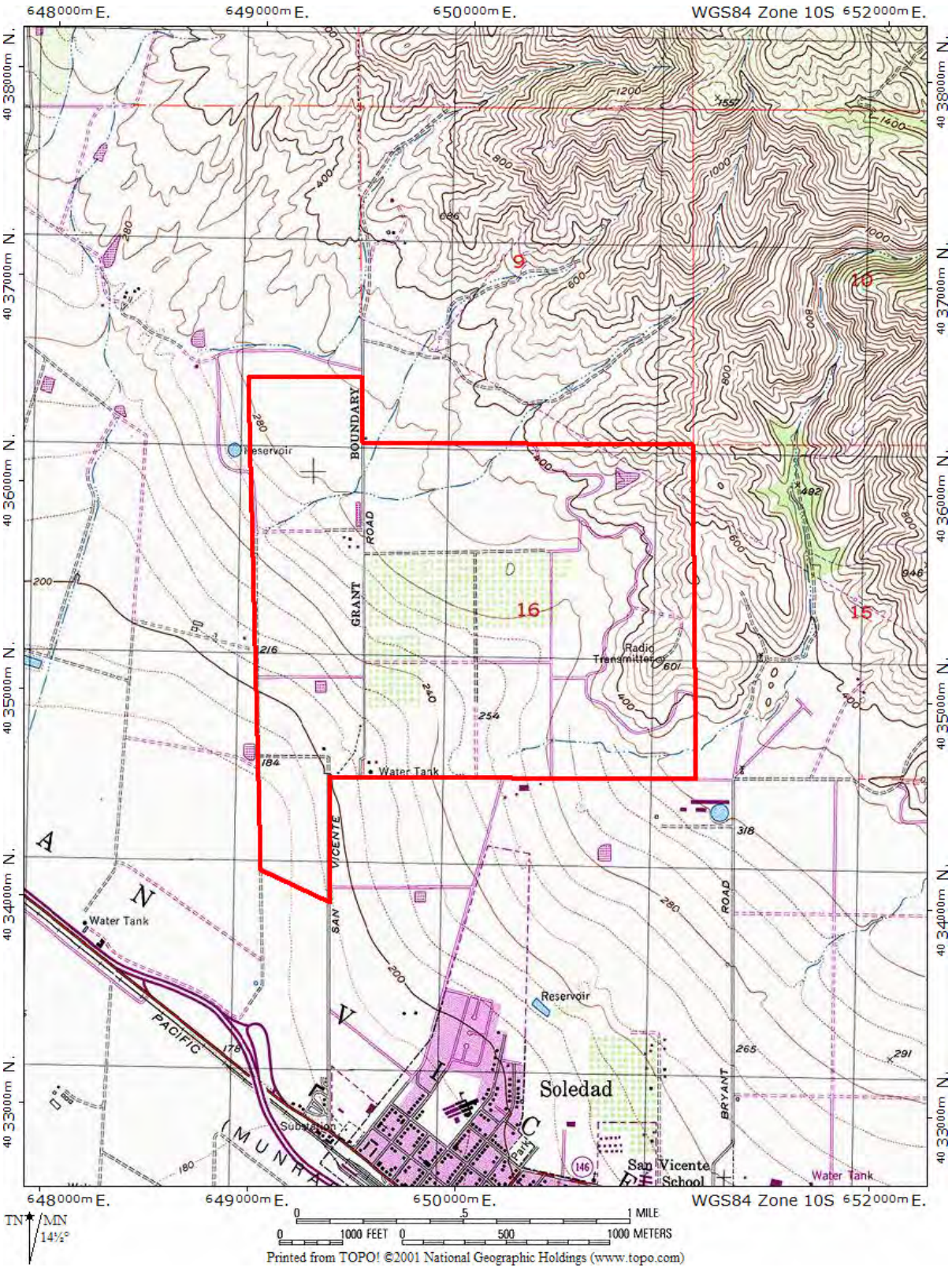


Figure 2. Miravale III San Joaquin kit fox early evaluation study area.

4.0 RESULTS

An analysis of the habitat suitability for the San Joaquin kit fox at the Miravale III site is provided below. Information is included regarding the proposed project, the known sightings from the vicinity, the vegetation communities onsite and in the vicinity, and the presence of specific habitat features for the San Joaquin kit fox.

4.1 San Joaquin Kit Fox Natural History. The San Joaquin kit fox (*Vulpes macrotis mutica*) occurs in the arid and semi-arid habitats of the San Joaquin Valley and the adjacent foothills of the coastal ranges, Sierra Nevada and Tehachapi Mountains. The species is also known to occur in the interior coastal ranges in Monterey, San Benito and Santa Clara Counties. San Joaquin kit fox primarily inhabit grassland and chenopod scrub habitats (USFWS 1998). Oak savanna is also utilized (Reese, et al. 1992). In portions of their range, they utilize habitats that have been altered by human activities, including agricultural and urban areas.

The San Joaquin kit fox often occurs in loose-textured soils, although it is found in virtually every soil type. The species requires dens for shelter, temperature regulation and reproduction and an individual may use up to 20 different dens (Hall 1983). San Joaquin kit fox that inhabit areas with non-friable soils depend largely on dens dug by other species, notably California ground squirrel (*Spermophilus beecheyi*) and American badger (*Taxidea taxus*) (Hall 1983). Wherever soils are more friable, kit fox dig deep and complex burrow systems (Morrell 1972). Suitable topography usually consists of low to moderate hills with slopes of less than 40 degrees (Morrell 1972), with the average slope at den sites ranging from 0 to 22 degrees (O'Farrell 1983, Orloff, et al. 1986). Light to moderate grazing may increase the suitability of grassland habitats for the San Joaquin kit foxes and its prey (Jensen 1972; Orloff, et al. 1986). Most San Joaquin kit fox dens are located on flat terrain or on the lower slopes of hills (O'Farrell 1983). Natal and pupping dens (used for birthing and rearing pups) are generally found in flatter terrain. The species will also readily use man-made structures such as culverts and pipes (O'Farrell 1983).

San Joaquin kit fox are opportunistic feeders that will prey on ground squirrels (*Spermophilus* and *Ammospermophilus*), rabbits (*Lepus* and *Sylvilagus*), kangaroo rats (*Dipodomys*), pocket mice (*Perognathus*) and other small mammals, birds, reptiles and insects, depending on their availability (Laughrin 1970; Morrell 1972; McGrew 1979; Hall 1983).

Severe declines in San Joaquin kit fox populations were initially attributed to intensive fur-trapping and coyote poisoning campaigns. Large scale agricultural development began in the San Joaquin Valley in the mid-1800s. More recently, urbanization, oil and gas production, mineral development, use of pesticides and rodenticides, shooting, and mortality by road-kill have been significant factors contributing to habitat loss and the species' decline (O'Farrell 1983). The San Joaquin kit fox is listed as Threatened by CDFG and as Endangered by USFWS. The status of the species was determined to be declining as of 2003 (CDFG 2005).

4.2 Project Description. The project consists of the development and implementation of the Miravale Phase III Specific Plan. The Specific Plan calls for a mixed-use development including 1,470 single-family residential units, 2,730 multi-family residential units, 120 hotel rooms, 275,000 square feet of retail commercial space and an 18-hole golf course. Conceptual plans include a variety of residential types, including apartments, townhouses, and attached homes on small and large lots. The project also proposes three school sites (2 elementary schools and 1 middle school), a fire and police substation, a recycled water plant, and approximately 75 acres of open space and recreation areas, including parks, playgrounds, and a trail system.

The project site is currently zoned by Monterey County for farmland and permanent grazing uses and is currently being used for agricultural cultivation. Large portions of the site are currently fallow.

4.3 San Joaquin Kit Fox Occurrences Within 10 Miles. The San Joaquin kit fox has been observed at six locations within 10 miles of the project site. These records are from along Metz Road approximately 1.9 miles SE, 2.4 miles SE and 3.7 miles SE, near Miners Gulch, approximately 6.9 miles SE, near the mouth of Arroyo Seco, approximately 7.2 miles south and along Metz Road near Greenfield, approximately 8.1 miles SSE (USFWS 1998; Johnson, pers. comm.). Five of these observations were made prior to 1975, while the sixth was made prior to 1986 (USFWS 1998; Johnson, pers. comm.).

More recent observations have been made near Bitterwater, approximately 15 miles ESE, including an observation in 1993 (CNDDB 2006; Mori. pers. comm.). The species has been observed regularly in the vicinity of King City, approximately 20 miles SE (Mori, pers. comm.; Orloff, pers. comm.; CNDDB 2006).

All of the localities listed above are south of the project site, and no observations of the species have been recorded in the Salinas Valley north of Soledad. The project site is situated just north of the range of the species as delineated by the Natural Diversity Data Base.

4.4 Vegetation Communities. The western part of the site, approximately 780 acres, is situated on the floor of the Salinas Valley and has been converted to agricultural uses. This currently includes vineyards, row crops and fallow fields. A row of eucalyptus trees and tamarisk is present along San Vicente Road. Two clusters of residences and outbuildings with associated non-native trees are present.

The eastern part of the site, covering approximately 140 acres, is situated in the foothills of the Gabilan Range, and supports grassland habitat. This portion of the site was grazed with cattle until recently. Vegetative cover is sparser on the south facing slopes. Small rock outcrops are scattered throughout this area. A small amount of freshwater marsh habitat is present around a permanent pond in the northeastern corner of the site.

4.5 Habitat Connectivity. Potential habitat for the San Joaquin kit fox is present in proximity to the project site (Figure 3). To the northwest and southeast, grassland, oak savanna and open scrub habitats are present along the fringes of the Salinas Valley. These habitats are relatively unbroken along a narrow band in the foothills to occupied San Joaquin kit fox habitat to the southeast.

To the west and south, much of the valley itself has been converted to agricultural uses. The species is known to occupy certain agricultural settings, particularly where they are in proximity to grassland and scrub habitats. The City of Soledad is adjacent to the south of the project site. It is not anticipated that the species would occur in such a dense urban setting.

4.6 San Joaquin Kit Fox Habitat Suitability. The site supports potential habitat for the species, particularly the grassland habitat in the eastern portion of the site. The species is also known to use agricultural areas including fallow fields, row crops and vineyards, particularly where these areas area adjacent to grassland habitats (Knapp 1978).

Potential San Joaquin kit fox den sites are present on the project site. California ground squirrel colonies were observed during reconnaissance surveys in the grassland portion of the site and along dirt roads in the vineyards. Some of these burrows are large enough to be used by San Joaquin kit fox. American badgers, which dig burrows that can be used by San Joaquin kit fox, are present in the grassland portion of the site. In addition, culverts of appropriate size are present that could be used as atypical dens (see USFWS 1999a).

Reconnaissance surveys, along with a small mammal trapping survey conducted in August 2006 (Biosearch Associates 2006) determined that a variety of suitable San Joaquin kit fox prey is present in the grassland portion of the site including California ground squirrels, California pocket mice (*Chaetodipus californicus*), San Joaquin pocket mice (*Perognathus inornatus*), Heermann's kangaroo rats (*Dipodomys heermanni*), deer mice (*Peromyscus maniculatus*), western harvest mice (*Reithrodontomys megalotis*), California voles (*Microtus californicus*), desert cottontails (*Sylvilagus audubonii*) and black-tailed jackrabbits (*Lepus californicus*). Prey availability is reduced in the portions of the site that are under active cultivation.

4.7 Impact Analysis and Mitigation Recommendations. The Miravale III project is conceptual at this time, and a comprehensive analysis of impacts is premature. As currently constituted, the project would result in direct and indirect impacts to potential San Joaquin kit fox habitat near the northern edge of its historic range in the Salinas Valley.

If the Service determines that the project would result in take of the San Joaquin kit fox, the project proponent would need to initiate consultation with the Service to determine appropriate project modifications to protect the species, including avoidance, minimization, restoration, preservation, and/or compensation. The Service may also determine that a protocol-level field survey for the species is appropriate.

5.0 DISCUSSION

The Miravale III project site is near the northern edge of the range of the federally-endangered and state-threatened San Joaquin kit fox in the Salinas Valley (Figure 4). San Joaquin kit fox were observed in the vicinity of the project site in the 1970s and 1980s. The current status of the species near Soledad is unclear, however, and no observations have been made near Soledad in the last 20 years (CNDDB 2006; Orloff, pers. comm.; Johnson, pers. comm.). The species has been observed in recent years in the vicinity of Bitterwater, approximately 15 miles ESE and near King City, approximately 20 miles to the SE (CNDDB 2006; Mori, pers. comm. Orloff, pers. comm.).

Suitable habitat is present at the Miravale III project site for the San Joaquin kit fox. The eastern part of the site supports annual grassland, which is a preferred habitat for the species. The western part of the site is in agricultural production (vineyards, row crops, fallow fields), and should be considered potential habitat given the proximity of grassland habitats.

Potential den sites for the San Joaquin kit fox, including those dug by California ground squirrels and American badger, as well as artificial den sites such as culverts, are present on the site. A wide variety of native prey species are also available, particularly in the eastern portion of the site. Suitable San Joaquin kit fox habitat extends along the edge of the Salinas Valley between the site and extant populations to the southeast.



Figure 3. Aerial view of Miravale III project site and vicinity.

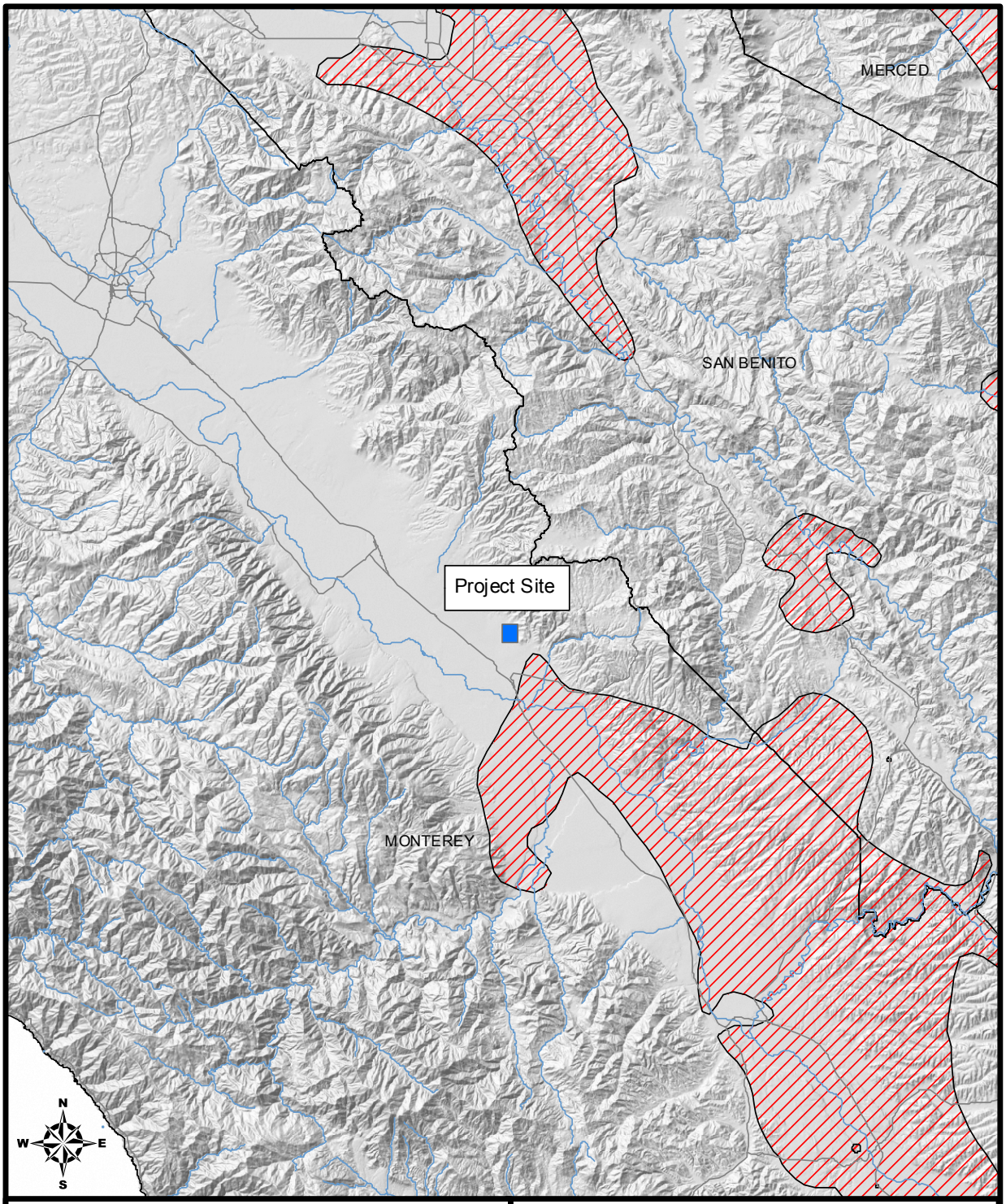


Figure 4. Miravale III Project Site in relation to San Joquin kit fox range (hatched area; from CNDDB).

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APPENDIX 1. Vertebrate species observed or detected by sign at the Miravale III Project Site, August - October 2006.

Amphibia	**Amphibians**
Hylidae	Tree Frogs
Pseudacris regilla	Pacific treefrog
Reptilia	**Reptiles**
Phrynosomatidae	Spiny Lizards
Sceloporus occidentalis	Western fence lizard
Uta stansburiana	Side-blotched lizard
Aves	**Birds**
Ardeidae	Herons, Egrets and Bitterns
Ardea herodias	Great blue heron
Cathartidae	American Vultures
Cathartes aura	Turkey vulture
Accipitridae	Hawks, Kites and Eagles
Circus cyaneus	Northern harrier
Buteo jamaicensis	Red-tailed hawk
Falconidae	Falcons and Caracaras
Falco sparverius	American kestrel
Columbidae	Pigeons and Doves
Zenaida macroura	Mourning dove
Tyrannidae	Tyrant Flycatchers
Sayornis nigricans	Black phoebe
Sayornis saya	Say's phoebe
Laniidae	Shrikes
Lanius ludovicianus	Loggerhead shrike
Corvidae	Jays, Magpies and Crows
Corvus brachyrhynchos	American crow
Mimidae	Mimic thrushes
Mimus polyglottos	Northern mockingbird
Sturnidae	Starlings
Sturnus vulgaris	European starling (introduced)
Emberizidae	Sparrows
Passerculus sandwichensis	Savannah sparrow
Icteridae	Blackbirds
Agelaius phoeniceus	Red-winged blackbird
Euphagus cyanocephalus	Brewer's blackbird
Sturnella neglecta	Western meadowlark
Fringillidae	Finches
Carpodacus mexicanus	House finch
Mammalia	**Mammals**
Leporidae	Rabbits and hares
Sylvilagus audubonii	Desert cottontail
Lepus californicus	Black-tailed jackrabbit

Sciuridae	Squirrels
Spermophilus beecheyi	California ground squirrel
Geomyidae	Pocket gophers
Thomomys bottae	Botta's pocket gopher
Heteromyidae	Kangaroo rats and pocket mice
Chaetodipus californicus	California pocket mouse
Perognathus inornatus	San Joaquin pocket mouse
Dipodomys heermanni	Heermann's kangaroo rat
Muridae	Mice, rats and voles
Peromyscus maniculatus	Deer mouse
Microtus californicus	California vole
Reithrodontomys megalotis	Western harvest mouse
Canidae	Foxes, Wolves and relatives
Canis latrans	Coyote
Mustelidae	Weasels, Skunks and Relatives
Taxidea taxus	American badger
Suidae	Pigs
Sus scrofa	Wild pig (introduced)

Appendix D. CTS Habitat Assessment Report (Biosearch)

CALIFORNIA TIGER SALAMANDER HABITAT ASSESSMENT, MIRAVALE III SUBDIVISION, MONTEREY COUNTY, CALIFORNIA

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10 November 2006

CALIFORNIA TIGER SALAMANDER HABITAT ASSESSMENT, MIRAVALE III SUBDIVISION, MONTEREY COUNTY, CALIFORNIA

SUMMARY

This document presents a habitat assessment for the federally-threatened California tiger salamander (*Ambystoma californiense*) at the proposed 920-acre Miravale III project site located north of the City of Soledad in Monterey County. The information provided conforms to habitat assessment guidelines issued by the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG).

The project site is within the range of the California tiger salamander. There are no known occurrences within 5 kilometers, although the species has been recorded from five locales within 10 kilometers.

A permanent pond in the northeast corner of the site provides potential aquatic habitat for the California tiger salamander and is surrounded by appropriate upland habitat. A variety of burrowing mammals inhabit the nearby grasslands, providing potential underground refugia.

Three agricultural ponds are present in the western part of the site. These ponds have highly variable water levels and are all situated more than 1 km from undisturbed upland habitat. Lands surrounding these ponds are used for row crops year-round. These factors greatly reduce their potential as breeding sites for the California tiger salamander.

Northern Monterey County is known to support California tiger salamander populations that have hybridized to varying degrees with non-native tiger salamanders (*Ambystoma tigrinum*). Determination of the genetic status of any tiger salamanders captured at the site should therefore be conducted prior to formulating a mitigation strategy.

CALIFORNIA TIGER SALAMANDER HABITAT ASSESSMENT,
MIRAVALE III SUBDIVISION,
MONTEREY COUNTY, CALIFORNIA

INTRODUCTION

The California tiger salamander is listed as threatened by the U.S. Fish and Wildlife Service (USFWS 2004). This document provides a habitat assessment for the 920-acre Miravale III project site located north of the City of Soledad. A description of the aquatic and upland habitats onsite, a general description of upland habitats within 2 km (2.1 miles), and the known California tiger salamander localities within 5 km (3.1 miles) are provided.

STUDY SITE

The Miravale III projects site covers 920 acres and is situated within unincorporated lands immediately north of Soledad in Monterey County, California (Figure 1). The project site is situated at the eastern edge of the Salinas Valley approximately 1.7 miles from the Salinas River. The bulk of the site is on the gently sloping valley floor, and is in agricultural production. The eastern part of the site is situated in the foothills of the Gabilan Range and supports mostly undisturbed grassland. The project site is situated between San Vicente Road and Orchard Lane and is surrounded by agricultural land to the north and west, an existing residential subdivision to the south, and undeveloped foothills of the Gabilan Mountain Range to the east.

The proposed project consists of the development and implementation of the Miravale Phase III Specific Plan. The Specific Plan calls for a mixed-use development including 1,470 single-family residential units, 2,730 multi-family residential units, 120 hotel rooms, 275,000 square feet of retail commercial space and an 18-hole golf course. Conceptual plans include a variety of residential types including apartments, townhouses, and attached homes on small and large lots. The project also proposes three school sites, a fire and police substation, a recycled water plant, and approximately 75 acres of open space and recreation areas.

The project site is currently zoned by Monterey County for farmland and permanent grazing uses and is currently being used for agricultural cultivation. Large portions of the site are fallow.

METHODS

Methodology follows the interim guidance on conducting site assessments for the California tiger salamander (USFWS and CDFG 2003). Current range maps for the species were reviewed. A record search of the California Natural Diversity Data Base (CNDDB 2006) for the Soledad 7.5' series quadrangle and the eight surrounding quadrangles was conducted. Previous biological investigations in the area were reviewed.

Researchers with experience in the area were contacted for information regarding locality records.

Reconnaissance-level field surveys were performed between 29 August and 18 October 2006. The project area was surveyed by vehicle and foot and wildlife habitats were identified. Information regarding habitat characteristics of California tiger salamanders was reviewed, and compared with onsite conditions. Aerial photos of the site and of surrounding areas were analyzed. Adjacent land use and wildlife habitats were determined.

CALIFORNIA TIGER SALAMANDER

The California tiger salamander (*Ambystoma californiense*) is a large, stocky salamander that inhabits grassland and oak savanna habitats in the valleys and low hills of central and coastal California. Adults spend most of their lives underground, typically in burrows of ground squirrels and other animals (USFWS 2003). During winter rains between November and February, adults emerge from underground retreats to breed (Stebbins 2003; Loredo and Van Vuren 1996). Adults may travel long distances between upland sites and breeding sites, and above-ground activity may occur under suitable environmental conditions through May. Adults have been found more than 2 km (1.2 miles) from breeding sites (USFWS 2003). Males typically spend 6-8 weeks at breeding ponds, while females typically spend only 1-2 weeks (Loredo and Van Vuren 1996). In years of below average rainfall, or when rains occur late in the season, females may forego breeding (Trenham, et al. 2000).

California tiger salamanders breed primarily in vernal pools and semi-permanent, quiet waters. After hatching in two to three weeks, larvae are 10-15 mm (0.4-0.6 inches, total length). Hatchlings forage primarily on zooplankton, while larger larvae feed mostly on frog tadpoles and invertebrates (Anderson 1968). Metamorphosis into the adult form involves a process in which the gills recede, the legs become robust, the eyes become well developed, and the adult spot pattern emerges. Metamorphosis typically occurs from May - July at approximately 100-125 mm (3.9-4.9 inches, total length). Length and weight may vary at metamorphosis because larvae can either accelerate development rapidly in response to drying ponds or delay development to take advantage of ponds that hold water longer. Larvae will desiccate and die if ponds in which they are developing dry out before metamorphosis is complete (Feaver 1971). The number of larvae that reach metamorphosis is highly variable (Trenham, et al. 2000). In addition to a variety of ecological factors, the number of larvae that transform appears to be related to the timing and amount of rainfall during the previous winter (Loredo and Van Vuren 1996).

Immediately following transformation, juvenile California tiger salamanders appear to seek the closest cover they encounter, including temporary cover such as cracks in the earth, debris or deeper refugia such as ground squirrel holes (Loredo, et. al. 1996). Juveniles that survive the arid summer disperse farther from the breeding sites during summer and fall rains and do not return to the ponds until they are sexually active (Stebbins 2003). Although individuals may become reproductive in 2-3 years, they

typically do not breed until they are 4-5 years old and rarely live longer than 10 years in the wild (Trenham, et. al. 2000).

California tiger salamanders in Monterey County are part of the Central Coast Range population of the species, which includes southern Santa Cruz County, Monterey County, northern San Luis Obispo County and portions of western San Benito, Fresno and Kern Counties. California tiger salamanders within this population are allied with one another genetically and are at least partially isolated from other populations (Shaffer, et al. 1993).

RESULTS

Range of California Tiger Salamander in Relation to Project Site.

The Miravale III project site is within the range of the California tiger salamander (Zeiner, et al. 1988; Stebbins 2003; USFWS & CDFG 2003).

California Tiger Salamander Localities Within 5 Kilometers of Project Site.

There are no known records of California tiger salamanders from the project site or within 5 kilometers of the site (CNDDB 2006). However, five localities are known from within 10 kilometers. The nearest records are from West Gloria Lake, 6.3 km NE and East Gloria Lake, 6.6 km NE. There are also two records from Williamson Valley, 8.8 km NNE and 9.2 km NNE. And finally, the species has been recorded from the Johnson Canyon Landfill, 9.6 km NW of the project site (CNDDB 2006). There is habitat connectivity along the fringe of the Salinas Valley between the project site and the Johnson Canyon Landfill record.

At least three of the records noted above are of California tiger salamander populations that have hybridized to varying degrees with non-native tiger salamanders (*Ambystoma tigrinum*) (Shaffer, et al. 1993; CNDDB 2006).

Habitats Onsite and Within 2 Kilometers.

Aquatic Habitats. There are four ponds on the site (Figure 2). One is a permanent pond in the northeast corner of the site, while the other three ponds are active agricultural ponds in the western part of the site.

Pond 1 is situated in the northeast corner of the site at an elevation of 450 feet (Figures 3 and 4). The pond covers approximately 1.6 acres. Emergent vegetation is present in approximately 5% of its surface. It is permanent and is impounded with a large berm. The depth is unknown but estimated at greater than six feet. Uplands surrounding Pond 1 are primarily grassland. Water from Pond 1 is pumped for agricultural use, so water levels may fluctuate.

Pond 2 is an agricultural pond located along San Vicente Road in the northwest part of the site (Figures 5 and 6). It covers approximately 0.5 acres and is situated at 280 feet above sea level. It is ephemeral and sandy soils indicate it does not hold water well. An

inlet pipe delivers water. No emergent vegetation is present at the pond. Upland habitats surrounding Pond 2 are in active agricultural production on three sides. Residences and farm buildings are situated to the south. The nearest grassland habitat is approximately 1.0 km to the northeast. Burrowing mammals are largely absent from the area surrounding Pond 2.

Pond 3 is an agricultural pond located in the western part of the site at an elevation of 215 feet (Figures 7 and 8). It covers approximately 0.7 acres. It held water in October of 2006. Approximately 2% of the surface area supports emergent vegetation. Water levels are expected to be highly variable and the pond is dependent on piped water to fill. Upland habitats surrounding Pond 3 are in active agricultural production on all sides. The Miravale II subdivision is located approximately 0.4 km to the south. The nearest grassland habitat is approximately 1.3 km to the east. Burrowing mammals are largely absent from the area surrounding Pond 3.

Pond 4 is a small agricultural pond in the southwestern corner of the site (Figures 9 and 10). It covers approximately 0.1 acres and is situated at 180 feet above sea level. It held water in October of 2006. There was no emergent vegetation. Water levels are expected to be highly variable and the pond is dependent on piped water to fill. Upland habitats surrounding Pond 4 are in active agricultural production on all sides. The Miravale II subdivision is located approximately 0.3 km to the east. The nearest grassland habitat is approximately 1.8 km to the northeast. Burrowing mammals are largely absent from the area surrounding Pond 4.

There are numerous ponds within 2 km of the project site (Figure 11). Most of these ponds are agricultural ponds to the west and northwest and are surrounded by upland habitats that are generally considered unsuitable for California tiger salamanders. A small stock pond situated 0.5 miles north of the site is surrounded by grassland and appears to be suitable habitat from aerial photographs. Two other ponds, 0.6 miles NE and 0.8 miles NNE, are also adjacent to some grassland habitat and may provide suitable aquatic habitat. A pond 0.1 miles SE appears to be permanent, supports a considerable amount of emergent vegetation, and may provide suitable aquatic habitat for the species.

Upland Habitats. The western part of the Miravale III project site, covering approximately 780 acres, is currently in agricultural production (Figure 2). A mixture of row crops, vineyards and fallow fields are present. San Vicente Road, which is paved, crosses the site. Numerous dirt roads divide the property into fields. A row of eucalyptus trees and tamarisk is present along San Vicente Road. Two clusters of residences and outbuildings are present.

The eastern part of the site, covering approximately 140 acres, is situated in the foothills of the Gabilan Range, and supports grassland habitat. This portion of the property was grazed with cattle until recently. Vegetative cover is sparser on the south facing slopes. Small rock outcrops are scattered throughout this area. Burrowing mammals including California ground squirrels (*Spermophilus californicus*), Botta's pocket gophers (*Thomomys bottae*), and Heermann's kangaroo rats (*Dipodomys heermanni*) are present

in the grasslands surrounding Pond 1. Diggings by American badger (*Taxidea taxus*) were also observed nearby.

Offsite areas within 2 km to the west and south of the site are in agricultural production and are not expected to provide terrestrial habitat for California tiger salamanders (Figure 11). The City of Soledad directly to the south is also not expected to support the species. Land to the north and east are relatively undisturbed and support grassland, oak savannah and scrub habitats.

DISCUSSION

The project site is within the range of the California tiger salamander. Although there are no known occurrences within 5 kilometers, the species inhabits five locales within 10 kilometers, and there is habitat connectivity between the site and a known California tiger salamander record to the northwest.

A pond in the northeast part of the site provides appropriate aquatic habitat for the California tiger salamander. The upland habitat surrounding the pond is grassland and suitable underground refugia are present, including those dug by ground squirrels, pocket gophers and kangaroo rats. At least three ponds within 5 km offsite to the northwest and southeast also provide potential breeding habitat.

The bulk of the site has been in agricultural production for many years and as such provides only marginal habitat for the California tiger salamander. Upland over-summering habitat is largely absent because fields are regularly disked and burrowing mammals are actively controlled. Although three ponds are present in this part of the site, they are all more than 1.0 km from suitable upland over-summering habitat. Moreover, they are subject to rapid shifts in water level, which greatly reduces their potential as breeding habitat.

Northern Monterey County is known to support California tiger salamander populations that have hybridized to varying degrees with non-native tiger salamanders (*Ambystoma tigrinum*) (Shaffer, et al. 1993). Intentional stocking of non-native tiger salamanders as fish bait occurred in several parts of the state, but was particularly widespread in the upper Salinas Valley. The conservation implications of introduced non-native tiger salamanders include competitive exclusion, hybridization, and non-viable offspring, all of which could result in local extirpation of California tiger salamander breeding populations (USFWS 2003). Currently, the USFWS protects hybrids but not non-native tiger salamanders. Determination of the genetic status of any tiger salamanders captured at the site should therefore be conducted prior to formulating a mitigation strategy.

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CALIFORNIA TIGER SALAMANDER HABITAT ASSESSMENT,
MIRAVALE III SUBDIVISION,
MONTEREY COUNTY, CALIFORNIA

FIGURES

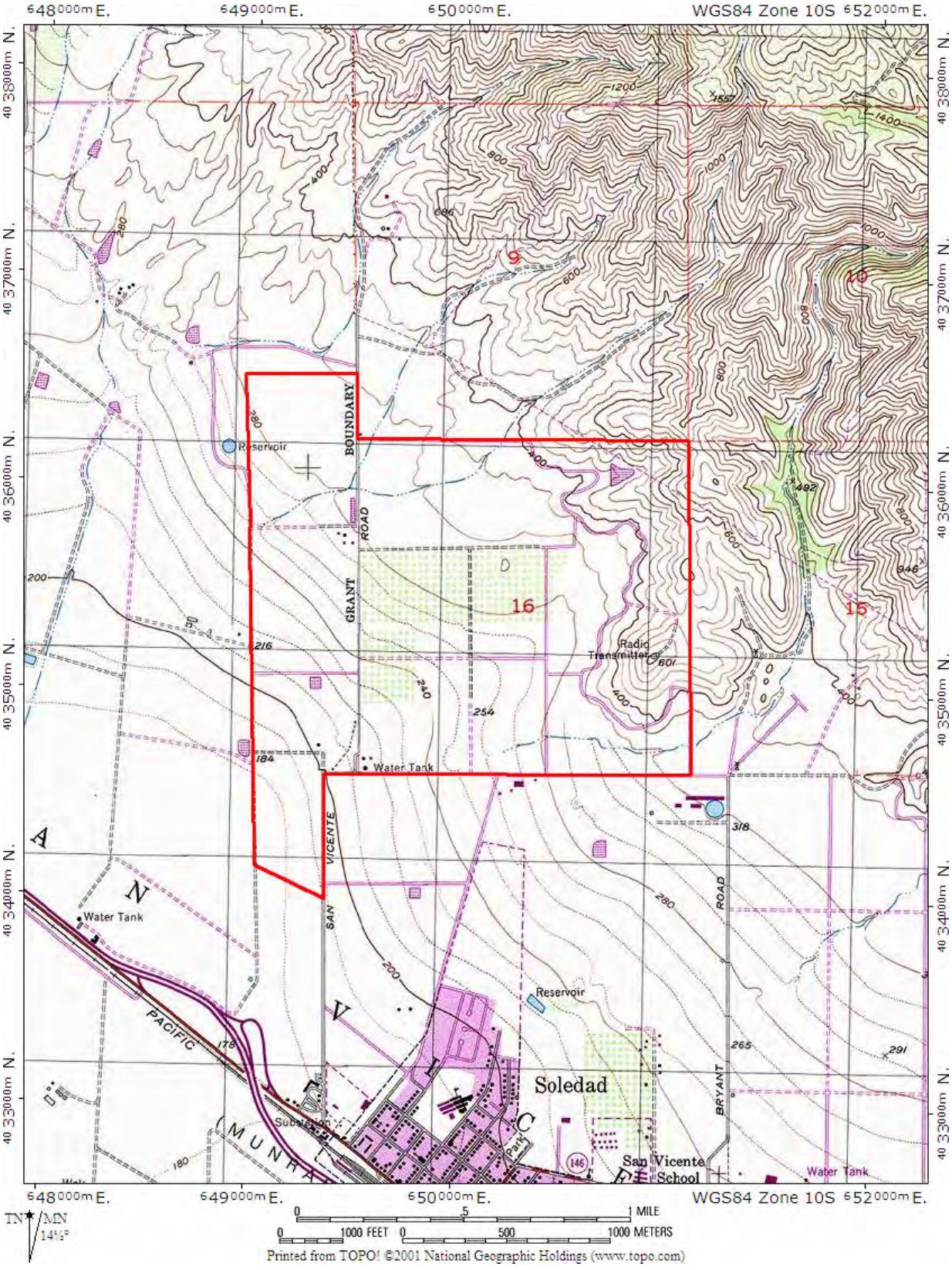


Figure 1. Miravale III project site.

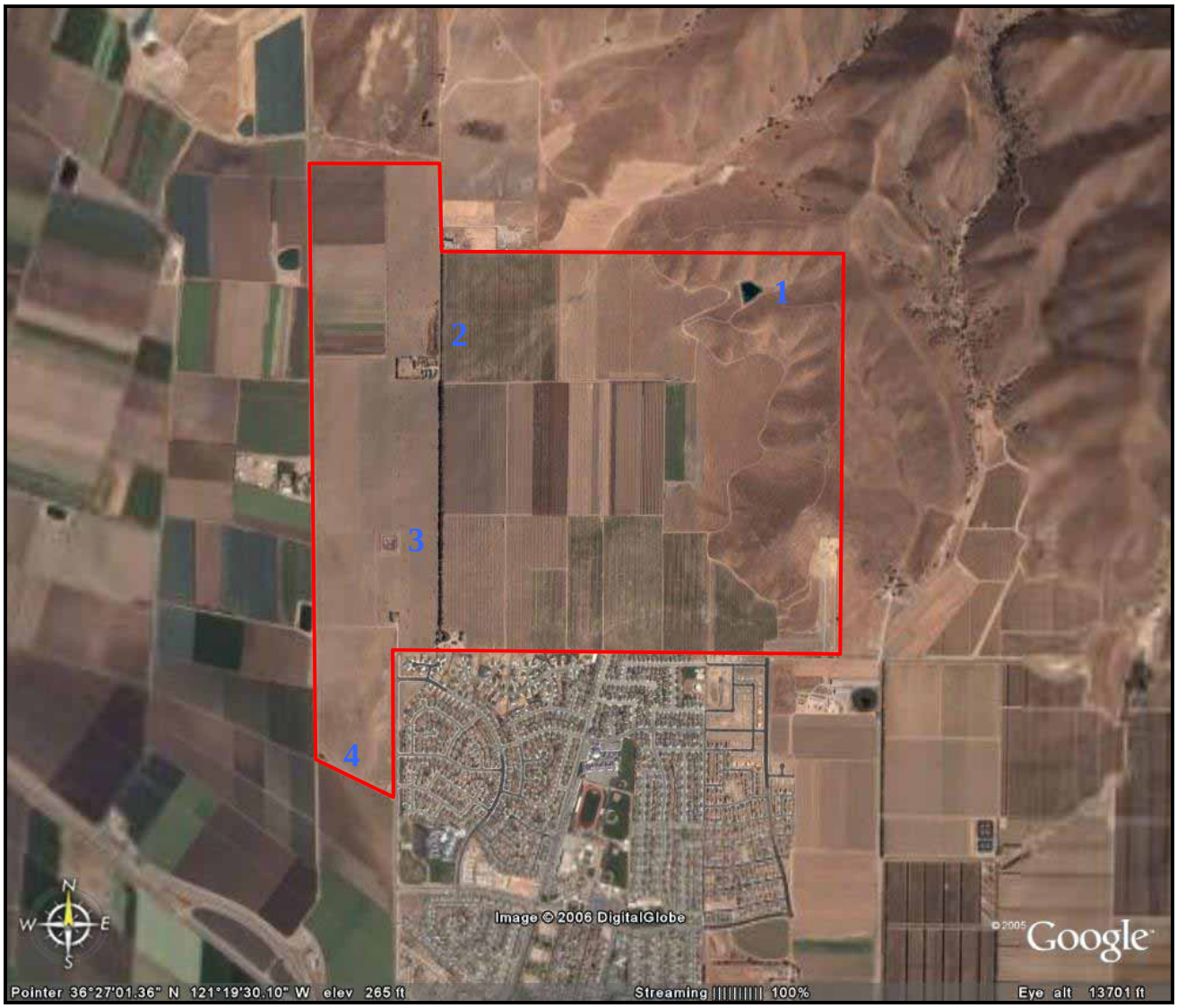


Figure 2. Aerial view of Miravale III project site. Onsite ponds are numbered.



Figure 3. Aerial view of Pond 1, Miravale III.



Figure 4. Pond 1, Miravale III from south looking north.



Figure 5. Aerial view of Pond 2, Miravale III.



Figure 6. Pond 2, Miravale III, from south looking north.



Figure 7. Aerial view of Pond 3, Miravale III.



Figure 8. Pond 3, Miravale III from SE looking NW.



Figure 9. Aerial view of Pond 4, Miravale III.



Figure 10. Pond 4, Miravale III from NW looking SE .

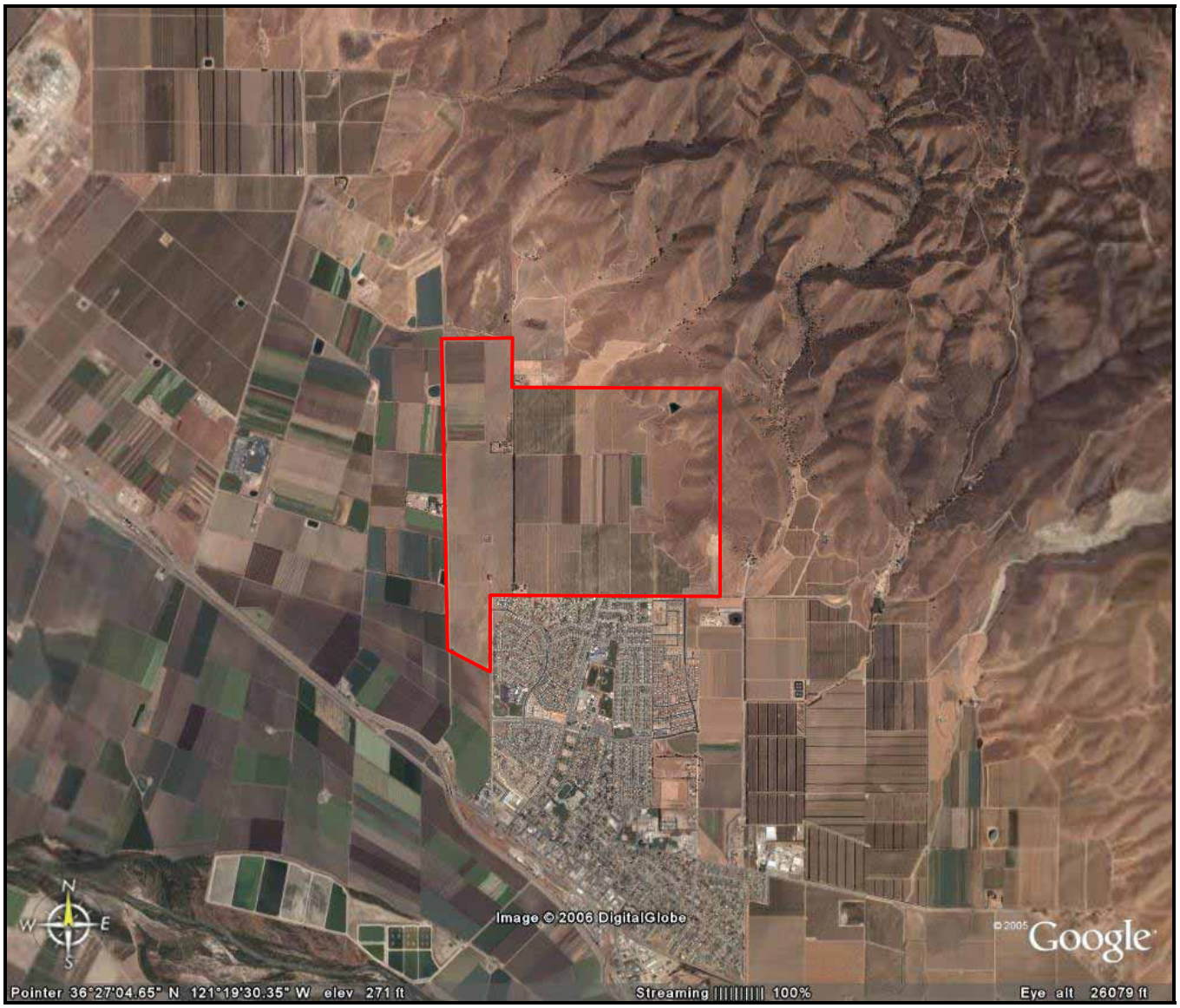


Figure 11. Aerial view of area within 2 km of Miravale III project site.

Appendix E. Shaffer Lab Genetic Analysis Report

Miravale III project site salamander genotyping 20 August 2007

Jarrett R. Johnson and H. Brad Shaffer
Section of Evolution and Ecology, University of California, Davis CA, 95616, USA

Methods

We received tail tips (N=24) from larvae collected by Mark Allaback (Biosearch, Inc.) and David Keegan (Denise Duffy & Assoc., Inc.) in "Pond 1" at the Miravale III project site 3.73 km NNE of Soledad, CA (Fig. 1) on 25 June 2007. Tissues arrived preserved in 95% ethanol and were assigned HBS tissue catalogue #'s (108896-108919). We extracted DNA from each tissue sample for genotyping analyses using standard extraction techniques (Palumbi 1996). Individual tissue samples were genotyped for one mitochondrial single nucleotide polymorphism (SNP) locus (Dloop) and up to 9 nuclear SNP loci (Contig325, Dlx3, FoxG1b, Gnat2, Gnat1, HoxB13, HoxD8, Slc4a4, WNT1; Voss et al. 2001) identified as diagnostic between *A. tigrinum* and *A. californiense* through previous restriction-fragment-length polymorphism (RFLP) analyses (Fitzpatrick and Shaffer 2004). Genotyping was performed using the Victor^3 plate reader (Perkin-Elmer) to perform fluorescence polarization (FP) analysis to score each individual's genotype at each locus. FP is a standard technique for the analysis of SNP loci (Xiao and Kwok 2003) and is more efficient, reliable and cost effective than RFLP analyses. At each SNP locus each individual was scored as 'aa' if homozygous for native (*Ambystoma californiense*) alleles, 'gg' if homozygous for introduced (*A. tigrinum mavortium*) alleles, or 'ga' if heterozygous. Because the *mavortium* hybridization began in the 1950s (Riley et al. 2003) and has been ongoing for at least 20 generations, individuals may be any combination of homozygotes and heterozygotes for each locus. Because the 10 loci analyzed here are know to be on separate genetic linkage groups (Voss et al. 2001), the total percentage of native and non-native alleles summed across loci provides a reasonable estimate of the "nativeness" of a given breeding site.

Results

Raw data are presented in Appendix 1 and genotypic frequency data are presented in Table 1. Our data indicate that Pond 1 at Miravale III contains low levels of native alleles at some nuclear loci. We detected no native alleles for the single mitochondrial locus, and several nuclear loci are completely homozygous for introduced alleles. Five of nine nuclear loci show higher frequencies of native alleles in the form of heterozygous genotypes. We summarize the "nativeness" of each individual as its Hybrid Index Score, or HIS, calculated for each individual as: [# non-native alleles]÷[total number of alleles]. HIS can range from 0.00 (pure native) to 1.00 (pure non-native). For the Miravale individuals, HIS values ranged from 0.89 – 1.00 (i.e., 89-100% non-native; Table 2) indicating that no genotyped individual can be described putatively as "pure native" based on the 10 loci we investigated.

Conclusions

We conclude that the genotypes of salamanders present at Pond 1 from the Miravale III project site are comprised primarily of introduced alleles. Our data suggest that this site has been subjected to invasion by introduced tiger salamanders and that extensive

hybridization has occurred. The observed levels of native California Tiger Salamander genotypes indicate that this site may 1) have historically supported native individuals, 2) be adjacent to sites containing native individuals, or 3) be the result of colonization by hybrid individuals whose lineages originated from sites containing native individuals. Given the location of this site within the Salinas Valley, which has historically contained native CTS populations, we feel that the most likely alternative is (1), and that Pond 1 was historically a pure CTS population that has been invaded by non-native genotypes.

Literature Cited

Palumbi, S. R. 1996. Nucleic acids. II. The polymerase chain reaction. Pp. 205–248 in D. M. Hillis, C. Moritz, and B. K. Mable, eds. Molecular systematics. 2d ed. Sinauer Associates, Sunderland, MA.

Riley, S.P.D., H.B. Shaffer, S.R. Voss, and B.M. Fitzpatrick. 2003. Hybridization between a rare, native tiger salamander (*Ambystoma californiense*) and its introduced congener. *Ecological Applications* 13:1263-1275.

Voss SR, Smith JJ, Gardiner DM, Parichy DM. 2001. Conserved vertebrate chromosome segments in the large salamander genome. *Genetics* 158:735-746.

Xiao M, Kwok P-Y. 2003. DNA analysis by fluorescence quenching detection. *Genome Research* 13:932-939.

Table 1. Observed genotypic frequencies of 10 SNP loci for Pond 1 at Miravale III. 'Average (All)' values represent the average genotypic frequency for all 10 loci. 'Average (Nuc.)' values represent the average of only the 9 nuclear loci.

	Contig 325	DLoop	DLX 3	FOX G1B	Gnat 1	Gnat 2	Hox B13	Hox D8	SLC 4a4	WNT 1	Avg. (All)	Avg. (Nuc.)
gg freq	0.87	1.00	1.00	0.81	0.83	1.00	1.00	0.82	1.00	0.94	0.93	0.92
ga freq	0.13	0.00	0.00	0.19	0.17	0.00	0.00	0.18	0.00	0.06	0.07	0.08
aa freq	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 2. Hybrid Index Scores (HIS) across 10 SNP loci for each individual genotyped from Pond 1 at Miravale III Project Site.

HBS#	HIS
108896	1.0000
108897	0.8889
108899	0.9000
108900	0.9000
108901	1.0000
108902	1.0000
108903	1.0000
108904	1.0000
108905	1.0000
108906	1.0000
108907	0.9375
108908	0.8889
108909	0.8889
108910	1.0000
108911	1.0000
108912	1.0000
108913	1.0000
108914	0.9000
108915	1.0000
108916	0.9000
108917	1.0000
108918	1.0000
108919	NoData

Figure 1. Aerial photo showing location of Pond 1 at Miravale III project site.



Appendix 1: Raw genotype data for each individual genotyped at 10 SNP loci. 'gg' represents homozygous introduced, 'aa' represents homozygous native, and 'ga' represents heterozygous genotypes.

HBS #	Contig 325	DLoop	DLX 3	FOX G1B	Gnat 1	Gnat 2	Hox B13	Hox D8	SLC 4a4	WNT 1
108896	gg	gg	gg	NoData	gg	gg	gg	gg	gg	gg
108897	gg	gg	gg	ga	gg	gg	gg	ga	gg	NoData
108898	gg	gg	gg	gg	gg	gg	gg	gg	gg	gg
108899	gg	gg	gg	gg	ga	gg	gg	ga	gg	gg
108900	ga	gg	gg	gg	ga	gg	gg	gg	gg	gg
108901	gg	gg	gg	gg	gg	gg	gg	gg	gg	gg
108902	gg	gg	gg	gg	gg	gg	gg	gg	gg	gg
108903	gg	gg	gg	gg	gg	gg	gg	gg	gg	NoData
108904	gg	NoData	gg	gg	gg	gg	gg	gg	gg	gg
108905	gg	gg	gg	gg	gg	NoData	NoData	NoData	gg	NoData
108906	gg	NoData	gg	gg	gg	gg	NoData	NoData	gg	NoData
108907	gg	NoData	gg	ga	gg	gg	gg	NoData	gg	gg
108908	ga	gg	gg	gg	ga	gg	NoData	gg	gg	gg
108909	gg	gg	gg	ga	gg	gg	gg	NoData	gg	ga
108910	gg	gg	NoData	gg	gg	gg	gg	gg	gg	gg
108911	gg	gg	gg	gg	gg	gg	gg	gg	gg	NoData
108912	gg	gg	gg	gg	gg	gg	gg	gg	gg	gg
108913	gg	gg	gg	gg	gg	gg	gg	NoData	gg	NoData
108914	ga	gg	gg	gg	ga	gg	gg	gg	gg	gg
108915	gg	gg	gg	gg	gg	gg	gg	NoData	gg	NoData
108916	gg	gg	gg	ga	gg	gg	gg	ga	gg	gg
108917	gg	gg	gg	NoData	gg	gg	gg	gg	gg	gg
108918	gg	gg	gg	gg	gg	gg	gg	gg	gg	gg
108919	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData

Appendix F. Burrowing Owl Survey Report (Biosearch)

Miravale III project site salamander genotyping 20 August 2007

Jarrett R. Johnson and H. Brad Shaffer
Section of Evolution and Ecology, University of California, Davis CA, 95616, USA

Methods

We received tail tips (N=24) from larvae collected by Mark Allaback (Biosearch, Inc.) and David Keegan (Denise Duffy & Assoc., Inc.) in "Pond 1" at the Miravale III project site 3.73 km NNE of Soledad, CA (Fig. 1) on 25 June 2007. Tissues arrived preserved in 95% ethanol and were assigned HBS tissue catalogue #'s (108896-108919). We extracted DNA from each tissue sample for genotyping analyses using standard extraction techniques (Palumbi 1996). Individual tissue samples were genotyped for one mitochondrial single nucleotide polymorphism (SNP) locus (Dloop) and up to 9 nuclear SNP loci (Contig325, Dlx3, FoxG1b, Gnat2, Gnat1, HoxB13, HoxD8, Slc4a4, WNT1; Voss et al. 2001) identified as diagnostic between *A. tigrinum* and *A. californiense* through previous restriction-fragment-length polymorphism (RFLP) analyses (Fitzpatrick and Shaffer 2004). Genotyping was performed using the Victor^3 plate reader (Perkin-Elmer) to perform fluorescence polarization (FP) analysis to score each individual's genotype at each locus. FP is a standard technique for the analysis of SNP loci (Xiao and Kwok 2003) and is more efficient, reliable and cost effective than RFLP analyses. At each SNP locus each individual was scored as 'aa' if homozygous for native (*Ambystoma californiense*) alleles, 'gg' if homozygous for introduced (*A. tigrinum mavortium*) alleles, or 'ga' if heterozygous. Because the *mavortium* hybridization began in the 1950s (Riley et al. 2003) and has been ongoing for at least 20 generations, individuals may be any combination of homozygotes and heterozygotes for each locus. Because the 10 loci analyzed here are know to be on separate genetic linkage groups (Voss et al. 2001), the total percentage of native and non-native alleles summed across loci provides a reasonable estimate of the "nativeness" of a given breeding site.

Results

Raw data are presented in Appendix 1 and genotypic frequency data are presented in Table 1. Our data indicate that Pond 1 at Miravale III contains low levels of native alleles at some nuclear loci. We detected no native alleles for the single mitochondrial locus, and several nuclear loci are completely homozygous for introduced alleles. Five of nine nuclear loci show higher frequencies of native alleles in the form of heterozygous genotypes. We summarize the "nativeness" of each individual as its Hybrid Index Score, or HIS, calculated for each individual as: [# non-native alleles]÷[total number of alleles]. HIS can range from 0.00 (pure native) to 1.00 (pure non-native). For the Miravale individuals, HIS values ranged from 0.89 – 1.00 (i.e., 89-100% non-native; Table 2) indicating that no genotyped individual can be described putatively as "pure native" based on the 10 loci we investigated.

Conclusions

We conclude that the genotypes of salamanders present at Pond 1 from the Miravale III project site are comprised primarily of introduced alleles. Our data suggest that this site has been subjected to invasion by introduced tiger salamanders and that extensive

hybridization has occurred. The observed levels of native California Tiger Salamander genotypes indicate that this site may 1) have historically supported native individuals, 2) be adjacent to sites containing native individuals, or 3) be the result of colonization by hybrid individuals whose lineages originated from sites containing native individuals. Given the location of this site within the Salinas Valley, which has historically contained native CTS populations, we feel that the most likely alternative is (1), and that Pond 1 was historically a pure CTS population that has been invaded by non-native genotypes.

Literature Cited

Palumbi, S. R. 1996. Nucleic acids. II. The polymerase chain reaction. Pp. 205–248 in D. M. Hillis, C. Moritz, and B. K. Mable, eds. Molecular systematics. 2d ed. Sinauer Associates, Sunderland, MA.

Riley, S.P.D., H.B. Shaffer, S.R. Voss, and B.M. Fitzpatrick. 2003. Hybridization between a rare, native tiger salamander (*Ambystoma californiense*) and its introduced congener. *Ecological Applications* 13:1263-1275.

Voss SR, Smith JJ, Gardiner DM, Parichy DM. 2001. Conserved vertebrate chromosome segments in the large salamander genome. *Genetics* 158:735-746.

Xiao M, Kwok P-Y. 2003. DNA analysis by fluorescence quenching detection. *Genome Research* 13:932-939.

Table 1. Observed genotypic frequencies of 10 SNP loci for Pond 1 at Miravale III. 'Average (All)' values represent the average genotypic frequency for all 10 loci. 'Average (Nuc.)' values represent the average of only the 9 nuclear loci.

	Contig 325	DLoop	DLX 3	FOX G1B	Gnat 1	Gnat 2	Hox B13	Hox D8	SLC 4a4	WNT 1	Avg. (All)	Avg. (Nuc.)
gg freq	0.87	1.00	1.00	0.81	0.83	1.00	1.00	0.82	1.00	0.94	0.93	0.92
ga freq	0.13	0.00	0.00	0.19	0.17	0.00	0.00	0.18	0.00	0.06	0.07	0.08
aa freq	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 2. Hybrid Index Scores (HIS) across 10 SNP loci for each individual genotyped from Pond 1 at Miravale III Project Site.

HBS#	HIS
108896	1.0000
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108900	0.9000
108901	1.0000
108902	1.0000
108903	1.0000
108904	1.0000
108905	1.0000
108906	1.0000
108907	0.9375
108908	0.8889
108909	0.8889
108910	1.0000
108911	1.0000
108912	1.0000
108913	1.0000
108914	0.9000
108915	1.0000
108916	0.9000
108917	1.0000
108918	1.0000
108919	NoData

Figure 1. Aerial photo showing location of Pond 1 at Miravale III project site.



Appendix 1: Raw genotype data for each individual genotyped at 10 SNP loci. 'gg' represents homozygous introduced, 'aa' represents homozygous native, and 'ga' represents heterozygous genotypes.

HBS #	Contig 325	DLoop	DLX 3	FOX G1B	Gnat 1	Gnat 2	Hox B13	Hox D8	SLC 4a4	WNT 1
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108897	gg	gg	gg	ga	gg	gg	gg	ga	gg	NoData
108898	gg	gg	gg	gg	gg	gg	gg	gg	gg	gg
108899	gg	gg	gg	gg	ga	gg	gg	ga	gg	gg
108900	ga	gg	gg	gg	ga	gg	gg	gg	gg	gg
108901	gg	gg	gg	gg	gg	gg	gg	gg	gg	gg
108902	gg	gg	gg	gg	gg	gg	gg	gg	gg	gg
108903	gg	gg	gg	gg	gg	gg	gg	gg	gg	NoData
108904	gg	NoData	gg	gg	gg	gg	gg	gg	gg	gg
108905	gg	gg	gg	gg	gg	NoData	NoData	NoData	gg	NoData
108906	gg	NoData	gg	gg	gg	gg	NoData	NoData	gg	NoData
108907	gg	NoData	gg	ga	gg	gg	gg	NoData	gg	gg
108908	ga	gg	gg	gg	ga	gg	NoData	gg	gg	gg
108909	gg	gg	gg	ga	gg	gg	gg	NoData	gg	ga
108910	gg	gg	NoData	gg	gg	gg	gg	gg	gg	gg
108911	gg	gg	gg	gg	gg	gg	gg	gg	gg	NoData
108912	gg	gg	gg	gg	gg	gg	gg	gg	gg	gg
108913	gg	gg	gg	gg	gg	gg	gg	NoData	gg	NoData
108914	ga	gg	gg	gg	ga	gg	gg	gg	gg	gg
108915	gg	gg	gg	gg	gg	gg	gg	NoData	gg	NoData
108916	gg	gg	gg	ga	gg	gg	gg	ga	gg	gg
108917	gg	gg	gg	NoData	gg	gg	gg	gg	gg	gg
108918	gg	gg	gg	gg	gg	gg	gg	gg	gg	gg
108919	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData

Appendix G. Plants observed onsite.

Class/Family	Scientific Name	Common Name	Native
	Dicotyledoneae		
ASTERACEAE	*Achillea millefolium*	Common yarrow	Yes
	Agoseris grandiflora	California dandelion	Yes
	Baccharis pilularis	Coyote Brush	Yes
	Hemizonia sp.	Tarweed	Yes
	Picris echioides	Bristly oxtongue	No
	Lactuca salinga	Willow lettuce	No
	Lactuca serriola	Prickly lettuce	No
	Lessingia sp.	Aster	Some
BORAGINACEAE	*Heliotropium curassavicum*	Heliotrope	Yes
BRASSICACEAE	*Brassica nigra*	Black mustard	No
	Hirschfeldia incana	Summer mustard	Yes
CRASSULACEAE	*Dudleya sp.*	Dudleya	Some
FABACEAE	*Lotus scoparius*	Deerweed	Yes
	Lupinus sp.	Lupine	Some
GERANIACEAE	*Erodium botrys*	Storksbill	No
	Erodium cicutarium	Red-stemmed filaree	No
	Erodium moschatum	White-stemmed filaree	No
MALVACEAE	*Malva parviflora*	Cheeseweed	No
PLANTAGINACEAE	*Plantago lanceolata*	English Plantain	No
POLYGONACEAE	*Eriogonum nudum*	Naked buckwheat	Yes
	Rumex crispus	Curly dock	No
ROSACEAE	*Adenostoma fasciculata*	Chamise	Yes
SCROPHULARIACEAE	*Mimulus aurantiacus*	Sticky monkey flower	Yes
	Monocotyledoneae		
CYPERACEAE	*Cyperus eragrostis*	Tall flatsedge	Yes
	Scirpus californicus	California bullrush	Yes
POACEA	*Avena fatua*	Wild oat	No
	Bromus diandrus	Rip gut grass	No
	Bromus hordeaceus	Soft chess	No
	Distichlis spicata	Saltgrass	Yes
	Nassella sp	Needlegrass	Yes
	Vulpia myorus	Rat-tailed fescue	No
TYPHACEAE	*Typha latifolia*	Broad-leaved cattail	Yes

Appendix H. Wildlife Species observed onsite.

Common Name	Scientific Name
Mammal	
Coyote	*Canis latrans*
California pocket mouse	*Chaetodipus californicus*
Heermann's kangaroo rat	*Dipodomys heermanni*
California vole	*Microtus californicus*
Mule deer	*Odocoileus hemionus*
Black-tailed jackrabbit	*Lepus californicus*
Spotted skunk	*Mephitis mephitis*
Salinas pocket mouse	*Perognathus inornatus psammolphilus*
Deer mouse	*Peromyscus maniculatus*
Western harvest mouse	*Reithrodontomys megalotis*
California ground squirrel	*Spermophilus beecheyi*
American badger	*Taxidea taxus*
Botta's pocket gopher	*Thomomys bottae*
Avian	
Red-winged blackbird	*Agelaius phoeniceus*
Rufous-crowned sparrow	*Aimophila ruficeps*
Scrub jay	*Aphelocoma coerulescens*
Great horned owl	*Bubo virginianus*
Red-tailed hawk	*Buteo jamaicensis*
California quail	*Callipepla californica*
House finch	*Carpodacus mexicanus*
Turkey vulture	*Cathartes aura*
Killdeer	*Charadrius vociferus*
Northern harrier	*Circus cyaneus*
American crow	*Corvus brachyrhynchos*
White-tailed kite	*Elanus leucurus*
Brewer's blackbird	*Euphagus cyanocephalus*
American kestrel	*Falco sparverius*
Barn swallow	*Hirundo rustica*
Northern mockingbird	*Mimus polyglottos*
Brown-headed cowbird	*Molothrus ater*
Chestnut backed chickadee	*Parus rufescens*
Cliff swallow	*Petrochelidon pyrrhonota*
Savannah sparrow	*Passerculus sandwichensis*
Black phoebe	*Sayornis nigricans*
Western meadowlark	*Sturnella neglecta*
Barn owl	*Tyto alba*
European starling	*Sturnus vulgaris*
Mourning dove	*Zenaida macroura*
Reptile and Amphibian	
California tiger salamander	*Ambystoma californiense*
Western rattlesnake	*Crotalus viridis*
Southern alligator lizard	*Elgaria multicarinata*
Pacific tree frog	*Hyla regilla*
Gopher snake	*Pituophis melanoleucus*
Western fence lizard	*Sceloporus occidentalis*

Common Name	Scientific Name
Invertebrate (ID by Don Roberson)	
Common green darner	*Anax junius*
Familiar bluet	*Enallagma civile*
Pacific forktail	*Ischnura cervula*
Flame skimmer	*Libellula saturata*
Blue dasher	*Pachydiplax longipennis*
Wandering Glider	*Pantala flavescens*
Common whitetail	*Platemis lydia*
Blue-eyed darner	*Rhionaescha multicolor*
Black saddlebags	*Tramea lacerata*

Appendix I. USFWS Ventura Concurrence Letter Regarding Onsite Tiger Salamander

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, California 93003

TAKE PRIDE IN AMERICA

IN REPLY REFER TO:
2008-I-0277

February 26, 2008

David Keegan
Denise Duffy & Associates, Inc.
947 Cass Street, Suite 5
Monterey, California 93940

Subject: Regulatory Status of the Tiger Salamander Population at Pond 1 of the Miravale III project site in Soledad, Monterey County, California

Dear Mr. Keegan,

This letter is in response to your correspondence, dated November 6, 2007, and received in our office on the same day, requesting our concurrence that the population of tiger salamanders currently occupying the agricultural water storage basins on the subject property is not subject to protection under the Endangered Species Act of 1973, as amended (Act). In your letter, you provided to us a report (Johnson and Shaffer 2007) detailing genetic analysis of the tiger salamander population at Pond 1 of the Miravale III project site. Your request for concurrence that the subject population of tiger salamanders is not protected under the Act is based on this genetics report.

The U.S. Fish and Wildlife Service's (Service) responsibilities include administering the Act, including sections 7, 9, and 10. Section 9 of the Act prohibits the taking of any federally listed endangered or threatened species. Section 3(18) of the Act defines take to mean to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Service regulations (50 CFR 17.3) define harm to include significant habitat modification or degradation which actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harassment is defined by the Service as an intentional or negligent action that creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. The Act provides for civil and criminal penalties for the unlawful taking of listed species. Exemptions to the prohibitions against take may be obtained through coordination with the Service in two ways: through interagency consultation for projects with Federal involvement pursuant to section 7 or through the issuance of an incidental take permit under section 10(a)(1)(B) of the Act.

On August 3, 2004, the Service published a final rule listing the California tiger salamander (*Ambystoma californiense*) as threatened range-wide, which included down-listing the previously federally endangered Sonoma and Santa Barbara distinct population segments (69 Federal Register (FR) 47212). On August 19, 2005, U.S. District Judge William Alsup vacated the

Service's down-listing of the Sonoma and Santa Barbara populations from endangered to threatened. Therefore, the Sonoma and Santa Barbara populations of the California tiger salamander are listed as endangered, and the Central California populations (including those occurring in Monterey County) are listed as threatened.

In the 1940s and 1950s, bait dealers from the Salinas Valley in Monterey County imported thousands of barred tiger salamander (*Ambystoma tigrinum mavortium*) larvae from Texas and other parts of the southwestern United States (Riley et al. 2003). Many of the non-native barred tiger salamanders were released in the hope of establishing harvestable populations in central California because they attain larger size prior to metamorphosis and can be available further into the summer than native California tiger salamanders. As a result of these introductions, non-native tiger salamanders established reproductive populations within dispersal distance of populations of California tiger salamanders.

One of the primary threats to the California tiger salamander is hybridization with non-native tiger salamanders in areas where the non-native salamanders were introduced and established viable populations (69 FR 47212). Hybridization between California tiger salamanders and non-native tiger salamanders results in introgression (i.e., the exchange of genetic material between different species or sub-species). Depending on the degree and extent of introgression (i.e., the number of reproductive generations between hybrid salamanders), certain populations of California tiger salamanders may become populations of salamanders with primarily non-native genes. Such genetic change has been characterized as a kind of extinction (Rhymer and Simberloff 1996), and may result in a population with fundamentally altered ecological function (Ellstrand and Schierenbeck 2000).

The August 3, 2004, listing rule for the California tiger salamander identified hybridization with non-native salamanders as a serious threat to the species in the Central Coast region of California (69 FR 47239). Research indicates that within this region, many Monterey County populations of the California tiger salamander are compromised by non-native genes to varying degrees (Fitzpatrick and Shaffer 2007). We noted in the listing rule, the difficulty in distinguishing between native California tiger salamanders and hybrid salamanders, and that the best way to identify hybrid or introgressed individuals at this point appears to be through the use of sophisticated molecular genetic techniques. Consistent with the August 4, 2003, listing rule, it is our intention to evaluate long-term conservation implications for each taxon separately on a case-by-case basis where introgressive hybridization may have occurred. Because hybridization in the Central California population of the California tiger salamander has been identified as a primary threat, determining the level of hybridization that receives regulatory protection, and identifying conservation strategies to reduce this threat, should be considered within the framework of recovery actions and should include consideration of implications on local and regional conservation of the California tiger salamander.

As outlined in your November 6, 2007, letter and the August 20, 2007, genetics report, Dr. H. Bradley Shaffer of the University of California at Davis conducted genetic analysis of larval salamanders from Pond 1 on the subject property. To evaluate the genetics of the salamander population at the subject property, Dr. Shaffer and a colleague analyzed tissue from 23 larval

salamanders from the site (Johnson and Shaffer 2007). Dr. Shaffer then genotyped individual tissue samples for one mitochondrial single nucleotide polymorphism (SNP) locus (Dloop) and up to nine nuclear SNP loci (Contig325, D1x3, FoxG1b, Gnat2, and Gnat1, HoxB13, HoxD8, S1c4a4, WNT1; (Voss et al. 2001)). Through previous research, Dr. Shaffer and his colleagues have identified diagnostic differences between *Ambystoma tigrinum* and *A. californiense* at each of these loci (Fitzpatrick and Shaffer 2004).

At each SNP locus, each individual was scored as 'aa' if it was homozygous for native alleles, 'gg' if it was homozygous for introduced alleles, or 'ga' if it was heterozygous, with one copy each of a native and introduced allele. These data were summarized, for each gene, as the total frequencies of each genotype. Dr. Shaffer then calculated a Hybrid Index score , for each individual and for the total population, by tallying the proportion of alleles (pooled across individuals and genes) that are native, using the formula Hybrid Index = (total number of native alleles)/(total number of alleles). This Hybrid Index score is one way of summarizing the overall level of "nativeness" of a sample of animals from a pond, and can range from 0.00 (pure native) to 1.00 (pure non-native) (Johnson and Shaffer 2007).

Using these methods, Dr. Shaffer calculated a Hybrid Index score ranging from 0.89 to 1.00 for each of the 23 individuals, and an overall Hybrid Index score for the population of 0.93. Only 8 of the 23 individuals contained any native alleles. For the 10 genetic loci analyzed, none of the 23 larval salamanders that Dr. Shaffer sampled were found to be pure California tiger salamanders. As a result of these investigations, Dr. Shaffer (Johnson and Shaffer 2007) concluded that, "the genotypes of salamanders present at Pond 1 from the Miravale III project site are comprised primarily of introduced alleles." Dr. Shaffer went on to say, "this site has been subjected to invasion by introduced tiger salamanders and that extensive hybridization has occurred."

We have carefully reviewed the information you provided, including the results of genetic investigations conducted on the tiger salamanders from Pond 1 on the subject property. Following our review, we conclude that none of the individual tiger salamanders which comprise the salamander population at Pond 1 of the subject property are the listed entity under the Act (i.e., California tiger salamanders). Therefore, tiger salamanders utilizing Pond 1 on the subject property are not afforded the protections of the Act.

If you have any questions regarding this letter, please contact Douglass Cooper of my staff at (805) 644-1766, extension 272.

Sincerely,

David M. Pereksta
Assistant Field Supervisor

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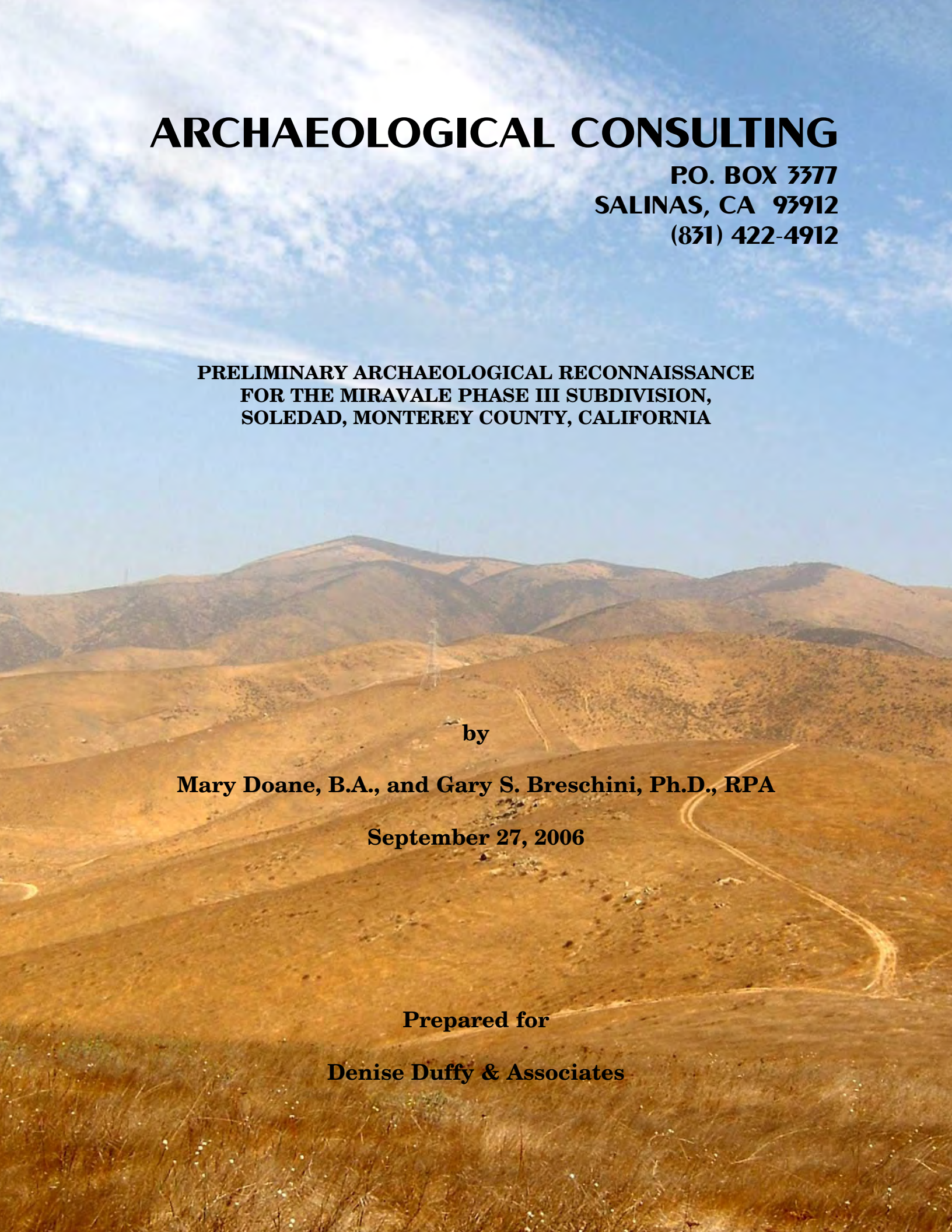
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TECHNICAL APPENDIX T-4

Preliminary Archaeological Reconnaissance (Archaeological Consulting)
CEQA Impacts Analysis & the Proposed Mitigation Report
for the Lorentzen House (JRP)
Phase One Historic Review (Kent Seavey)



ARCHAEOLOGICAL CONSULTING

P.O. BOX 3377
SALINAS, CA 93912
(831) 422-4912

PRELIMINARY ARCHAEOLOGICAL RECONNAISSANCE FOR THE MIRAVALE PHASE III SUBDIVISION, SOLEDAD, MONTEREY COUNTY, CALIFORNIA

by

Mary Doane, B.A., and Gary S. Breschini, Ph.D., RPA

September 27, 2006

Prepared for

Denise Duffy & Associates

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SUMMARY: PROJECT 3936
RESULTS: SEE TEXT
AREA: ±920 ACRES
SITES: NONE
UTMG: NW 6.4905/40.3630, NE 6.5120/40.3602, SE 6.5120/40.3540, SW 6.4945/40.3385
MAP: USGS 7.5 MINUTE SOLEDAD QUADRANGLE

REQUIRED FOR MONTEREY CO. PLANNING DEPT. EVIDENCE OF:

	YES	NO	N/A	SEE TEXT
SACRED/RELIGIOUS SITE			✓	
NATIVE AMERICAN REMAINS		✓		
ANYTHING OF ARCHAEOLOGICAL SIGNIFICANCE		✓		
FINDINGS OF HISTORICAL SIGNIFICANCE				✓

INTRODUCTION

In July 2006 Archaeological Consulting was authorized by Denise Duffy of Denise Duffy & Associates to prepare a Preliminary Archeological Reconnaissance report for the proposed Miravale Phase III subdivision, located north of Soledad, Monterey County, California.

As part of our methodology in the preparation of this report, we have conducted: 1) a background records search at the Northwest Regional Information Center of the California Historical Resources Information System, located at Sonoma State University, Rohnert Park; and 2) a field reconnaissance of the project area. The following report contains the results of these investigations as well as our conclusions and recommendations.

PROJECT LOCATION AND DESCRIPTION

The project area is located along both sides of San Vicente Road, immediately north and west of the existing Soledad city limits in Monterey County, California (see Map 1). East of the road the project area includes Section 16 of Township 17 S. Range 6 E. West of the road the project area includes a small section of the historic San Vicente Rancho, including Assessor's Parcels (APNs) 257-091-009 and 257-081-005, -023, -024, -025 and -026. The Universal Transverse Mercator Grid (UTMG) coordinates for the approximate corners of the project area are as follows: NW 6.4905/40.3630, NE 6.5120/40.3602, SE 6.5120/40.3540 and SW 6.4945/40.3385 on the USGS 7.5 minute Soledad Quadrangle (1955, photorevised 1981). The project proposes a major subdivision of the 920 acre project area (see Map 2).

At the time of the field reconnaissance the project area west of San Vicente Road was under cultivation in row crops and soil visibility was very good. Portions of Section 16 were planted in grapes and soil visibility in the tended vineyards was also good (see Figure 1). Most of the flatter part of Section 16 was fallow, with remnants of former vineyards in some areas (see Figure 2).

Vegetation consisted of dry grasses and weeds which varied in density. Soil visibility was generally good to fair in the fallow areas. The steeper slopes in the northeastern part of Section 16, no longer in use as pasture, were vegetated in dry grasses and weeds which greatly limited soil visibility to ranch roads, animal trails and burrows (see Figure 3). Overall, ground surface visibility was considered adequate for the purposes of this reconnaissance.

PROJECT METHODOLOGY

The methodology used in the preparation of this report included two primary steps, as follows:

Background Research

The background research for this project included an examination of the archaeological site records, maps, and project files of the Northwest Regional Information Center of the California Historical Resources Information System, located at Sonoma State University, Rohnert Park, California. In addition, our own extensive files and maps were examined for supplemental information, such as rumors of historic or prehistoric resources in the general project area.

The Regional Information Centers have been established by the California Office of Historic Preservation as the local repository for all archaeological reports which are prepared under cultural resource management regulations. The background literature search at the appropriate Regional Information Center is required by state guidelines and current professional standards. Following completion of the project, a copy of the report must be deposited with that organization.

These literature searches are undertaken to determine if there are any previously recorded archaeological resources within the project area, and whether the area has been included in any previous archaeological research or reconnaissance projects.

Field Reconnaissance

The field reconnaissance was conducted by Mary Doane, Patrick Cave and Gina Kay on several days between August 29 and September 14, 2006. The survey consisted of a "general surface reconnaissance" of all project areas which could reasonably be expected to contain visible cultural resources, and which could be viewed without major vegetation removal or excavation. The crew made contour transects on the slopes and straight line transects in the flatter areas. The numerous bedrock outcrops on the slopes were examined for evidence of utilization (see Figure 4).

RESULTS OF THE RECONNAISSANCE

Background Research

The search of the files at the Northwest Regional Information Center found that there are no previously recorded archaeological sites and only one recorded historic cultural resource located within one kilometer of the project area. No previous surveys have included any portion of the project area. In addition, the California Inventory of Historical Resources (March 1976), California Historical Landmarks, and the National Register of Historic Places were checked for listed cultural resources which might be present in the project area; none were found. The 1915 USGS Soledad 15 Minute Quadrangle map depicts a structure or structures in the southwest corner of Section 16 (see Map 3, Figures 5 and 6).

The project area lies within the currently recognized ethnographic territory of the Esselen linguistic group. The Esselen were one of the least populous groups in the state, and one of the least known. They are often considered the first California group to become culturally extinct. Discussions of this group and their territorial boundaries can be found in Breschini, Haversat, and Hampson (1983), Kroeber (1925), Hester (1978), and other sources. In brief, the Esselen followed a generalized hunting and gathering subsistence pattern with partial dependence on the natural acorn crop. Habitation is considered to have been sedentary to

semi-sedentary and occupation sites can be expected most often at the confluence of streams, other areas of similar topography along streams, or in the vicinity of springs. These original sources of water may no longer be present or adequate. On the coast, Esselen sites are found at the north and south banks of virtually every stream within their territory. Also, resource gathering and processing areas, and associated temporary campsites, are frequently found on the coast and in other locations containing resources utilized by the group. Factors which influence the location of these sites include the presence of suitable exposures of rock for bedrock mortars or other milling activities, ecotones, the presence of specific resources (oak groves, quarries, game trails, trade routes, etc.), proximity to water, and the availability of shelter. Temporary camps or other activity areas can also be found along ridges or other travel corridors. On the interior, rock art sites are also found in some remote areas.

Field Research

None of the materials frequently associated with prehistoric cultural resources in this area (dark midden soil, fire-altered or broken rocks, bones or bone fragments, flaked or ground stone, shell fragments, bedrock mortar outcrops, etc.) were observed during the field survey. Overall, the soil was light in color and contained sparse natural pebbles and some cobbles, especially in the seasonal watercourses running from the northeastern hills.

In addition to the old farm house and barn, segments of the historic section boundary fence remain standing on the northern property line in the hilly northeast quadrant of the project area (see Figure 7). Square cut nails were found in the redwood fencing in the few remaining parts of the original fence. Most of the perimeter fence has been repaired or replaced with more modern materials. There was no other evidence of other potentially significant historic period archaeological resources in the project area. Some ceramics and glass were seen in various parts of Section 16, but no concentrations indicative of an historic trash feature were noted.

CONCLUSIONS AND RECOMMENDATIONS

Based upon the background research and the surface reconnaissance, we have concluded that the proposed project area does not contain surface evidence of potentially significant archaeological resources. Potential historic resources, other than the historic fenceline remnants in the upper northeast part of Section 16, are located in the southwestern corner of Section 16. Because of this we make the following recommendations:

1. The proposed subdivision project should not be delayed for archaeological reasons.

2. The house and barn in the southwest corner of Section 16 should be evaluated for historical significance by a qualified structural historian or historic architect.

Because of the possibility of unidentified (e.g., buried) cultural resources being found during construction, we recommend that the following standard language, or the equivalent, be included in any permits issued within the project area:

- If archaeological resources or human remains are accidentally discovered during construction, work shall be halted within 50 meters (150 feet) of the find until it can be evaluated by a qualified professional archaeologist. If the find is determined to be significant, appropriate mitigation measures shall be formulated and implemented.

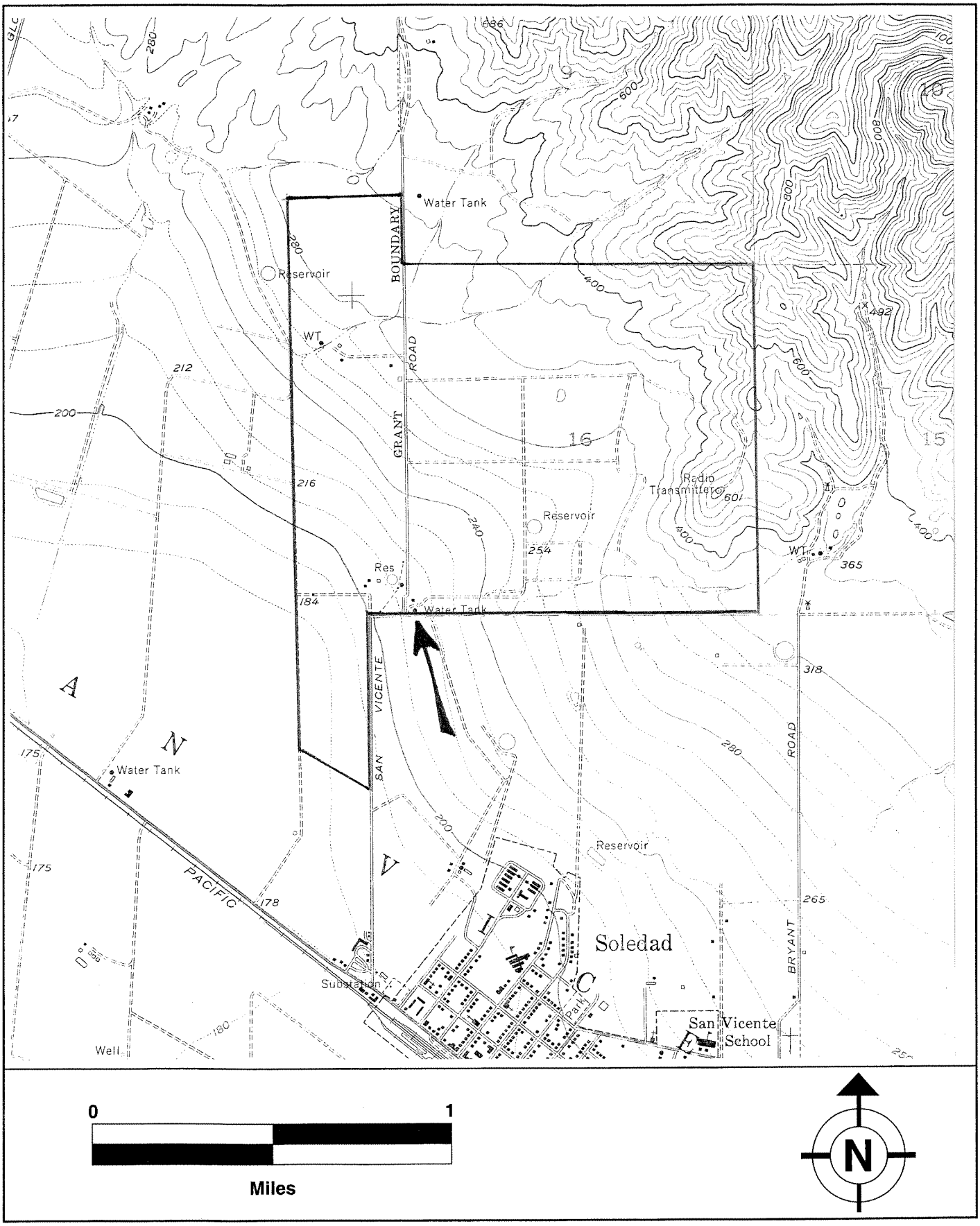
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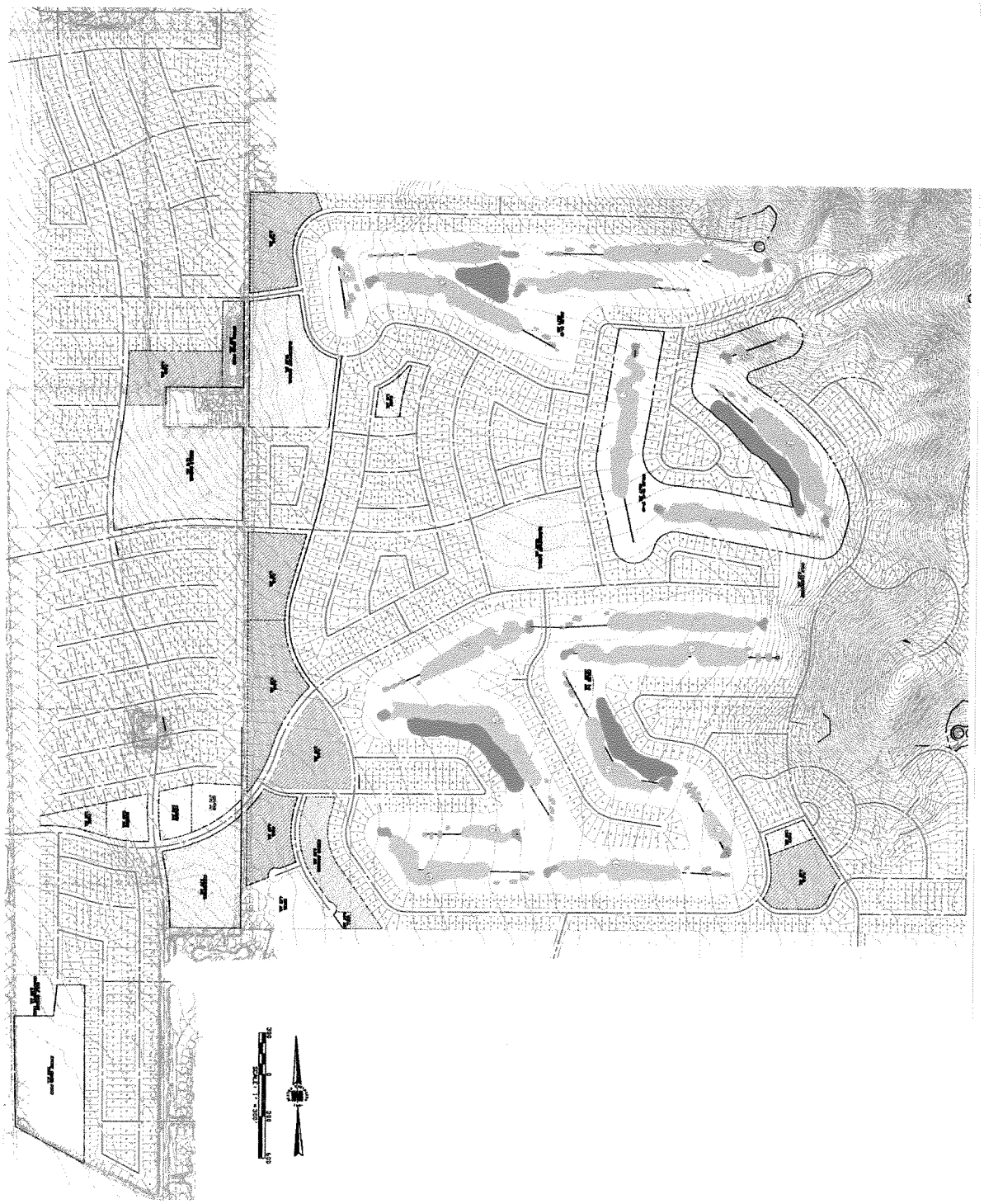
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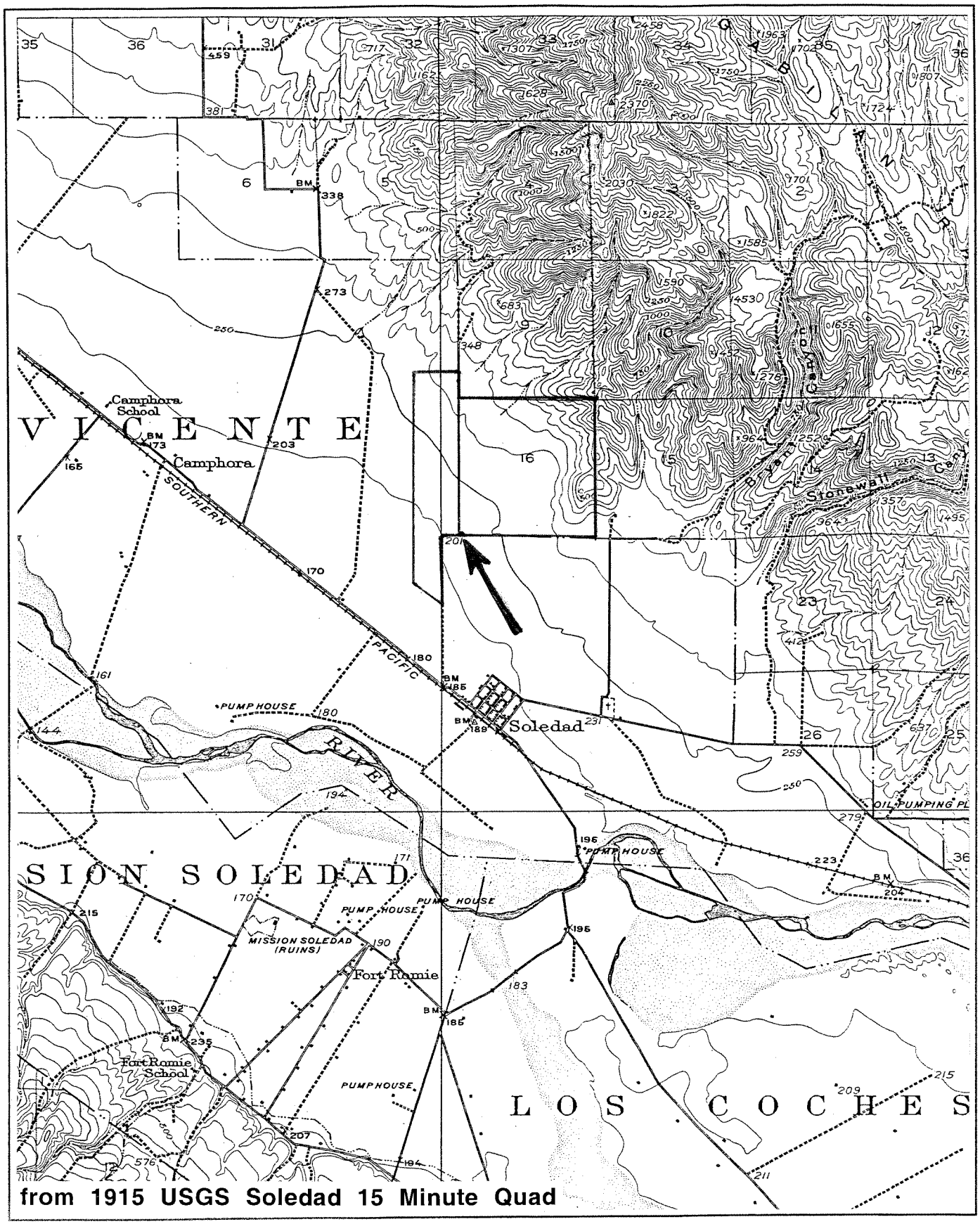


Map 1. Project Location.



MIRAVALE SUBDIVISION PHASE #3

Map 2. **PRELIMINARY VESTING TENTATIVE MAP**



Map 3. Project Location.



Figure 1. Project area -- view to southwest from radio transmitter hilltop.



Figure 2. Project area -- view to northwest from radio transmitter hilltop.



Figure 3. Steeper slopes in northeast corner of Section 16.



Figure 4. Typical bedrock outcrops in Section 16.



Figure 5. Ranch complex in southwest corner of Section 16, depicted on 1915 quad map.



Figure 6. Old farmhouse in southwest corner of Section 16.



Figure 7. Historic fence on northern boundary of Section 16 (square cut nails are found in old sections of the fence).

CEQA Impacts Analysis and Proposed Mitigation Report for the

Lorentzen House
Miravale Phase III Subdivision, Soledad, Monterey County, California



Prepared for:

Denise Duffy & Associates

Prepared by:

JRP Historical Consulting, LLC
1490 Drew Avenue, Suite 110
Davis, California 95618

July 2007

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APPENDICES

Appendix A: DPR 523 Form (prepared by K. Seavey, October 2006)
Appendix B: Monterey County Mitigation Monitoring Plan

1. EXECUTIVE SUMMARY

The Miravale Phase III Specific Plan project applies to the 920-acre project site located within unincorporated lands of Monterey County on the northern edge of the City of Soledad. The project proposes "a mixed-use development consisting of approximately 1,470 single-family residential units, 2,230 multi-family residential units, 500 senior housing units, 120 hotel rooms, 250,000 square feet of retail commercial space, and an 18-hole golf course...The project also proposes three school sites (2 elementary schools and 1 middle school), a fire and police substation, and approximately 255 acres of open space and recreation areas, including parks, playgrounds, a trail system, and a public golf course."[1]

A historical resource, known as the Morris Lorentzen House, is located in this project area. This resource is eligible for listing in the California Register of Historical Resources, and such properties are considered historical resources under the California Environmental Quality Act (CEQA). JRP Historical Consulting, LLC (JRP) prepared this CEQA Impacts Analysis to assist the project proponent in identification of potential impacts on the historical resource. This impacts analysis considered two possible project scenarios regarding the Lorentzen House: Scenario 1) relocation of the building to a suitable site, or Scenario 2) demolition of the building in whole or in part. A preferred project scenario for the Lorentzen House had not yet been identified when this analysis was conducted.

Both scenarios would cause a substantial adverse change; however Scenario 1 could be mitigated to a less than significant level under CEQA, if the appropriate mitigation is implemented. The demolition proposed under Scenario 2 will also require implementation of mitigation, but cannot be mitigated to a less than significant level.

This report recommends mitigation to address the identified impacts. Mitigation measures and conditions proposed for both scenarios include: professional qualification standards; mitigation monitoring and reporting; consultation with interested parties; and recordation of the property to Historic American Buildings Survey (HABS) standards. In addition, the recommendations include mitigation measures specific to each scenario. Mitigation measures recommended for Scenario 1 are: relocation in accordance with state and federal guidelines for such actions; application of protective measures before, during, and after relocation; repair of inadvertent damage; and development of a re-use plan. Mitigation measures recommended for Scenario 2 are: an update of the surveys of remaining David Jacks Corporation houses in the Salinas Valley, including inventory and evaluation of remaining resources; videography of the interior and exterior of the Lorentzen House prior to demolition; and preparation and installation of an interpretive exhibit addressing the history of these houses in the region, with a focus upon the Lorentzen House.

[1] "Miravale III Specific Plan, Soledad, Monterey, California." Administrative Draft (September 27, 2006).

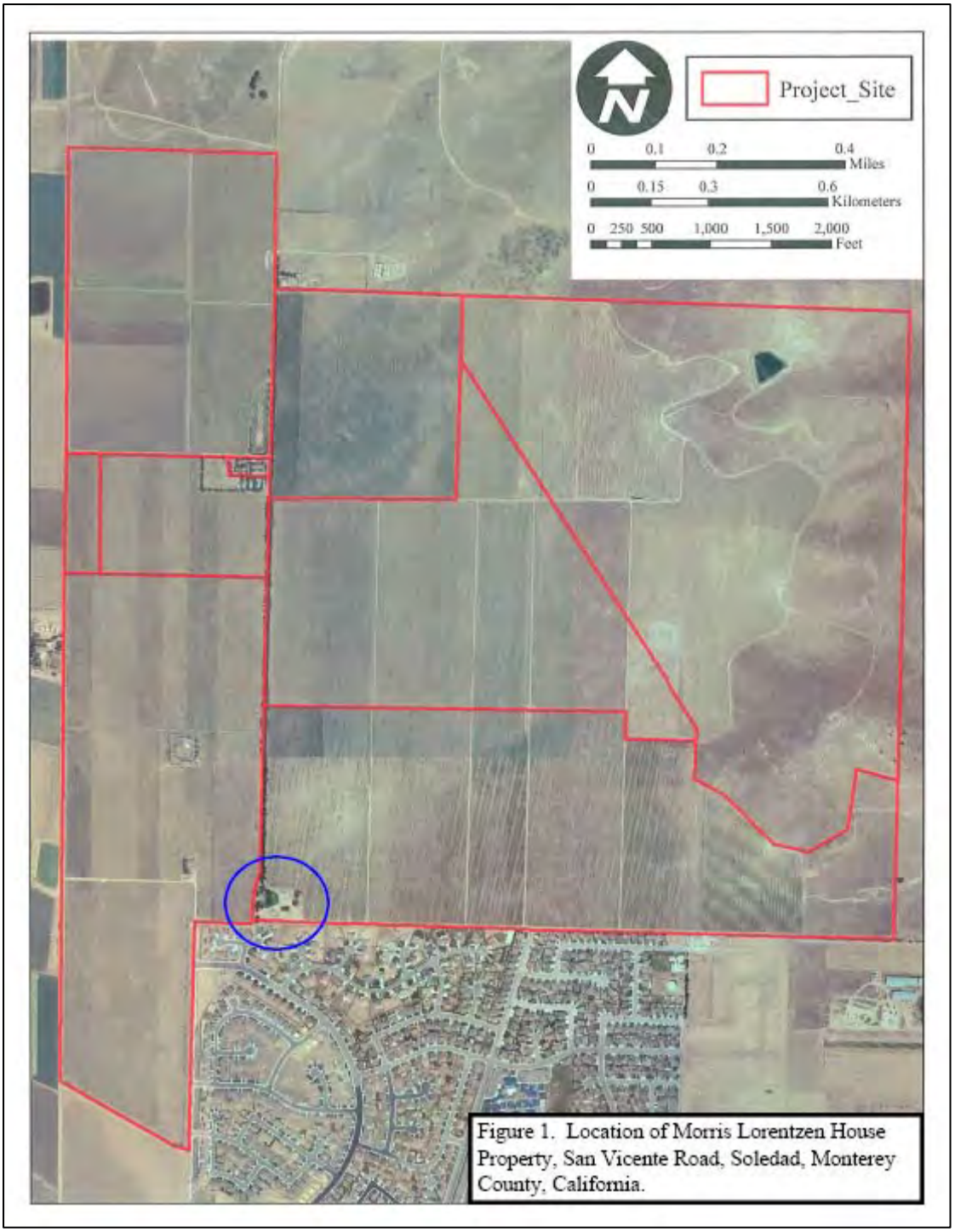


Figure 1. Location of Morris Lorentzen House Property, San Vicente Road, Soledad, Monterey County, California.

2. PREVIOUS SURVEYS AND DESCRIPTION OF RESOURCES

2.1. Previous Architectural Surveys

In October 2006, preservation consultant Kent Seavey prepared a California Department of Parks and Recreation (DPR) 523 form for the Morris Lorentzen House at 32945 San Vicente Road, north of the City of Soledad, California (Figures 1 and 2, and DPR 523 form in **Appendix A**). This form included a description and evaluation of the property and concluded that the building is eligible for listing in the California Register of Historical Resources (CRHR) under Criterion C as an example of a type, period, and method of construction important in the history of agricultural development by the David Jacks Corporation in the Salinas Valley. The building dates to between 1907 and 1921 and was moved to its current location in the late 1930s to an older house that burned down.

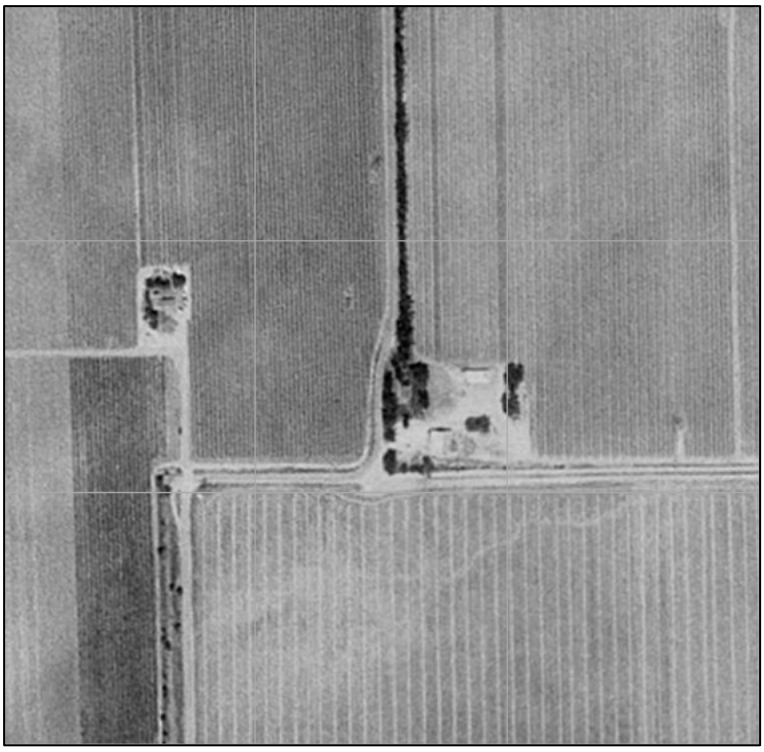


Figure 2. 1994 aerial view of Lorentzen House property (at center), prior to subdivision of land to the south. (For view of subdivided land, see Figure 1).

2.2. Description of Resources

Physical Description

The Morris Lorentzen House is a two-story, wood-framed, front gable residence with a rectangular plan. The building makes spare use of ornament and is an example of what some architectural historians call the National Folk Gable-Front style. The roof is clad in composition shingles and has narrow boxed eaves with a plain wood fascia at the gable ends, while channel rustic siding with corner boards clad the walls. A one-story hipped roof porch appears at the front and a shed roof porch extends from the rear. Most windows are simple wood frame 1/1 double-hung sash, but aluminum frame sliding windows have been added in several of the original openings. The other structures on the parcel do not date to the same time period as the house and are not contributing elements of the property. For additional description of the residence, please refer to the inventory form in **Appendix A**.



Morris Lorentzen House, July 2007.

Historic Architectural Context

The architectural importance of the Morris Lorentzen House lies in its association with the David Jacks Corporation (DJC) and the influential role that the company played in the agricultural development of the Salinas Valley in the early twentieth century. DJC was incorporated in 1907, by the children and heirs of David Jacks. The company owned thousands of acres of irrigated farmland and dairies throughout the Salinas Valley – land Jacks acquired over several decades

prior to his death in 1909. The company was formed to manage the leasing of these extensive holdings. DJC provided its lessees with a basic farmstead consisting of a house, barn, and granary "prefabricated in Monterey" and shipped to the nearest rail terminal for construction on each farm.[2]

DJC reportedly established more than sixty farms in this manner between 1908 and 1915 including the building now known as the Morris Lorentzen House. Descendents of the previous owners suspect that the house was originally constructed on a farm near Gonzales. Lorenz Lorentzen, owner of a hardware store in Gonzales, purchased the farm property on San Vicente Road in 1928 from the Nels Nielsen estate. If Lorenz Lorentzen ever lived at the property, he did so after 1930 because he reported his primary residence was in Gonzales at the time of the US Census that year. Lorentzen died in 1940 and his brother Morris Lorentzen, a farmer from the Greenfield area, took over operation of the property on San Vicente Road. The DJC house was moved to the property in the late 1930s to replace the Nielsen house when it burned down in a fire (**Figure 2**). The DJC house was reportedly from Gonzales, but it is not known if the Lorentzen family lived in it when it was a DJC house at its previous location.[3]



In 1904, the Arroyo Seco Improvement Company bought 7,000 acres of the Arroyo Seco Rancho. They secured water rights and began constructing canals. The following year, they sold out to the California Home Extension Association, who laid out Clark Colony, now Greenfield. Land was sold for $37.50 per acre, including water. Pictured is Morris Lorentzen irrigating his farm near Cherry Avenue. (Courtesy of Helen McDonald.)

Morris Lorentzen at his farm in Greenfield in 1904. (Clovis, *Salinas Valley*, 2005)

[2] "David Jacks Co., Inc., is a Family Affair," *Oakland Tribune* (August 15, 1907): 10; Seavey, "Morris Lorentzen House, DPR523 Form, October 2006; Breschini, 1*0,000 Years on the Salinas Plain*, 55.

[3] US Census, Population Schedules: 1910, 1920, 1930, Monterey County; Seavey, "Morris Lorentzen House, DPR523 Form, October 2006; Margaret E. Clovis, *Images of America: Salinas Valley* (Arcadia Publishing, 2005), 73.

The Monterey County Parks and Recreation Department surveyed farms and ranches in the Salinas Valley between the Soledad area on the south and Salinas and identified more than about a dozen farmsteads that appear to include DJC buildings. According to historian Kent Seavey, "most were found on the Former Los Coches Rancho, at the southern edge of Soledad," and the residences are generally described as one-and-one-half-story residences with a basic structure 26' x 32' in plan exclusive of the porches. The buildings also share the general spatial arrangement of windows at both the gable ends and side wall. The overall massing, scale, and fenestration of these buildings are character-defining features of DJC housing.[4] The Morris Lorentzen House is generally typical of the DJC house form, except that it has more windows.

3. IMPACTS ANALYSIS AND RECOMMENDED MITIGATION MEASURES

3.1. Impacts Analysis

The impacts analysis presented in this section considers of two possible project scenarios regarding the Lorentzen House: Scenario 1) demolition of the building in whole or in part, or Scenario 2) relocation of the building to a suitable site. A preferred project had not yet been identified when this study was conducted.

CEQA requires that California public agencies identify the significant environmental impacts of their actions and either avoid those impacts, or mitigate those impacts. This impacts analysis was prepared to assist the project proponent, lead and local agencies, as well as the general public, to understand the potentially significant impacts that may be caused by the project, and if such impacts are identified, how those impacts may be avoided and/or minimized.

The California Code of Regulations, beginning with 15064.5(b), defines significant impacts for historical resources as follows:

> *(1) Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.*
>
> *(2) The significance of an historical resource is materially impaired when a project:*
>
> > *(A) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or*

[4] Seavey, "Morris Lorentzen House, DPR523 Form, October 2006.

> *(B) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or*
>
> *(C) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.*
>
> *(3) Generally, a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995), Weeks and Grimmer, shall be considered as mitigated to a level of less than a significant impact on the historical resource.*
>
> *(4) A lead agency shall identify potentially feasible measures to mitigate significant adverse changes in the significance of an historical resource. The lead agency shall ensure that any adopted measures to mitigate or avoid significant adverse changes are fully enforceable through permit conditions, agreements, or other measures.*

The California Register recognizes "Special Considerations" for certain resource types, including moved buildings (emphasis added):

> *The State Historical Resources Commission encourages the retention of historical resources on site and discourages the non-historic grouping of historic buildings into parks or districts. However, it is recognized that moving an historic building, structure, or object is sometimes necessary to prevent its destruction. Therefore, a moved building, structure, or object that is otherwise eligible may be listed in the California Register if it was moved to prevent its demolition at its former location and if the new location is compatible with the original character and use of the historical resource. An historical resource should retain its historic features and compatibility in orientation, setting, and general environment.*[5]

[5] OHP, "California Environmental Quality Act (CEQA) and Historical Resources," *Technical Assistance Series No. 1* (March 2006), 29.

The City of Soledad General Plan also includes guidance regarding historical resources, including policies regarding Land Use:

> *L52 -- Historically or architecturally significant buildings shall not be demolished or substantially changed in outward appearance in a way that diminishes the historical character, unless doing so is necessary to remove a threat to health and safety and other means to avoid the threat are infeasible.*

City of Soledad General Plan Conservation Goals:

> *7 -- To preserve historic resources within and surrounding the City.*
>
> *8.5 -- The city shall amend the zoning ordinance to include the following or similar language: The demolition or remodel of buildings considered to be of historic, cultural or architectural significance shall not occur unless the following findings can be made.*
>
> *Remodel or Alteration, The proposed remodel or alteration does not adversely affect the historic, cultural or architectural significance of the building or site.*
>
> *Demolition, The demolition of the building does not adversely affect the historic, cultural, or architectural character of the City of Soledad, or the building presents a clear hazard to occupants or to the public, which can not be feasibly corrected through restoration.*[6]

In consideration of these regulations, policies and guidelines, this impacts analysis concludes that the Scenario 1 project would cause a substantial adverse change to the historical resource; however, this action could be mitigated to a less than significant level with the appropriate mitigation (see Section 3.2, below).

The Scenario 2 project would cause a substantial adverse change to the historical resource. This action cannot be mitigated to a less than significant level, and requires the appropriate mitigation to help reduce the impacts (see Section 3.2, below).

3.2. Recommended Mitigation Measures

The mitigation measures presented in this section considered two possible project scenarios: Scenario 1) demolition of the building in whole or in part, or Scenario 2) relocation of the building to a suitable site. Both scenarios would cause a substantial adverse change, however Scenario 1 could be mitigated to a less than significant level.

[6] City of Soledad. *General Plan*. Prepared by Crawford, Multari & Clark (2005), *II-34*, VIII-8, VIII-14.

- Scenario 1. Relocation of the Lorentzen House. The appropriate mitigation for relocation of the building would be to conduct the relocation project in accordance with the following guidelines and codes: 1) California State Historic Resources Commission "Special Considerations" for moved buildings; 2) the *Secretary of the Interior's Standards for Rehabilitation* (National Park Service, 1992); and 3) the California Historical Building Code. Implementation of this scenario under these conditions would reduce the adverse change caused by relocation to a less than significant level under CEQA.

- Scenario 2. Demolition of the building, in whole or in part. This type of project would cause a significant adverse change under CEQA, which is a significant impact on the environment. Mitigation is required to help reduce this impact [see 15064.5(b)(4), above], although demolition of a historic resource cannot be reduced to a less than significant level under CEQA.

The considerations and recommended mitigation measures related to these scenarios are presented below, beginning with those mitigation activities and specifications that will be conducted under either scenario. Once a preferred project is identified, the project proponent will consult with interested parties and the lead agency regarding implementation of Scenario 1, or Scenario 2. The mitigation measures ultimately selected may be based upon the proposed mitigation measures presented in this section, and/or may include additional mitigation proposed by interested parties during consultation.

The following considerations and mitigation measures apply to treatment of the Lorentzen House regardless of the final project description or scenario selected:

- Professional Standards. All activities regarding historical architectural resources and historic preservation carried out as part of this project would be carried out by or under the direct supervision of persons meeting, at a minimum, the Secretary of the Interior's professional qualifications standards (48 FR 44738-9) in these disciplines.

- Monitoring. Once the project scenario regarding the Lorentzen House is selected, the mitigation measures applying the scenario (described below) will be set forth in a Mitigation Monitoring and Reporting Plan (MMRP). The format and content of the MMRP will be determined by the lead Agency, the City of Soledad. The City may refer to the Monterey County guidelines for such plans, which are "intended to guide project-specific mitigation. monitoring and/or reporting programs … for various aspects of mitigation monitoring, reporting, and enforcement in order to ensure full compliance with conditions of project approval." Please see Appendix B for a copy of: County of Monterey, "Mitigation Monitoring and/or Reporting Program, Pursuant to Public Resources Code §21081.6, and CEQA Guidelines §15097."

- Coordination. The project proponent will coordinate with and inform interested parties, including, but not limited to the Soledad Historical Society and the Monterey County

Historical Society, regarding the status of its compliance with the mitigation measures set forth in the MMRP, as necessary.

- Recordation to Historic American Buildings Survey (HABS) standards. Prior to the start of any project work, the project proponent would ensure that the Lorentzen House property was recorded and documented in accordance with the Level II recordation standards of the Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) program. This level of recordation would include:

  - archival reproduction of any existing historic images of the property and grounds;
  - archival reproduction of any existing maps, sketches, or drawings of the house;
  - production of measured architectural plans and drawings;
  - production of large-format photographs of exterior and interior views of the house, and exterior views of house and current setting, including relationship to non-eligible outbuildings;
  - narrative history and description of the property (based on the narrative provided in the Seavey (2006) evaluation of the property, and the Monterey County survey(s) of similar properties.

  The original archival set of recordation documents and photograph prints will be submitted to the Soledad Historical Society (or its designee), and archival quality photocopies of the documentation set will be provided to the following interested parties and local repositories: Monterey County Historical Society; Monterey County Libraries (Soledad and Salinas branches); and UC Santa Cruz Library Special Collections Department. The project proponent would ensure that this recordation documentation was prepared prior to carrying out any other treatment and would make the content of the document available for other mitigation measures, such as the preparation of interpretive material.

Scenario 1. Mitigation for Relocation

- Relocation of House. The project proponent would ensure that the design and implementation of the relocation project would be consistent with the *Secretary of the Interior's Standards for* Rehabilitation *and Illustrated Guidelines for Rehabilitating Historic Buildings (U.S. Department of the Interior, National Park Service, 1992),* the California Historical Building Code, and the MMRP for the project. A relocation plan would be included in the MMRP and would be developed in accordance with the general recommendations of *Moving Historic Buildings*, a publication of the National Park Service. Specifically, it discusses planning, research, and recording prior to the move; and addresses the siting, foundation construction, building reassembly, and restoration work after a successful move. See: John Obed Curtis, *Moving Historic Buildings*, Heritage Conservation and Recreation Service, Publication No. 9, US Department of Interior (1979).

- Protective Measures. The project proponent will develop and implement measures to protect the character-defining features of the Lorentzen House building from damage by the relocation project. The features include, but are not limited to scale, massing, and layout of the house, as well as siding and wood frame fenestration. Protective measures will be prepared in accordance with the *Secretary of the Interior's Standards for Rehabilitation and Illustrated Guidelines for Rehabilitating Historic Buildings* (U.S. Department of the Interior, National Park Service, 1992), the California Historical Building Code, *Moving Historic Buildings*, and the MMRP for the project.

- Repair of Inadvertent Damage. The project proponent will ensure that any inadvertent damage to the character-defining features of the Morris Lorentzen House resulting from the rehabilitation project was repaired in accordance with the *Secretary of the Interior's Standards for Rehabilitation and Illustrated Guidelines for Rehabilitating Historic Buildings* (U.S. Department of the Interior, National Park Service, 1992) and California Historical Building Code, and the MMRP for the project. The condition of the building will be photographed as part of the proposed recordation document and/or video documentation, prior to the start of the relocation scenario, and this will help to establish the baseline condition for assessing inadvertent damage.

Scenario 2. Demolition of the Lorentzen House.

- Survey of remaining David Jacks Corporation Houses in the Salinas Valley. The project proponent will ensure that a resurvey, including current photography, inventory and evaluation forms (DPR523 Forms) is done for the remaining houses in the valley. The survey will specifically address DJC houses in and around Soledad, such as the Merrill Farms building, as well as investigating potential resources located south of Soledad, which may not have been previously surveyed. This survey will provide additional and/or updated information on the remaining DLC houses in the Salinas Valley and will be conducted in coordination with Monterey County Department of Parks and Recreation, so as to not duplicate inventory and recordation efforts.

- Interpretive exhibits. The project proponent will consult with interested parties about their interest in permanent or temporary interpretive exhibits describing the history of the Lorentzen House and other David Jacks Corporation houses. Interested parties to be consulted include, but are not limited to, the Soledad Historical Society and the Monterey County Historical Society. If consultation results in agreement between the project proponent and these parties concerning the nature and extent of the exhibits, the project proponent will produce and install the exhibits. The interpretive exhibit will utilize the images, narrative history, drawings or other material produced for the HABS mitigation described above. The interpretive exhibits may be in the form of, but are not necessarily limited to: plaques or markers, interpretive display panels, and or printed material for dissemination to the public. If consultation does not result in agreement between the project

proponent and the interested parties, the project proponent could seek an alternative Monterey County location for the interpretive exhibits. Appropriate alternative locations would be determined at that time.

- Documentary Videography. At least 30 days prior to commencing any work on the Morris Lorentzen House property, the project proponent would produce video documentation of the Lorentzen House property. This video documentation would include footage of the exterior and interior of the building, as well as the grounds of the property. The video documentation would be submitted to the Soledad Historical Society (or its designee) and a copy of the video documentation would be provided to interested parties upon request. The project proponent would make the videography available for other mitigation measures described above.

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Seavey, Kent. "Morris Lorentzen House," inventory and evaluation prepared on California Department of Parks and Recreation Form 523. October 20, 2006.

Appendix A: DPR 523 Form

(by K. Seavey, October 2006)

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code 5S2
Other Listings
Review Code Reviewer Date

 Resource Name or #: (Assigned by recorder) *Morris Lorentzen House*

P1. Other Identifier:

P2. Location: ☐ Not for Publication ☐ Unrestricted a. County *Monterey*

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

b. USGS 7.5' Quad Date T ; R ; 1/4 of 1/4 of Sec ; B.M.

c. Address: *32945* *San Vicente Road* City *Soledad* Zip *93960*

d. UTM: (Give more than one for large and/linear resources) ; mE/ mN

e. Other Locational Data (Enter Parcel #, legal description, directions to resource, elevation, etc., as appropriate)

Parcel No. *417-151-085*

P3. Description (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

A one-and-one-half-story wood-framed gable-front vernacular residence, rectangular in plan, resting on a concrete foundation. The exterior wall cladding is a medium-width rustic wood siding, with simple corner-boards. The one-story, full-width, hipped-roof porch across the south facing facade has been partially enclosed on its east and west sides, and below the porch rail, with a horizontal rustic wood siding slightly wider than that found on the main building block. A one-story, full-width, enclosed shed-roofed porch across the rear (north) elevation has always been enclosed. The steep-pitched gable-front roof has slightly overhanging eaves with closed soffits and a simple facia. The roof is covered in composition shingles, as are the hipped-roof of the front (south) porch, and shed-roofed (north) rear porch. Fenestration is irregular, with a combination of single and paired 1/1 double-hung wood sash, and several aluminum sliding windows. The latter features occupy the original window openings primarily on the rear (north) elevation. Two small, horizontal hopper type windows appear in the building envelope. One centered on the ground floor of the east side-elevation, and the second centered on the upper floor of the west side-elevation. Each denotes the location of interior bathrooms.

P3b. Resource Attributes: (List attributes and codes) *HP2 - Single Family Property*

P4. Resources Present ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)



P5b. Description of Photo: (View, date, accession #)
Looking NW at the south facing facade and e/side-elev., 7/1/05, #28935-8

P6. Date Constructed/Age and Sources
☐ Prehistoric ☒ Historic ☐ Both
c.1940, Lorenizen family records

P7. Owner and Address
HAMBY, LP
542 Lighthouse Ave.
Pacific Grove, CA 93950

P8. Recorded by: (Name, affiliation, and address)
Kent L. Seavey
Preservation Consultant
310 Lighthouse Ave.
Pacific Grove, CA 93950

P9. Date Recorded: *10/20/2006*

P10. Survey Type: (Describe)
Intensive-required CEQA review

P11. Report Citation: (Cite survey report and other sources, or enter "none".)
None

Attachments ☐ NONE ☒ Continuation Sheet ☐ District Record ☐ Rock Art Record ☐ Other: (List)
☐ Location Map ☒ Building, Structure, and Object Record ☐ Linear Feature Record ☐ Artifact Record
☐ Sketch Map ☐ Archaeological Record ☐ Milling Station Record ☐ Photograph Record

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

BUILDING, STRUCTURE, AND OBJECT RECORD

Primary # _____
HRI # _____

NRHP Status Code *5S2*

Resource Name or #: (Assigned by recorder) *Morris Lorentzen House*

B1. Historic Name: *Jacks Farmhouse*
B2. Common Name:
B3. Original Use: *residence* B4. Present Use: *residence*
B5. Architectural Style: *gable front vernacular (Jacks House)*
B6. Construction History: (Construction date, alterations, and date of alterations)
Constructed ca. 1910-1912 (Jacks Corp. period of development); moved to present location ca. 1940 (Lorentzen family members)

B7. Moved? ☐ No ☒ Yes ☐ Unknown Date : *ca. 1940* Original Location: *possibly from Gonzales*
B8. Related Features: *A large, undated wood-framed barn is found a little SE of the residence*

B9a. Architect: *Unknown* b. Builder: *David Jacks Corporation*
B10. Significance: Theme: *Agricultural Development* Area: *Soledad*
Period of Significance: *ca. 1940* **Property Type:** *single family residence* **Applicable Criteria:** *CR3*
(Discuss importance in terms of historical or architectural context as defined by theme, period and geographic scope. Also address integrity.)

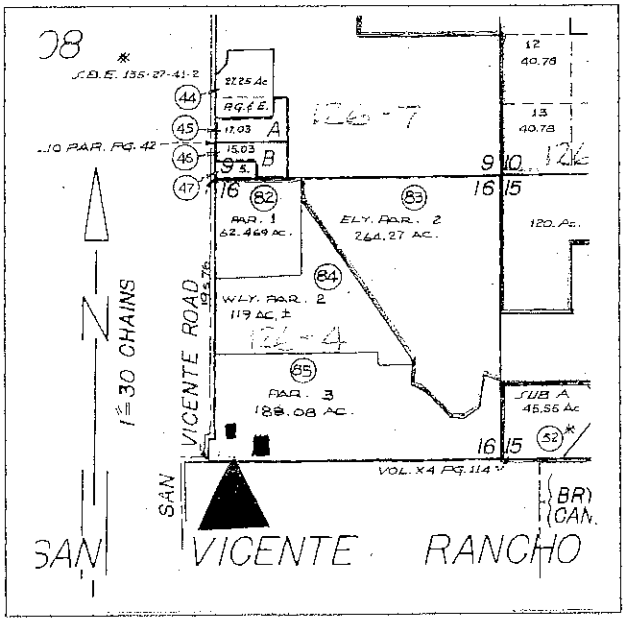
The Morris Lorentzen House is significant under California Register criterion 3, in the area of architecture as a basically intact example of a David Jacks Corporation prefabricated farm house from the first decade of the twentieth century.
Between about 1908 and 1915 Monterey's Jacks family corporation had designed and constructed a series of up to sixty-six ranches and dairies in the Salinas Valley between Chualar and King City on 30,000 acres of the vast land holdings acquired by David Jacks during the nineteenth century. The small tenant farms were developed as rental income property for the Jacks family heirs. The Jacks Corporation installed electric water pumps for wells on each farmsite, which consisted of a house, barn and grainery, prefabricated in Monterey and shipped to terminals near the farmsteads.
The Jacks Corporation gable-front residence design has been described in American architectural style books as a type of national folk house, or basic homestead house, deriving its form from the Greek Revival movement of the 1830s to 1850s. The popularity of the building shape persisted with the expansion of the national railroad network becoming a dominant folk form until well into the twentieth century.
In a 2001 survey of agriculturally related historic resources funded by the Monterey County Parks Department about a dozen Jacks farmsites with houses were identified, in various states of repair. Most were found on the former Los Coches Rancho, at the southern edge of Soledad. As described in the survey, the one-and-one-half-story Jacks houses were of similar design, and pre-cut at an unidentified Monterey mill. The
basic building block measures 26' wide by 32' deep. The four-room over four-room interior layout determines the exterior form. Each house has 6' deep covered full-width porches on the front and rear gable ends, making the the over-all footprint of the house 26' by 44'.

B11. Additional Resource Attributes: (List attributes and codes) *HP2 - Single Family Property*

B12. References:

Clark, Donald, *Monterey County Place Names*, Kestrel Press:Carmel Valley, CA, 1991
Clark Historic Resources Consultants, *Agriculturally Related Historic resources in the Unincorporated Areas Between Salinas and Soledad, Monterey County*, Monterey County Parks Dept. 2000
Gonzales Tribune. "Jack's Houses in Monterey County". 5/7/75

B13. Remarks: *Zoning F-40*



B14. Evaluator: *Kent Seavey*
Date of Evaluation: *10/20/2006*

(This space reserved for official comments.)

P3 The south facing facade is characterized by its symmetrical appearance. There are three glazed bays, set between the square posts on either side of the of the principal entry on the front porch, with two evenly spaced vertical double-hung wood sash windows, having narrow louvered wood shutters, on the upper floor. These elements visually balance the slightly offset entry, which is reached by a straight run of open concrete steps, with its simple metal pipe railing on the east side of the feature. The residence was moved to this location just before WWII to replace the original farm house, which was destroyed in a fire.
The subject property is sited in a stand of mature trees of varying species in a natural landscape setting that has not been maintained. It is located on open farmland at the NE edge of Soledad, near a modern housing development.
There is a large, undated wood-framed storage barn just SE of the residence. Basically square in plan, resting on mud sills. The exterior wall cladding is vertical flush board-siding. The low-pitched gable-front roof is covered in corrugated sheet metal. There is a massive, square entry opening centered in the north (front) elevation, with evidence of former sliding wood doors on the side bays, and on the rear (north) elevation. This feature is in fair condition. It is similar to many barns of its type in the region and not specifically significant.

B10. The spatial arrangement of windows in the gables and side elevations is a character-defining feature of the Jacks house form. There are two vertical double-hung, wood sash windows symmetrically set in the upper floor on both gable ends. On one side elevation, there are two vertical double-hung, wood-sash windows placed one-quarter distance from each corner of the main building block. A single window of the same type is found centered in the building envelope on the upper floor, immediately under the eaves, denoting the location of the interior stairway. The opposing side-elevation is generally characterized by two ground floor windows , matching those described, with no window in the upper floor.
The Morris Lorentzen House, which meets the general Jacks House specifications, has four windows along the ground floor of the east side-elevation, rather than two. The spacing to the first window from the SW corner of the main building block is consistent with the standard Jacks pattern, with a second window about 2' further along the building envelope. The paired windows at the rear of the house on this elevation are separated by a single mullion. All windows are 1/1 double-hung wood sash. In examining photographs of other Jacks houses in the area, at least one, the Pershall home on Doud Road, south of Soledad, has a similar set of paired windows. This suggests that there was some leeway for variation in the original building designs. Based on available sources, these Jacks houses could be constructed by the Jacks Corporation for their tenants for $800 each. Of the approximately one dozen Jacks houses surveyed in the area in 2001, the Merrill Farms building, on Highway 101 in Soledad, and the Lorentzen house appear to be the most intact examples of this now rare building type.
The Lorentzen Ranch was originally part of the Rancho San Vicente, two leagues in the Salinas Valley first granted December 16, 1835 to Francisco Soto, then to Francisco Figuroa in September, 1836. Figuroa sold the property to Estevan Munras in September of 1850. In June of 1865, the rancho, now 19,979 acres, was patented to the Munras heirs. The rancho extended from Gloria Road in the north to Soledad in the SE, and from the Salinas plain to the foothills of the Gabilan Range. In 1873 Catalina Manzaneli de Munras, widow of Estevan Munras established the town of Soledad on the rancho, having given the Southern Pacific Railroad a right-of-way across the property in December of 1872. Soledad became the SPRR railhead until 1886. The landscape setting of the region was described in 1875 as "a very dry plain with few trees." It was principally an area of dry farming east of the Salinas River, and later, dairying on the west side. Danish immigrant Nels J. Nielsen purchased 640 acres of the subject property from the Munras interests on October 7, 1913 and began dry farming cereal crops, and established a 200 acre almond orchard. After Nielsen's passing in 1927, the ranch was sold to Lorenz Lorentzen, owner of the Gonzales Hardware & Grocery Company, on December 4, 1928. Morris Lorentzen operated the ranch until his passing in 1967.
According to Lorentzen family members, the original Nielsen farmhouse burned down just before WWII (no exact date was given), and the Jacks house was moved to its current location, possibly from the Gonzales area.
The David Jacks family was one of the largest landholders in Monterey County at the beginning of the twentieth century. Under the leadership of David Jacks son, Will Jacks, the David Jacks Corporation made a significant contribution to the up building of the central Salinas Valley in the first two decades of the new century by investing in the irrigation of 30,000 acres of valley land for tenant farming, and by providing the tenant farmers with a basic farmstead from which to develop their crops. The vernacular farmhouse design provided by the Jacks Corporation for their tenants was once a common sight along the Salinas Valley, with as many as 60 examples present. By 1975 as few as 23 of these housing units could be found, and by the 2000 Monterey County Parks survey of agriculturally Related historic resources only a dozen were identified. The remaining Jacks farm houses, once plentiful, are now rare. They embody the distinctive characteristics of a type and period of regional construction specific to the Salinas Valley, and qualify thematically for listing in the California Register. The Morris Lorentzen House, as a little altered example of the building type, qualifies for individual listing in the California Register for its type and period of regional construction. The California Register allows moved properties to qualify for listing based on their significance and potential to yield information important to the history of a local area. The subject property clearly has this potential.

B12.
MacDonald, Helen, personal interview, Morris Lorentzen granddaughter, 10/10/06; 10/14/06
Monterey County Deeds, Chicago Title Co., Salinas, CA
Monterey Democrat, "Jacks Ranches Irrigation Plants",8/23/1912
Willits, Beverly Nielsen, personal interview, granddaughter of Nels Nielsen, 10/15/06

Appendix B:
Monterey County Mitigation Monitoring Plan

County of Monterey
Mitigation Monitoring and/or Reporting Program
Pursuant to Public Resources Code §21081.6
and CEQA Guidelines §15097

I. PURPOSE.

A. The CEQA Guidelines in Title 14, Chapter 3, Section 15000 *et seq*., of the California Code of Regulations, contain provisions for local agencies' monitoring and reporting of mitigation measures imposed on projects for which a mitigated negative declaration ("MND") or an environmental impact report ("EIR") has been prepared pursuant to the California Environmental Quality Act (Public Resources Code Section 21000 *et seq*., "CEQA"). On December 5, 2000 the Monterey County Board of Supervisors adopted Ordinance No. 04087, thereby incorporating into the Monterey County Code the existing State CEQA Guidelines and as they may be amended from time to time. Ordinance No. 04087 became effective on January 5, 2001.

B. This Mitigation Monitoring and/or Reporting Program ("Program") fulfills the requirements of CEQA and the CEQA Guidelines for monitoring and/or reporting of implementation of mitigation measures imposed under CEQA, and provides detailed procedures to be followed by County land use departments. This Program is intended to guide project-specific mitigation monitoring and/or reporting programs and sets forth the responsibilities of County land use departments for various aspects of mitigation monitoring, reporting, and enforcement in order to ensure full compliance with conditions of project approval.

II. IMPLEMENTATION RESPONSIBILITIES.

A. Planning and Building Inspection Department. The Planning and Building Inspection Department ("P&BI"), through the Director of Planning and Building Inspection ("Director") and his duly appointed subordinates, shall have the primary responsibility for implementation, compliance, and enforcement of this Program. If the Director finds that there is reasonable cause to believe that non-compliance with this Program exists, he or she shall take such measures as necessary or expedient, pursuant to existing enforcement provisions of the Monterey County Code, to enforce and secure compliance with the provisions of this Program.

B. Mitigation Monitoring and Reporting Program Supervisor. A Mitigation Monitoring and Reporting Program Supervisor ("MMRPS") within the P&BI may assist the Director in implementing this Program. The County may charge reasonable fees to recover the cost of the Program. Such fees shall be imposed to recover the costs of implementation and enforcement of mitigation measures that require field inspection, continuous or long-term monitoring, or the preparation and/or review of reports by County staff. Any such fees shall be approved by the Board of Supervisors before being imposed.

C. Other County Land Use Departments. All departments, officials, and public employees of the County, involved in processing, reviewing, recommending, or approving applications for permits or land use entitlements for projects requiring an MND or an EIR, including the Department of Public Works ("DPW"), the Environmental Health Division ("EHD") of the Health Department, and the Monterey County Water Resources Agency ("MCWRA"), shall implement,

enforce, and assist the Director in implementing and enforcing, the provisions of this Program as set forth herein. Each of the foregoing County land use departments shall report to the Director regarding each and every project's compliance with conditions of approval and CEQA mitigation measures imposed, as provided herein. For purposes of this Program, the foregoing departments shall be referred to as "responsible land use departments."

1. Where a particular CEQA mitigation measure or condition of project approval recommended by a County land use department is imposed, the recommending responsible land use department shall be primarily responsible for ensuring that the mitigation measure or condition of approval is fully implemented in accordance with the procedures and timelines, if any, specified in the Mitigation Monitoring and/or Reporting Plan ("MMRP") adopted at the time of project approval.

2. When a project applicant has fulfilled all requirements associated with a mitigation measure or measures imposed as a condition of project approval, the responsible land use department which recommended the condition and which was given the responsibility to monitor and/or report on condition compliance, shall fill out a "Verification of Condition Compliance/Non-Compliance Form" ("VCCNC") prepared by the P&BI. The VCCNC shall specify the project name and number, and condition/mitigation measure number, as well as provide a description of the mitigation measure, the date the condition was satisfied, how it was satisfied, and the County employee or officer of the responsible land use department who deemed the condition satisfied. The responsible land use department completing the VCCNC shall promptly forward the VCCNC to the P&BI. The P& BI shall enter a print copy of the VCCNC in the P&BI's official files and in the Department's computerized project tracking system, if any. A copy of the VCCNC shall be filed in the originating responsible land use department's project file.

3. In the event the applicant has not fully complied or refuses to comply with a mitigation measure or condition of approval within the schedule or reporting deadline(s) specified in the MMRP adopted as a condition of project approval, or within a reasonable time if no timeline is specified, the responsible County land use department that recommended the mitigation measure or condition shall promptly fill out a VCCNC which provides detailed information about the mitigation measure and the basis for finding that the applicant has failed to comply with the mitigation measure; and how compliance could be achieved within a specific date or schedule. The land use department involved shall promptly forward the VCCNC to the P&BI, which shall then decide whether to take any of the actions specified in Section III.D.2 herein.

4. In the event any type of action, including a Code enforcement action, is taken by the Director pursuant to the VCCNC, all documentation associated with corrective enforcement shall be incorporated in the P&BI's official project files. The files shall reflect the final action taken by the County to achieve compliance with this Program.

5. Each responsible land use department shall maintain a file for each project for which that department has recommended a condition of approval or CEQA mitigation measure which is later incorporated into an MMRP. The file shall contain all communications, records, and documents pertaining to each project's compliance with conditions of approval and CEQA mitigation measures imposed.

D. Program Availability. The Director shall provide a copy of this Program with the attached *Agreement to Implement a Mitigation Monitoring and/or Reporting Plan*, to County staff, project applicants, attorneys, consultants working on behalf of project applicants, and any member of the public requesting a copy. P&BI may consider other means of making this Program available to the public. Copies of these documents shall also be available to the public at the Planning and Building Inspection Department's public counter.

E. Revisions to the Program. Any revisions to this Program of a substantial nature shall be submitted to the Board of Supervisors for approval.

III. PROCEDURES.

A. Procedures to ensure that mitigation measures identified in an EIR or an MND are imposed as enforceable conditions at the time of project approval.

1. Findings and Conditions of Project Approval. Findings and conditions of project approval recommended by P&BI and each land use department named in Paragraph II.C, herein, and approved by any County decision-making body pursuant to an MND or an EIR, shall be in accordance with the *Monterey County Planning and Building Department Standard Conditions of Approval, Findings and Evidence* adopted July, 1994 and updated December, 1998.

2. Agreement to Implement a Mitigation Monitoring and/or Reporting Plan. Each applicant for a project approved pursuant to an MND or an EIR shall be required to enter into an Agreement (attached herewith) with the County to implement an MMRP for the project so approved.

3. Mitigation Measures. The MMRP shall list every mitigation measure approved by the decision-making body that adopted the MND or certified the EIR. The MMRP shall be prepared by P&BI staff and incorporated within the report recommending project approval to the decision-making body. Each mitigation measure shall be clearly written and include the following, as applicable:

a. A schedule for implementation of each mitigation measure. If a mitigation measure requires continuous or frequent (e.g. annual/daily) monitoring, the frequency and duration of required monitoring shall be specified (e.g. for five years/during construction);

b. The standard or measure used to determine the adequacy of the mitigation (e.g. a threshold adopted by a state or regional agency, General Plan policy, Monterey County Code or regulation);

c. Identification of the person or agency responsible for carrying out the field inspection, monitoring of a mitigation measure, or preparation of a report on the status of a mitigation measure or final approval;

d. The County department responsible for carrying out the implementation, monitoring, and reporting tasks required under each mitigation measure imposed;

e. If a consultant is assigned the task of monitoring or reporting, the consultant's area of expertise (e.g. licensed engineer, certified arborist) shall be specified in the MMRP. Consultants shall be qualified professionals, and their qualifications shall be presented to County P& BI staff as soon as they are selected by the project applicant.

B. Procedures to ensure compliance with the mitigation monitoring and reporting requirements of CEQA.

1. Once the Director of Planning and Building Inspection or his duly appointed subordinate determines that a project is not categorically exempt and will require certification of an EIR or adoption of an MND, County P&BI staff shall:

a. Provide a copy of the Program to the applicant or consultant.

b. Work with the MMRPS and the responsible land use departments to ensure that mitigation measures developed by any consultant(s) or by County staff are adequately and clearly written to mitigate significant impacts to the environment. Measures shall be written so that the effectiveness can be monitored and quantified, and the mitigation measure can be enforced.

1) The MMRPS and/or appropriate P & BI and responsible land use departments staff shall attend project scoping meetings, or meetings specially convened for the particular project, including Interdepartmental Review (IDR) to provide guidance and direction on working with the requirements of Public Resources Code §21081.6 and CEQA Guidelines, §15097.

2) The MMRPS and/or appropriate P&BI and responsible land use department staff shall work with consultants and responsible agencies, as required, to ensure compliance with the Program.

3) Projects with an Initial Study that result in a Mitigated Negative Declaration or with an underlying EIR requiring certification shall be reviewed by appropriate P&BI and responsible land use department staff and, as necessary, by the Office of County Counsel to determine that the mitigation measures are enforceable before recommending the project to the Minor Subdivision Committee, Subdivision Committee, Zoning Administrator, Planning Commission, or Board of Supervisors.

2. P&BI staff shall provide training, as necessary, to those staff responsible for the preparation of a MMRP, and/or agencies/or individuals and consultants who either prepare mitigation measures or must provide field inspections, monitoring or the preparation and/or review of reports related to Public Resources Code §21081.6 and CEQA Guidelines, §15097.

C. Procedures to ensure that mitigation monitoring or reporting programs are imposed and adopted at the time of project approval.

1. No recommendation for approval shall be delivered to the Minor Subdivision Committee, Subdivision Committee, Zoning Administrator, Planning Commission, or Board of Supervisors for any project requiring a Mitigation Monitoring and/or Reporting Plan pursuant to CEQA unless a copy of the MMRP is attached. No such MMRP shall be submitted to the Minor

Subdivision Committee, Subdivision Committee, Zoning Administrator, Planning Commission, or Board of Supervisors unless P & BI staff has approved it.

2. County P & BI staff shall ensure that any final resolution of the Minor Subdivision Committee, Subdivision Committee, Zoning Administrator, Planning Commission, or Board of Supervisors approving a project based upon an MND or an EIR, contains language which specifies adoption of the Mitigation Monitoring and/or Reporting Plan for the project.

D. Procedures to ensure that mitigation measures identified in an EIR or MND and incorporated into a mitigation monitoring or reporting program are fully and consistently enforced through permit conditions and compliance relating thereto, agreement, or other acceptable and legal measures.

1. No project requiring a Mitigation Monitoring and/or Reporting Plan pursuant to CEQA, shall be recommended to the Minor Subdivision Committee, Subdivision Committee, Zoning Administrator, Planning Commission, or Board of Supervisors unless it also includes, as a condition of project approval, that the project applicant agree to enter into an *Agreement to Implement a Mitigation Monitoring and/or Reporting Plan* (see attachment). This Agreement shall be executed and recorded by the applicant no later than sixty (60) days after project approval or prior to the issuance of the first ministerial permit or commencement of construction on the project, whichever event occurs first. In no event shall an applicant be deemed to have fully satisfied all conditions of approval of a project unless this Agreement has been executed and recorded.

2. If the applicant fails to comply with any adopted mitigation measure, or an adopted Mitigation Monitoring and/or Reporting Plan, County P&BI staff shall issue a "Stop Work Order," a "Notice of Violation," or a notice of County's intent to pursue a Code Enforcement action. An applicant who desires to remedy the non-compliance shall be given an opportunity to consult with the P&BI to determine the extent of the violation and to take any necessary remedial action.

3. The project applicant shall consult with P&BI within 15 days of the issuance of a "Stop Work Order," a "Notice of Violation," or a notice of County's intent to pursue a Code Enforcement action. Failure of the applicant to take remedial action to the satisfaction of the Director shall result in Code Enforcement action through the Environmental Health Division or through any appropriate County law enforcement agency.

Attachment:

- *Agreement to Implement a Mitigation Monitoring and/or Reporting Plan*
- January 1, 2001/jg/mw; Revised February 5, 2001/mw; Revised April 20, 2001/mw; Revised June13, 2001/mw; Revised Sept. 21, 2001.

[Adopted by the Board of Supervisors on October 9, 2001 (Resolution 01-391)]

When recorded return to:

MONTEREY COUNTY PLANNING AND BUILDING INSPECTION DEPARTMENT

☐ **COASTAL OFFICE**
2620 First Avenue
Marina, CA 93933
ATTN: _____
(831) 883-7500

☐ **SALINAS OFFICE**
230 Church Street
Salinas, CA 93901
ATTN: _____
(831) 755-5025

Space above for Recorder's Use

AGREEMENT TO IMPLEMENT A MITIGATION MONITORING and/or REPORTING PLAN

IN ACCORDANCE with Section 21081.6 of the California Public Resources Code, and Section 15097 of Title 14, Chapter 3 of the California Code of Regulations, this Agreement is made by and between the County of Monterey, a political subdivision of the State of California (herein "COUNTY"), and _____ (herein "OWNER"), upon the following facts and circumstances:

A. OWNER is the owner of certain real property located_____ _____ _____ more particularly described in "Exhibit 1", attached hereto and incorporated herein by reference.

B. On _____[DATE], pursuant to County Resolution No. _____, subject to the conditions listed therein, the _____ _____

[GOVERNING BODY: MONTEREY COUNTY BOARD OF SUPERVISORS **or** MONTEREY COUNTY PLANNING COMMISSION **or** MONTEREY COUNTY ZONING ADMINISTRATOR **or** MONTEREY COUNTY MINOR SUBDIVISION COMMITTEE]

did_____

[ADOPT A MITIGATED NEGATIVE DECLARATION **or** CERTIFY AN EIR]

approving a _____ Permit, File No. PLN_____, and adopted a Mitigation Monitoring and/or Reporting Plan (hereafter "the Plan"). The Plan is attached hereto as "Exhibit 2" and incorporated herein by reference. Resolution No. _____ is on file in the Department of Planning and Building Inspection.

C. As required by the California Environmental Quality Act, the Owner agrees to implement a Mitigation Monitoring and/or Reporting Plan.

NOW, THEREFORE, in consideration of the County's above-referenced _____

[ADOPTION OF A MITIGATED NEGATIVE DECLARATION **or** CERTIFICATION OF AN EIR] and approval of a _____ Permit, File No. PLN_____, OWNER agrees as follows:

1. Mitigation Monitoring and/or Reporting Plan. OWNER hereby agrees to implement the Plan attached hereto as "Exhibit 2".

1.01 Cost of Monitoring and/or Reporting. At OWNER'S sole cost and expense, OWNER shall be responsible for the monitoring and/or reporting as may be required by the Plan.

1.02 Alternative Mitigation Measure(s). If, for any reason, any mitigation measure specified in the Plan cannot be implemented due to factors beyond the control of the Owner and/or County, the Director of the County Department of Planning and Building Inspection may, after good faith negotiation with OWNER, recommend substitution of another mitigation measure at a noticed public hearing before the decision-making body which originally approved the Permit herein.

2. Binding Effect. This Agreement shall be construed as a covenant running with the land and shall bind and benefit COUNTY, its successors and assigns, and OWNER and its successors in interest.

3. Specific Performance. The parties acknowledge that the obligations of OWNER under this AGREEMENT are unique and that, in the event of a breach of this AGREEMENT by Owner, the remedy of damages or any other remedy may be inadequate to fulfill the purpose of this AGREEMENT. Therefore, the parties agree that in addition to any other remedies available to COUNTY, COUNTY shall be entitled to the remedy of specific performance.

4. Severability. In the event any provision of this Agreement is found to be invalid or unenforceable, such determination shall not affect the validity and enforceability of any other provision of this AGREEMENT.

5. Interpretation. It is agreed by the parties that this AGREEMENT has been arrived at through negotiation and neither party is to be deemed the party which prepared this Agreement for the purposes of California Civil Code Section 1654.

6. Amendments. This AGREEMENT may be amended only by a written document signed by the parties.

7. Recordation. Upon execution of this Agreement, the parties shall cause recordation thereof with the Monterey County Recorder's Office.

8. Mitigation Monitoring Fee. Upon execution of this Agreement, the OWNER shall pay the requisite $840 mitigation monitoring fee, pursuant to the Board of Supervisors' adopted fee schedule.

IN WITNESS WHEREOF, the party(ies) hereto have executed this Agreement on the day and year set out opposite his/her/their respective signature(s).

OWNER(s):

Date:_____ _____

(PRINT NAME) _____

Date:_____ _____

(PRINT NAME) _____

STATE OF CALIFORNIA }
}
COUNTY OF MONTEREY}

On _____ before me, _____ Notary Public, personally appeared _____ _____, personally know to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s) or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature_____

COUNTY OF MONTEREY

Date:_____ By:_____

DALE ELLIS
ASSISTANT DIRECTOR
PLANNING AND BUILDING INSPECTION DEPARTMENT

STATE OF CALIFORNIA }
}
COUNTY OF MONTEREY}

On _____ before me,_____,
Notary Public, personally appeared _____,
personally know to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s) or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature_____

APPROVED AS TO FORM:
CHARLES J. MCKEE, COUNTY COUNSEL

BY: _____, DEPUTY COUNTY COUNSEL
PRINT NAME

Date:_____ By:_____

DEPUTY COUNTY COUNSEL

Verification of Condition Compliance/Non-Compliance

MONTEREY COUNTY
PLANNING AND BUILDING INSPECTION DEPARTMENT

PLN ☐ SH ☐ PC ☐ ZA ☐ SB ☐ MS ☐ # _____

PROJECT NAME: _____

CONDITION NO. _____

CONDITION DESCRIPTION: _____

_____

_____

_____

SCHEDULE/REPORTING DEADLINES: _____

_____

_____

VERIFIED BY DOCUMENT/DATE:		
Other Evidence of Compliance (Field Visits, Letters, Phone Calls, Reports)		
(Attached/Number of Pages)		

VERIFIED BY STAFF MEMBER: _____

(Name/Dept.) ***(Phone No.)*** ***(Date)***

OR

BASIS OF FINDING FAILURE TO COMPLY:
RECOMMENDED COMPLIANCE AND SCHEDULE:
VERIFIED BY STAFF MEMBER: _____ ***(Name/Dept.)*** ***(Phone No.)*** ***(Date)***

Original – *Planning & Building Inspection Dept. Project File*
Copy –*Clearing Department's Project File*
Copy – County Counsel

[Adopted by the Board of Supervisors on October 3, 2001 (Resolution 01-391)]

KENT L. SEAVEY

310 LIGHTHOUSE AVENUE
PACIFIC GROVE, CALIFORNIA 93950
(831)375-8739

October 20, 2006

Ms. Elizabeth Guzman
Denise Duffy & Assoc.
947 Cass Street
Suite #5
Monterey, CA 93940

Dear Ms. Guzman:

Thank you for the opportunity to prepare a Phase One Historic Review for the County of Monterey for the property at 32945 San Vicente Rd. (APN #417-151-085) in Soledad.

The subject property is a one-and-one-half-story wood-framed gable-front vernacular residence, rectangular in plan, resting on a concrete foundation. The exterior wall cladding is a medium-width rustic wood siding, with simple corner-boards.

The one-story, full-width, hipped-roof porch across the south facing facade has been partially enclosed on its east and west sides, and below the porch rail, with a horizontal rustic wood siding slightly wider than that found on the main building block. A one-story, full-width, enclosed shed-roofed porch across the rear (north) elevation has always been enclosed.

The steep-pitched gable-front roof has slightly overhanging eaves with closed soffits and a simple facia. The roof is covered in composition shingles, as are the hipped-roof of the front (south) porch, and shed-roofed (north) rear porch.

Fenestration is irregular, with a combination of single and paired 1/1 double-hung wood sash, and several aluminum sliding windows. The latter features occupy the original window openings primarily on the rear (north) elevation. Two small, horizontal hopper type windows appear in the building envelope. One centered on the ground floor of the east side-elevation, and the second centered on the upper floor of the west side-elevation. Each denotes the location of interior bathrooms.

The south facing facade is characterized by its symmetrical appearance. There are three glazed bays, set between the square posts on either side of the of the principal entry on the front porch, with two evenly spaced vertical double-hung wood sash windows, having narrow louvered wood shutters, on the upper floor. These elements visually balance the slightly offset entry, which is reached by a straight run of open concrete steps, with its simple metal pipe railing on the east side of the feature.

The subject property is sited in a stand of mature trees of varying species in a natural landscape setting that has not been maintained. It is located on open farmland at the NE edge of Soledad, near a modern housing development.

There is a large, undated wood-framed storage barn just SE of the residence. Basically square in plan, resting on mud sills. The exterior wall cladding is vertical flush board-siding. The low-pitched gable-front roof is covered in corrugated sheet metal. There is a massive, square entry opening centered in the north (front) elevation, with evidence of former sliding wood doors on the side bays, and on the rear (north) elevation. This feature is in fair condition. It is similar to many barns of its type in the region and not specifically significant in the context of the Lorentzen (Jacks) House.

The Lorentzen Ranch was originally part of the Rancho San Vicente, two leagues in the Salinas Valley first granted December 16, 1835 to Francisco Soto, then to Francisco Figuroa in September, 1836. Figuroa sold the property to Estevan Munras in September of 1850. In June of 1865, the rancho, now 19,979 acres, was patented to the Munras heirs. The rancho extended from Gloria Road in the north to Soledad in the SE, and from the Salinas plain to the foothills of the Gabilan Range.

In 1873 Catalina Manzaneli de Munras, widow of Estevan Munras established the town of Soledad on the rancho, having given the Southern Pacific Railroad a right-of-way across the property in December of 1872. Soledad became the SPRR railhead until 1886. The landscape setting of the region was described in 1875 as "a very dry plain with few trees." It was principally an area of dry farming east of the Salinas River, and later, dairying on the west side.

Danish immigrant Nels J. Nielsen purchased 640 acres of the subject property from the Munras interests on October 7, 1913 and began dry farming cereal crops, and established a 200 acre almond orchard.

After Nielsen's passing in 1927, the ranch was sold to Lorenz Lorentzen, owner of the Gonzales Hardware & Grocery Company, on December 4, 1928. Morris Lorentzen operated the ranch until his passing in 1967.

According to Lorentzen family members, the original Nielsen farmhouse burned down just before WWII (no exact date was given), and the Jacks house was moved to its current location, possibly from the Gonzales area.

The California Environmental Quality Act (CEQA), PRC Sec. 21084.1 requires all properties fifty years of age or older to be reviewed for potential historic significance. Criteria for that significance is addressed in PRC Sec. 5024.1(a). It asks, generally, did any event of importance to the region, state or nation occur on the property ? Did anyone of great importance to the region, state or nation occupy the property during the productive period of their lives ? Does the building represent an important architectural type, period or method of construction, or is it a good example of the work of a noted architect or master-builder ? The criteria also asks if the property is likely to yield information significant to the understanding of the areas history.

The Morris Lorentzen House is significant under California Register criterion 3, in the area of architecture as a basically intact example of a David Jacks Corporation prefabricated farm house from the first decade of the twentieth century.

Between about 1908 and 1915 Monterey's David Jacks family corporation had designed and constructed a series of up to sixty-six ranches and dairies in the Salinas Valley between Chualar and King City on 30,000 acres of the vast land holdings acquired by David Jacks during the nineteenth century. The small tenant farms were developed as rental income property for the Jacks family heirs. The Jacks Corporation installed electric water pumps for wells on each farmsite, which consisted of a house, barn and grainery, prefabricated in Monterey and shipped to terminals near the farmsteads.

The Jacks Corporation gable-front residence design has been described in American architectural style books as a type of national folk house, or basic homestead house, deriving its form from the Greek Revival movement of the 1830s to 1850s. The popularity of the building shape persisted with the expansion of the national railroad network becoming a dominant folk form until well into the twentieth century.

In a 2001 survey of agriculturally related historic resources funded by the Monterey County Parks Department about a dozen Jacks farmsites with houses were identified, in various states of repair. Most were found on the former Los Coches Rancho, at the southern edge of Soledad. As described in the survey, the one-and-one-half-story Jacks houses were of similar design, and pre-cut at an unidentified Monterey mill.

The basic building block measures 26' wide by 32' deep. The four-room over four-room interior layout determines the exterior form. Each house has 6' deep covered full-width porches on the front and rear gable ends, making the the over-all footprint of the house 26' by 44'.

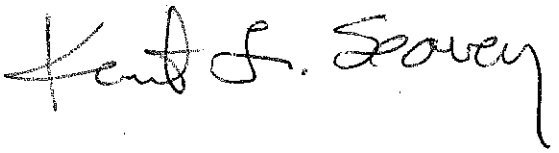
The spatial arrangement of windows in the gables and side elevations is a character-defining feature of the Jacks house form. There are two vertical double-hung, wood sash windows symmetrically set in the upper floor on both gable ends. On one side elevation, there are two vertical double-hung, wood-sash windows placed one-quarter distance from each corner of the main building block. A single window of the same type is found centered in the building envelope on the upper floor, immediately under the eaves, denoting the location of the interior stairway. The opposing side-elevation is generally characterized by two ground floor windows , matching those described, with no window in the upper floor.

The Morris Lorentzen House, which meets the general Jacks House specifications, has four windows along the ground floor of the east side-elevation, rather than two. The spacing to the first window from the SW corner of the main building block is consistent with the standard Jacks pattern, with a second window about 2' further along the building envelope. The paired windows at the rear of the house on this elevation are separated by a single mullion. All windows are 1/1 double-hung wood sash. In examining photographs of other Jacks houses in the area, at least one, the Pershall home on Doud Road, south of Soledad, has a similar set of paired windows. This suggests that there was some leeway for variation in the original building designs. Based on available sources, these Jacks houses could be constructed by the Jacks Corporation for their tenants for $800 each. Of the approximately one dozen Jacks houses surveyed in the area in 2001, the Merrill Farms building, on Highway 101 in Soledad, and the Lorentzen house appear to be the most intact examples of this now rare building type.

The vernacular farmhouse design provided by the Jacks Corporation for their tenants was once a common sight along the Salinas Valley, with possibly as many as 60 examples present. By 1975 as few as 23 of these housing units could be found, and by the 2000 Monterey County Parks survey of agriculturally Related historic resources only a dozen were identified. The remaining Jacks farm houses, once plentiful, are now rare. They embody the distinctive characteristics of a type and period of regional construction specific to the Salinas Valley, and qualify thematically for listing in the California Register.

The Morris Lorentzen House, retains sufficient integrity as a good representitive example of the building type to qualify for individual listing in the California Register, for its type and period of regional construction. The California Register allows moved properties to qualify for such listing based on their significance and potential to yield information important to the history of a local area. The subject property clearly has this potential.

Respectfully Submitted,



State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code 5S2
Other Listings
Review Code Reviewer Date

 Resource Name or #: (Assigned by recorder) *Morris Lorentzen House*

P1. Other Identifier:

P2. Location: ☐ Not for Publication ☐ Unrestricted a. County *Monterey*

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

b. USGS 7.5' Quad Date T ; R ; 1/4 of 1/4 of Sec ; B.M.

c. Address: *32945* *San Vicente Road* City *Soledad* Zip *93960*

d. UTM: (Give more than one for large and/linear resources) ; mE/ mN

e. Other Locational Data (Enter Parcel #, legal description, directions to resource, elevation, etc., as appropriate)

Parcel No. *417-151-085*

P3. Description (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

A one-and-one-half-story wood-framed gable-front vernacular residence, rectangular in plan, resting on a concrete foundation. The exterior wall cladding is a medium-width rustic wood siding, with simple corner-boards. The one-story, full-width, hipped-roof porch across the south facing facade has been partially enclosed on its east and west sides, and below the porch rail, with a horizontal rustic wood siding slightly wider than that found on the main building block. A one-story, full-width, enclosed shed-roofed porch across the rear (north) elevation has always been enclosed. The steep-pitched gable-front roof has slightly overhanging eaves with closed soffits and a simple facia. The roof is covered in composition shingles, as are the hipped-roof of the front (south) porch, and shed-roofed (north) rear porch. Fenestration is irregular, with a combination of single and paired 1/1 double-hung wood sash, and several aluminum sliding windows. The latter features occupy the original window openings primarily on the rear (north) elevation. Two small, horizontal hopper type windows appear in the building envelope. One centered on the ground floor of the east side-elevation, and the second centered on the upper floor of the west side-elevation. Each denotes the location of interior bathrooms.

P3b. Resource Attributes: (List attributes and codes) *HP2 - Single Family Property*

P4. Resources Present ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)



P5b. Description of Photo: (View, date, accession #)
Looking NW at the south facing facade and e/side-elev., 7/1/05, #28935-8

P6. Date Constructed/Age and Sources
☐ Prehistoric ☒ Historic ☐ Both
c.1940, Lorenizen family records

P7. Owner and Address
HAMBY, LP
542 Lighthouse Ave.
Pacific Grove, CA 93950

P8. Recorded by: (Name, affiliation, and address)
Kent L. Seavey
Preservation Consultant
310 Lighthouse Ave.
Pacific Grove, CA 93950

P9. Date Recorded: *10/20/2006*

P10. Survey Type: (Describe)
Intensive-required CEQA review

P11. Report Citation: (Cite survey report and other sources, or enter "none".)
None

Attachments ☐ NONE ☒ Continuation Sheet ☐ District Record ☐ Rock Art Record ☐ Other: (List)
☐ Location Map ☒ Building, Structure, and Object Record ☐ Linear Feature Record ☐ Artifact Record
☐ Sketch Map ☐ Archaeological Record ☐ Milling Station Record ☐ Photograph Record

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

BUILDING, STRUCTURE, AND OBJECT RECORD

Primary # _____
HRI # _____

NRHP Status Code *5S2*

Resource Name or #: (Assigned by recorder) *Morris Lorentzen House*

B1. Historic Name: *Jacks Farmhouse*
B2. Common Name:
B3. Original Use: *residence* B4. Present Use: *residence*
B5. Architectural Style: *gable front vernacular (Jacks House)*
B6. Construction History: (Construction date, alterations, and date of alterations)
Constructed ca. 1910-1912 (Jacks Corp. period of development); moved to present location ca. 1940 (Lorentzen family members)

B7. Moved? ☐ No ☒ Yes ☐ Unknown Date : *ca. 1940* Original Location: *possibly from Gonzales*
B8. Related Features: *A large, undated wood-framed barn is found a little SE of the residence*

B9a. Architect: *Unknown* b. Builder: *David Jacks Corporation*
B10. Significance: Theme: *Agricultural Development* Area: *Soledad*
Period of Significance: *ca. 1940* **Property Type:** *single family residence* **Applicable Criteria:** *CR3*
(Discuss importance in terms of historical or architectural context as defined by theme, period and geographic scope. Also address integrity.)

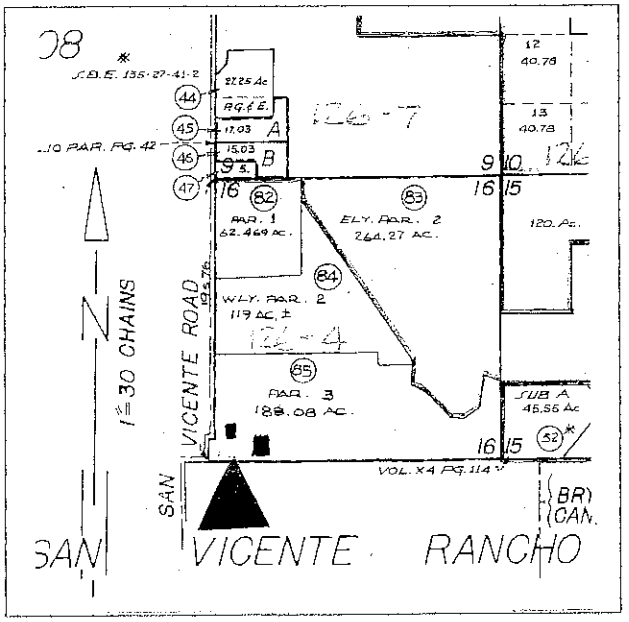
The Morris Lorentzen House is significant under California Register criterion 3, in the area of architecture as a basically intact example of a David Jacks Corporation prefabricated farm house from the first decade of the twentieth century.
Between about 1908 and 1915 Monterey's Jacks family corporation had designed and constructed a series of up to sixty-six ranches and dairies in the Salinas Valley between Chualar and King City on 30,000 acres of the vast land holdings acquired by David Jacks during the nineteenth century. The small tenant farms were developed as rental income property for the Jacks family heirs. The Jacks Corporation installed electric water pumps for wells on each farmsite, which consisted of a house, barn and grainery, prefabricated in Monterey and shipped to terminals near the farmsteads.
The Jacks Corporation gable-front residence design has been described in American architectural style books as a type of national folk house, or basic homestead house, deriving its form from the Greek Revival movement of the 1830s to 1850s. The popularity of the building shape persisted with the expansion of the national railroad network becoming a dominant folk form until well into the twentieth century.
In a 2001 survey of agriculturally related historic resources funded by the Monterey County Parks Department about a dozen Jacks farmsites with houses were identified, in various states of repair. Most were found on the former Los Coches Rancho, at the southern edge of Soledad. As described in the survey, the one-and-one-half-story Jacks houses were of similar design, and pre-cut at an unidentified Monterey mill. The
basic building block measures 26' wide by 32' deep. The four-room over four-room interior layout determines the exterior form. Each house has 6' deep covered full-width porches on the front and rear gable ends, making the the over-all footprint of the house 26' by 44'.

B11. Additional Resource Attributes: (List attributes and codes) *HP2 - Single Family Property*

B12. References:

Clark, Donald, *Monterey County Place Names*, Kestrel Press:Carmel Valley, CA, 1991
Clark Historic Resources Consultants, *Agriculturally Related Historic resources in the Unincorporated Areas Between Salinas and Soledad, Monterey County*, Monterey County Parks Dept. 2000
Gonzales Tribune. "Jack's Houses in Monterey County". 5/7/75

B13. Remarks: *Zoning F-40*



B14. Evaluator: *Kent Seavey*
Date of Evaluation: *10/20/2006*

(This space reserved for official comments.)

P3 The south facing facade is characterized by its symmetrical appearance. There are three glazed bays, set between the square posts on either side of the of the principal entry on the front porch, with two evenly spaced vertical double-hung wood sash windows, having narrow louvered wood shutters, on the upper floor. These elements visually balance the slightly offset entry, which is reached by a straight run of open concrete steps, with its simple metal pipe railing on the east side of the feature. The residence was moved to this location just before WWII to replace the original farm house, which was destroyed in a fire.
The subject property is sited in a stand of mature trees of varying species in a natural landscape setting that has not been maintained. It is located on open farmland at the NE edge of Soledad, near a modern housing development.
There is a large, undated wood-framed storage barn just SE of the residence. Basically square in plan, resting on mud sills. The exterior wall cladding is vertical flush board-siding. The low-pitched gable-front roof is covered in corrugated sheet metal. There is a massive, square entry opening centered in the north (front) elevation, with evidence of former sliding wood doors on the side bays, and on the rear (north) elevation. This feature is in fair condition. It is similar to many barns of its type in the region and not specifically significant.

B10. The spatial arrangement of windows in the gables and side elevations is a character-defining feature of the Jacks house form. There are two vertical double-hung, wood sash windows symmetrically set in the upper floor on both gable ends. On one side elevation, there are two vertical double-hung, wood-sash windows placed one-quarter distance from each corner of the main building block. A single window of the same type is found centered in the building envelope on the upper floor, immediately under the eaves, denoting the location of the interior stairway. The opposing side-elevation is generally characterized by two ground floor windows , matching those described, with no window in the upper floor.
The Morris Lorentzen House, which meets the general Jacks House specifications, has four windows along the ground floor of the east side-elevation, rather than two. The spacing to the first window from the SW corner of the main building block is consistent with the standard Jacks pattern, with a second window about 2' further along the building envelope. The paired windows at the rear of the house on this elevation are separated by a single mullion. All windows are 1/1 double-hung wood sash. In examining photographs of other Jacks houses in the area, at least one, the Pershall home on Doud Road, south of Soledad, has a similar set of paired windows. This suggests that there was some leeway for variation in the original building designs. Based on available sources, these Jacks houses could be constructed by the Jacks Corporation for their tenants for $800 each. Of the approximately one dozen Jacks houses surveyed in the area in 2001, the Merrill Farms building, on Highway 101 in Soledad, and the Lorentzen house appear to be the most intact examples of this now rare building type.
The Lorentzen Ranch was originally part of the Rancho San Vicente, two leagues in the Salinas Valley first granted December 16, 1835 to Francisco Soto, then to Francisco Figuroa in September, 1836. Figuroa sold the property to Estevan Munras in September of 1850. In June of 1865, the rancho, now 19,979 acres, was patented to the Munras heirs. The rancho extended from Gloria Road in the north to Soledad in the SE, and from the Salinas plain to the foothills of the Gabilan Range. In 1873 Catalina Manzaneli de Munras, widow of Estevan Munras established the town of Soledad on the rancho, having given the Southern Pacific Railroad a right-of-way across the property in December of 1872. Soledad became the SPRR railhead until 1886. The landscape setting of the region was described in 1875 as "a very dry plain with few trees." It was principally an area of dry farming east of the Salinas River, and later, dairying on the west side. Danish immigrant Nels J. Nielsen purchased 640 acres of the subject property from the Munras interests on October 7, 1913 and began dry farming cereal crops, and established a 200 acre almond orchard. After Nielsen's passing in 1927, the ranch was sold to Lorenz Lorentzen, owner of the Gonzales Hardware & Grocery Company, on December 4, 1928. Morris Lorentzen operated the ranch until his passing in 1967.
According to Lorentzen family members, the original Nielsen farmhouse burned down just before WWII (no exact date was given), and the Jacks house was moved to its current location, possibly from the Gonzales area.
The David Jacks family was one of the largest landholders in Monterey County at the beginning of the twentieth century. Under the leadership of David Jacks son, Will Jacks, the David Jacks Corporation made a significant contribution to the up building of the central Salinas Valley in the first two decades of the new century by investing in the irrigation of 30,000 acres of valley land for tenant farming, and by providing the tenant farmers with a basic farmstead from which to develop their crops. The vernacular farmhouse design provided by the Jacks Corporation for their tenants was once a common sight along the Salinas Valley, with as many as 60 examples present. By 1975 as few as 23 of these housing units could be found, and by the 2000 Monterey County Parks survey of agriculturally Related historic resources only a dozen were identified. The remaining Jacks farm houses, once plentiful, are now rare. They embody the distinctive characteristics of a type and period of regional construction specific to the Salinas Valley, and qualify thematically for listing in the California Register. The Morris Lorentzen House, as a little altered example of the building type, qualifies for individual listing in the California Register for its type and period of regional construction. The California Register allows moved properties to qualify for listing based on their significance and potential to yield information important to the history of a local area. The subject property clearly has this potential.

B12.
MacDonald, Helen, personal interview, Morris Lorentzen granddaughter, 10/10/06; 10/14/06
Monterey County Deeds, Chicago Title Co., Salinas, CA
Monterey Democrat, "Jacks Ranches Irrigation Plants",8/23/1912
Willits, Beverly Nielsen, personal interview, granddaughter of Nels Nielsen, 10/15/06

TECHNICAL APPENDIX T-5

Preliminary Geologic Hazards Investigation (Nolan Associates)
Preliminary Soil and Foundation Investigation – EIR
Phase (Donald M. Tharp & Associates)
Geotechnical Investigation – Preliminary Design Phase (Tharp & Associates)
Geologic Hazards Investigation Update (Nolan Associates)

5524

Rec'd 31 Oct 95

PRELIMINARY GEOLOGIC HAZARDS INVESTIGATION
PROPOSED SUBDIVISIONS
SAN VICENTE VINEYARDS
AND HAMBEY RANCH PROPERTIES
APNS 417-151-082, -083, -084, & -085,
257-101-051
MONTEREY COUNTY, CALIFORNIA

PREPARED FOR
Nader Agha
August 1995

Job # 95MT-001-17S6E

NOLAN ASSOCIATES
GEOLOGIC AND HYDROGEOLOGIC CONSULTANTS
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August 9, 1995

Mr. Nader Agha
P.O. Box 3016
Monterey, California 93942-3016

RE: Geologic Hazards Investigation
Proposed Subdivisions
San Vicente Vineyard and Hambey Ranch Properties
APNs 417-151-082, -083, -084, & -085, 257-101-051
Soledad, Monterey County, California

Dear Mr. Agha:

At your request, we have completed our geologic report for the above referenced project. The purpose of our investigation was to provide a geologic characterization of the subject properties and to identify potential geologic hazards relevant to subdivision of the properties and construction of approximately 3500 residential units. This investigation is intended to satisfy Monterey County requirements for a geologic report for the project.

The results of our investigation indicate that the proposed development of both properties is acceptable with respect to geologic hazards. Our investigation indicates that the properties may be subject to landsliding, flooding, liquefaction, and seismic shaking hazards. In our opinion, the risks associated with these potential hazards can be reduced to "ordinary risk", as defined in Appendix A, provided that the recommendations contained in this report are followed.

We recommend that you make this report available to the design professionals assisting you on this project. Please contact us if you have any questions.

Sincerely,
Nolan Associates

Jeffrey M. Nolan
Principal Geologist

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EXECUTIVE SUMMARY

INTRODUCTION

This report presents the results of our preliminary geologic hazards investigation for two proposed subdivisions located north of the City of Soledad, Monterey County, California (Figure 1, Site Location Map). The subject properties include the 634 acre San Vicente Vineyard parcel on San Vicente Road and the 280 acre Hambey Ranch parcel on Bryant Road. The purpose of our investigation was to evaluate geologic hazards on the subject properties to provide for prudent development of residential housing and associated facilities.

Based on discussions with you, we understand that the two proposed subdivisions will include approximately 3500 residential units, a density of about four units per acre. We have not reviewed any proposed tentative maps or specific project plans for this investigation. It is our understanding that the subdivision will be provided water by on-site wells and that sewage will be disposed of in shallow leachfield trenches after secondary treatment in a package plant. The subject properties are presently being used for agricultural production.

SCOPE OF INVESTIGATION

Work performed during this study included:

1) Review of pertinent geologic literature and published geologic maps for the subject sites.

2) Examination of 6 sets of aerial photographs for the area ranging in age from 1937 to 1989.

3) Geologic reconnaissance mapping of the subject property, including construction of two geologic cross sections.

4) Analysis of data and preparation of this report summarizing our findings and recommendations.

CONCLUSIONS

1. Based on the information gathered and analyzed, it is our opinion that both of the properties are geologically suitable for residential development, provided that the recommendations contained in this report are properly implemented.

2. The properties are not located in an Alquist-Priolo special studies zone. No known or suspected active faults are mapped across the proposed development area and we did not identify any evidence for faulting on the properties during our site investigation. Therefore, we are of the opinion that the potential for surface ground rupture due to faulting is low on the subject properties.

3. There is a potential for strong seismic shaking at the site if a large earthquake occurs on the nearby Rinconada or related fault. Such an earthquake is expected to produce mean peak horizontal ground accelerations (randomly oriented horizontal component) of about 0.5g for sites underlain by deep soil (more than 40 feet of alluvium) and 0.28g to 0.38g for rock sites.

   These expected ground motions are based on a deterministic evaluation of seismic hazards. In our opinion, insufficient information is available on the activity of the Rinconada fault to provide for a valid probability assessment, although we are of the opinion that the probability of a large earthquake on the Reliz-Rinconada fault during the economic lifetime of a typical residential structure is low. Ground motion values estimated for the other principal seismogenic sources in the area, the San Andreas fault and the San Gregorio-Hosgri fault, are in the range of 0.07g to 0.1g for rock sites and 0.13g to 0.19g for soil sites. Large earthquakes on these faults are considered to be more likely than on the Reliz-Rinconada fault.

4. The potential hazard due to seismically induced liquefaction on the site is judged to be low for older alluvium (Qoa, Plate 1) and low to moderate for younger alluvium (Qa, Plate 1).

5. The likelihood of landsliding affecting the two proposed subdivisions is very low, with the exception of sites on or immediately adjacent to the steep slopes on the eastern margin of the San Vicente property. The lack of evidence for previous landsliding on these slopes indicates that the granitic bedrock is a competent slope forming material. However, we did identify several very steep, v-shaped drainages that could conduct debris flows during intense rainstorms. Evidence for past debris flows at these sites is equivocal, but for conservatism, we have made recommendations for setbacks for residential structures from the mouths of these steep drainages, as summarized in the Recommendations section, below.

6. The potential for flooding of the proposed subdivisions is low, provided that adequate drainage provisions are implemented for the ephemeral drainage courses shown on Plate 1.

RECOMMENDATIONS

Based on the results of our investigation, we make the following recommendations:

1) The mean peak horizontal acceleration (randomly oriented component) that should be considered in dynamic or psuedostatic analyses for the project is 0.5g for deep soil sites and 0.38 g for rock sites. For design purposes, a repeatable high ground acceleration (RHGA) of 0.33g (soil) or 0.25g (rock) may be used for project design if the project engineer considers the RHGA to be a more appropriate design value.

   It is important that recommendations regarding seismic shaking be used in the design for any proposed development. Even with adequate design and construction, some damage to structures may occur during a great earthquake. However, the damage due to high intensity shaking may be

reduced by careful placement and construction of the structure. Past experience has shown that the quality of design and construction is far more important than the precise evaluation of ground motion parameters.

Many of the risks associated with earthquakes are not due to structural failure. Most injuries result from falling debris, overturned furniture, the disruption of utilities, and fires that occur as a result of broken utility lines, overturned gas stoves, etc. Large appliances (i.e. refrigerators, freezers, pianos, wall units, water heaters, etc.) should be firmly attached to the floor or to structural members of walls.

2) We recommend that the project geotechnical engineer prepare a quantitative assessment of liquefaction and seismically induced settlement potential once a development plan is chosen, with specific reference to areas underlain by younger alluvium.

3) We recommend that residential structures be set back 100 feet from the mouths of steep drainages identified as potential debris flow hazards on Plate 1. The recommended setbacks are indicated on Plate 1.

4) We recommend that any natural drainages on the subject properties be channelized and conducted across the development sites in appropriately engineered structures. We recommend that all drainage from improved surfaces such as walkways, patios, roofs and driveways be collected in impermeable gutters or pipes and carried to neighborhood storm sewers or natural drainages. At no time should any concentrated discharge be allowed to spill directly onto the ground adjacent to a proposed building site. Any water landing on paved areas should not be allowed to flow towards a proposed building site. The control of runoff is essential for control of erosion and prevention of ponding water against building foundations.

5) We recommend that any embankment dams on the properties be evaluated for stability if they are to remain in use following development of the properties. Stability evaluations should include psuedostatic or dynamic stability analyses using peak horizontal ground motions recommended in 1), above.

6) This report is issued with the understanding that it is the duty and responsibility of the owner, or of his representative or agent, to ensure that this report is provided to and brought to the attention of the architect, engineer(s) and general contractor for the project, and that all recommendations made in the report are incorporated into the plans and specifications, and that the necessary steps are taken to see that the contractor and subcontractors carry out the report's recommendations in the field.

7) We recommend that our firm be provided the opportunity for a general review of the final design and specifications in order that our recommendations may be properly interpreted and implemented in the design and specification. If our firm is not accorded the privilege of making the recommended review we can assume no responsibility for misinterpretation of our recommendations.

Job # 95MT-001
August 9, 1995

PRELIMINARY GEOLOGIC HAZARDS INVESTIGATION
PROPOSED SUBDIVISIONS
SAN VICENTE VINEYARDS
AND HAMBEY RANCH PROPERTIES
APNS 417-151-082, -083, -084, & -085,
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4) Analysis of data and preparation of this report summarizing our findings and recommendations.

REGIONAL GEOLOGY

The subject sites are situated on the eastern flank of the Salinas Valley and are bounded to the east by the foothills of the Gabilan Range, a granitic massif that forms a portion of the Coast Ranges Physiographic Province of California. The Coast Ranges Province consists of a series of coastal mountain chains paralleling the pronounced northwest-southeast structural grain of central California geology.

The Gabilan Range and adjacent portions of the Salinas Valley are underlain by a large, northwest-trending, fault bounded, elongate prism of granitic and metamorphic basement rocks, known collectively as the Salinian Block. The Salinian Block is separated from contrasting basement rock types to the northeast and the southwest by the San Andreas and the Sur-Nacimiento fault systems, respectively (Figure 2, Regional Geologic Map). Overlying the granitic basement rocks on the Salinian Block is a sequence of dominantly marine sediments of Paleocene to Pliocene age and non-marine sediments of Pliocene to Pleistocene age, all of which show evidence of uplift and deformation.

In the study area, only alluvial deposits of Quaternary age are exposed at the surface. These deposits are in depositional contact with granitic basement exposed in the foothills of the Gabilan Range (Figure 2 and Plate 1, Site Geologic Map). Older sedimentary units crop out to the south and west in the Salinas valley and may occur at depth in the vicinity of the subject properties. These units include marine shales of the Monterey Formation, of Miocene age, marine sandstones and siltstones of the Pancho Rico Formation, of Pliocene age, and heterogeneous non-marine sediments of the Paso Robles Formation, of Plio-Pleistocene age.

REGIONAL FAULTING

Throughout the late Cenozoic Era (approximately the past 25 million years), central California has been dominated by tectonic forces associated with lateral or "transform" motion between the North American and Pacific crustal plates, producing a complex system of northwest-trending faults (the San Andreas Fault system). These faults show horizontal displacements measured in tens or hundreds of miles. Uplift, deformation, erosion, and subsequent re-deposition of sedimentary rocks have been driven primarily by the northwest-directed, horizontal (strike-slip) movement of the plates and the associated southwest to northeast-oriented compressive stress. The region continues to be characterized by moderate to high rates of tectonic and seismic activity (Figure 3, Regional Seismicity).

Active or potentially active faults which may impact the site (Buchanan-Banks et al., 1978; Jennings, 1975; Greene, 1977;), include the Reliz, Rinconada, King City, San Gregorio-Hosgri

and San Andreas fault zones (Figures 2 & 3). These faults are discussed in the following sections. Locations of epicenters associated with these faults are shown in Figure 3. Smaller northwest trending faults are also present in the Santa Lucia Mountains, on the western side of the Salinas Valley. These faults include the Tularcitos and Palo Colorado faults (Fiugure 3). The seismic potential of these faults has been little studied since they occur in an area that is sparsely populated. They are not generally associated with significant historic seismicity and and do not appear to have been a source of any large earthquakes in historic times.

Reliz, Rinconada, and King City Faults

The Reliz, Rinconada and King City faults, as mapped by Durham (1974), Dibblee (1976) and Jennings (1975) are roughly parallel to the San Andreas fault zone and skirt the eastern foothills of the Santa Lucia Mountains for almost the entire length of the Salinas Valley. These faults have been considered to be one structure by some researchers (Dibblee, 1976). The alignment and total length of the fault zone cited by different researchers therefore depends on whether the Reliz and King City faults are included with the Rinconada fault system as a single seismogenic structure or are considered separately. Wesnousky (1986) included the Reliz fault as part of the Rinconada fault and cited a length of 136 kilometers for the structure. Dibblee (1976) included the King City fault with the Reliz and Rinconada faults and cited a length of 190 kilometers for the entire structure. The Reliz fault passes about six miles west of the proposed development. We consider the Reliz and Riconada faults to be linked and will refer to them here collectively as the Rinconada fault.

The King City Fault (Ross and Brabb, 1973) extends northwestward from the northern-most mapped portion of the Reliz fault along the southwest side of the Salinas Valley, separating the tectonically elevated Sierra de Salinas and other portions of the Santa Lucia Mountains from the Salinas valley (Jennings, 1992; Figures 2 and 3). Northwest from the Sierra de Salinas, it extends into Monterey Bay. Since the Santa Lucias are considered to be Plio-Pleistocene in age, this hypothesis would have much of the vertical component of displacement on this fault occurring as late as early to mid-Pleistocene. To our knowledge, the King City fault is not exposed at the ground surface and no geologic evidence for Quaternary activity on the King City fault has been observed in the 40,000 to 100,000 year old sand dune fields that cover the fault in the area of the city of Marina or in the alluvial fans that cover the inferred fault trace in the Salinas Valley. Green (1973) found no evidence for activity on any offshore faults that might connect with the King City fault (Green, 1973). Ross and Brabb (1973), some of the early proponents for the King City fault, considered it to be older than Miocene. We are of the opionion that the King City fault, is not a significant seismogenic source for this project.

Geologic evidence suggests that the Rinconada fault is a high angle, right-lateral, strike-slip fault which has experienced cumulative offset of up to 40 miles since the Miocene age (Dibblee, 1976). No historic earthquakes have been reported on this fault, though it is considered potentially active. Hart (1985) did not consider the Rinconada fault to show sufficient evidence of Holocene activity to be included in the state's Alquist-Priolo active fault mapping program, although this does not preclude youthful activity on the fault. Mapping along the fault by Hart (1985) revealed offset drainages, anomalous ridges, and other geomorphic features that could result from active faulting, but he did not observe any offset or disturbance of Holocene deposits across the trace of the fault. Wesnousky (1986) has calculated that the Rinconada fault is capable of generating a magnitude 7.6 (M_w) earthquake. This magnitude earthquake is estimated to have a recurrence interval of about 1900 years according to Wesnousky (1986).

San Andreas Fault

The San Andreas fault is active and represents the major seismic hazard in northern California (Jennings, 1975; Buchanan-Banks et al., 1978). The main trace of the San Andreas fault trends northwest-southeast and extends over 700 miles from the Gulf of California through the Coast Ranges to Point Arena, where the fault extends offshore.

Geologic evidence suggests that the San Andreas fault has experienced right-lateral, strike-slip movement throughout the latter portion of Cenozoic time, with cumulative offset of hundreds of miles. Surface rupture during historic earthquakes, fault creep, and historic seismicity confirm that the San Andreas fault is highly active today.

Historic earthquakes along the San Andreas fault and its eastern branches have caused significant seismic shaking in the Monterey County area. There were large earthquakes along the San Andreas fault in 1838, 1865 and 1890 (Sykes and Nishenko, 1984). The most intense earthquake to have affected this area was the great San Francisco earthquake of April 18, 1906. This 8.3 magnitude temblor caused severe seismic shaking and structural damage to many buildings in Northern California, including Santa Cruz, Santa Clara, San Mateo, and Monterey Counties. (Lawson, 1908). The recent magnitude 7.1 Loma Prieta earthquake (October 17, 1989) caused seismic shaking as intense as that of 1906 in parts of the Santa Cruz Mountains.

A common measure of the intensity of ground shaking is the Modified Mercalli Intensity Scale (Table 1), a subjective measure of the effect of ground shaking on man, man-made structures, and the earth's surface. Intensity varies with distance from the causative fault, but can also vary greatly with local geologic setting. Lawson et al. (1908) lists a Mercalli Intensity of about VI to VII for the site as a result of the 1906 earthquake, although it should be emphasized that this estimate is based on a small number of field observations in an area sparsely populated in 1906.

TABLE 1: MODIFIED MERCALLI INTENSITY SCALE

The modified Mercalli scale measures the intensity of ground shaking as determined from observations of an earthquake's effect on people, structures, and the Earth's surface. This scale assigns to an earthquake event a Roman numeral from I to XII as follows:

I	Not felt by people, except rarely under especially favorable circumstances.
II	Felt indoors only by persons at rest, especially on upper floors. Some hanging objects may swing.
III	Felt indoors by several. Hanging objects may swing slightly. Vibration like passing of light trucks. Duration estimated. May not be recognized as an earthquake.
IV	Felt indoors by many, outdoors by few. Hanging objects swing. Vibration like passing of heavy trucks; or sensation of a jolt like a heavy ball striking the walls. Standing automobiles rock. Windows, dishes, doors rattle. Wooden walls and frame may creak.
V	Felt indoors and outdoors by nearly everyone; direction estimated. Sleepers wakened. Liquids disturbed, some spilled. Small unstable objects displaced or upset; some dishes and glassware broken. Doors swing; shutters, pictures move. Pendulum clocks stop, start, change rate. Swaying of tall trees and poles sometimes noticed.
VI	Felt by all. Damage slight. Many frightened and run outdoors. Persons walk unsteadily. Windows, dishes, glassware broken. Knickknacks and books fall off shelves; pictures off walls. Furniture moved or overturned. Weak plaster and masonry cracked.
VII	Difficult to stand. Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary buildings; considerable in badly designed or poorly built buildings. Noticed by drivers of automobiles. Hanging objects quiver. Furniture broken. Weak chimneys broken. Damage to masonry; fall of plaster, loose bricks, stones, tiles, and unbraced parapets. Small slides and caving in along sand or gravel banks. Large bells ring.
VIII	People frightened. Damage slight in specially designed structures; considerable in ordinary substantial buildings, partial collapse; great in poorly built structures. Steering of automobiles affected. Damage or partial collapse to some masonry and stucco. Failure of some chimneys, factory stacks, monuments, towers, elevated tanks. Frame houses moved on foundations if not bolted down; loose panel walls thrown out. Decayed pilings broken off. Branches broken from trees. Changes in flow or temperature of springs and wells. Cracks in wet ground and on steep slopes.
IX	General panic. Damage considerable in specially designed structures; great in substantial buildings, with some collapse. General damage to foundations; frame structures, if not bolted, shifted off foundations and thrown out of plumb. Serious damage to reservoirs. Underground pipes broken. Conspicuous cracks in ground; liquefaction.
X	Most masonry and frame structures destroyed with their foundations. Some well-built wooden structures and bridges destroyed. Serious damage to dams, dikes, embankments. Landslides on river banks and steep slopes considerable. Water splashed onto banks of canals, rivers, lakes. Sand and mud shifted horizontally on beaches and flat land. Rails bent slightly.
XI	Few, if any masonry structures remain standing. Bridges destroyed. Broad fissures in ground; earth slumps and landslides widespread. Underground pipelines completely out of service. Rails bent greatly.
XII	Damage nearly total. Waves seen on ground surfaces. Large rock masses displaced. Lines of sight and level distorted. Objects thrown upward into the air.

Geologists have recognized that the San Andreas fault can be divided into segments that have earthquakes of different characteristic sizes and recurrence intervals associated with them. A study by the Working Group on California Earthquake Probabilities (WGCEP) (Agnew et al, 1988) defines several fault segments in the site region and assigns different expected events and recurrence intervals to each segment.

The Central Creeping segment, located about 15 miles northeast of the properties, is the closest segment of the San Andreas fault zone to the site. It is marked by continuous creep, at a rate of approximately 30 to 34 mm/year (Agnew et al, 1988). There is no historical evidence for large magnitude earthquakes on this segment. Since the creep rate is about the same as the long term creep rate for the San Andreas fault, the central creeping segment is not considered to be a source for large magnitude earthquakes (Agnew et al, 1988), although small to moderate size earthquakes (magnitude 4-6) are considered possible. There have been a few historical events in this size range spatially associated with this segment of the San Andreas fault (Figure 3).

San Gregorio-Hosgri Fault Zone

The San Gregorio-Hosgri fault zone, as mapped by Greene (1977) and Weber (1981), is a 250 mile long fault that skirts the coastline of Central California northward from Point Arguello to Point Reyes. For most of this length, the fault is offshore, passing onshore only briefly at Point San Simeon in San Luis Obispo County, Point Sur in Monterey County, and Point Ano Nuevo and Pillar Point in San Mateo County. Northward from Pillar Point, it passes offshore again, to connect with the San Andreas fault near Bolinas.

The landward extension of the San Gregorio fault at Point Año Nuevo shows evidence of Late Pleistocene (Jennings, 1975; and Buchanan-Banks et al., 1978) and Holocene displacement (Weber, et. al., 1979). Although stratigraphic offsets indicate a history of horizontal and vertical displacements, the San Gregorio is considered predominantly right-lateral strike slip by most researchers (Greene, 1977; Weber and LaJoie, 1974; and Graham and Dickinson, 1978). Estimates of cumulative strike-slip (horizontal) offset on the fault ranges up to 90 miles (Clark et al, 1984).

In addition to stratigraphic evidence for Holocene activity, the historic seismicity in the region is partially attributed to the San Gregorio fault zone (Greene, 1977). Due to inaccuracies of epicenter locations, the magnitude 6+ earthquakes of 1926, tentatively assigned to the Monterey Bay fault zone, may have actually occurred on the San Gregorio fault zone (Greene, 1977; Tuttle, 1985).

In summary, the San Gregorio-Hosgri fault zone must be considered active. Weber and Cotton (1981) present evidence suggesting that recurrence intervals for earthquakes that produce surface ground rupture (magnitude 7.1 to 7.9 based on possible surface rupture length) within the San Gregorio fault system is 6,000 years or less. Weber's latest data indicates a recurrence interval for surface ground rupture of about 500 to 600 years (Weber, 1990). Wesnousky (1986) suggests a maximum probable earthquake of M_w 7.7 for the San Gregorio portion of the fault, and a magnitude (M_w) of 7.8 for the Hosgri portion of the fault.

SITE GEOLOGIC SETTING

Topography

The subject properties are located on a broad, gently sloping alluvial fans at the foot of the western slope of the Gabilan Range on the east side of the Salinas Valley, with the eastern-most portion of the San Vicente Vineyard property extending onto the foothills of the Gabilan range (Figure 1 and Plate 1). The alluvial fans abut flat lying fluvial deposits of the Salinas River southwest of the subject properties (Figure 1). Elevation on the subject properties ranges from 200 and 600 feet above sea level. The land to the east of the property is rugged ridge-and-valley topography that rises rapidly to elevations greater than 2000 feet. Surface slopes on the alluvial portion of the subject parcels are approximately 5 to 8% gradient. Steep slopes on the eastern portion of the San Vicente Vineyards property range up to about 70% gradient.

Drainage

Drainage of surface water in the vicinity of the proposed sites generally occurs by overland sheet flow towards shallow drainage courses on the two properties (Plate 1). The drainages are ephemeral and it is unlikely that substantial surface flow occurs except during periods of high rainfall. We did not observe seeps, springs or any other evidence of high groundwater levels on the subject properties during our site reconnaissance or aerial photo review. We did not observe surface flow or standing water in any of the drainages.

The natural drainage channels crossing the properties are only slightly incised and there is little indication of significant erosion on the properties. There are two earth embankment dams on the properties used for water storage. One is located in the northeast corner of the San Vicente Vineyards property and one is located in the northeastern portion of the Hambey Ranch property. The two earth embankments are depicted as artificial fill on Plate 1.

Earth Materials

The most recent regional scale geologic mapping in the vicinity of the property has been accomplished principally by Dibblee (1972). The geologic map by Dibblee depicts only Quaternary age alluvium in this portion of the Salinas Valley. These alluvial sediments were separated into two separate map units by Dibblee (1972), **older alluvium** (Qoa) and **alluvium** (Qa). The Qoa encompasses alluvial fans and older depositional surfaces along the margins of the valley. The Qa includes the more recent deposits of the Salinas River and the larger tributary drainages. For our geologic mapping, we retained these map units, but have subdivided the older alluvium (Qoa) into sub-units representing individual alluvial fans (Qoa_1, Qoa_2, and Qoa_3 on Plate 1)

The alluvial sediments lap onto granitic rock exposed in the foothills of the Gabilan Range east and north of the subject properties. The granitic rocks are classified a granodiorite and are generally fractured and highly weathered in outcrop. Our geologic map of the property depicts a few isolated granitic outcrops on the San Vicente property (Plate 1). These outcrops were interpreted on the basis of surface relief observed on older aerial photos (1937, 1949, and 1956 vintage) and are not now visible in the field. In our opinion, it is possible that the low relief associated with these outcrops was removed by grading for agricultural purposes.

No subsurface information was obtained for the subject properties. Therefore, the thickness of the alluvial sediments on the subject properties depicted on cross sections A-A' and B-B' are approximate.typical for this portion of the valley

Faulting

There are 34 faults of known or suspected Quaternary age activity within a one hundred mile radiuus of the site. These faults are summarized in Table 2. The nearest mapped fault considered to be potentially active is the northwest trending Rinconada fault, located approximately 6 miles west-southwest of the subject properties (Burkland and Associates, 1974; Durham, 1974; Dibblee, 1976). Other active faults of significance to the project include the San Andreas fault, located about 12.5 miles northeast of the project site, and the San Gregorio fault, located about 28 miles southwest of the site.

There are many faults located within the Santa Lucia Mountains west of the subject property. The recently published fault map of California by Hart (1992) depicts these faults as pre-Quaternary in age. However, since the Santa Lucia range is considered to be Plio-Pleistocene in age, it is likely that many of these faults are also of Quaternary vintage. In our opinion, the pre-Quaternary activity assessment is probably a result of the lack of research study of the these faults, both because of their remoteness from population centers and the inaccessibility of the terrain.

There are no mapped faults depicted on or adjacent to the subject properties by any of the published geologic maps reviewed for this study. We reviewed five sets of stereographic aerial photos spanning the time period of 1937 to 1989. We observed no evidence for tonal or topographic lineaments that would indicate the presence of faulting on the subject properties.

TABLE 2

FAULTS WITHIN 100 MILE RADIUS OF THE SITE
Grouped according to known or suspected age of most recent movement

1. Faults with Historic Movement.
   - San Andreas
   - Calaveras
   - Nunez
   - Hayward

2. Faults with Holocene Movement (known or suspected)
   - San Gregorio
   - Monterey Bay Fault Zone
   - Cypress Point
   - San Simeon
   - San Juan
   - Bear Valley
   - Paicines
   - San Benito
   - Vergeles
   - Quien Sabe
   - Ortigalita
   - Greenville
   - Sargent
   - Crosley
   - Quien Sabe
   - Hosgri
   - Santa Lucia Bank
   - Los Osos

3. Faults with Late Quaternary Movement (known or suspected)
   - San Joaquin
   - Williams
   - Las Positas
   - Monta Vista
   - Reliz
   - Rinconada
   - Cambria
   - Oceano
   - Santa Maria River
   - Coyote Creek
   - Silver Creek
   - Evergreen

GEOLOGIC HAZARDS

Seismic Shaking

The closest and most important faults to the subject properties with respect to seismic shaking are the San Andreas, San Gregorio-Hosgri, and Reliz-Rinconada faults (Figure 2). These faults are either active or are considered potentially active, as discussed previously in this report.

There are two methods for estimating seismic ground motions, deterministic and probabilistic. A deterministic approach estimates the magnitude of the most severe shaking that can be expected at a particular site, without regard for how likely such shaking is to occur. A probabilistic analysis evaluates a range of ground motions, and specifies a probability for each level of shaking intensity. The probabilistic evaluation allows one to select a specified risk level for design which may be adequate for the structure, without having to design for a more severe, but unlikely ground motion level.

While the probabilistic analysis represents a more sophisticated approach to seismic design, there may not be enough information available on active faults in a given region to make it a reliable design criterion. In the study area, the present rate of activity on the Rinconada fault is unknown. The fault was reviewed as part of the California Department of Mines and Geology program to evaluate active faults (Hart, 1985). That study determined that the fault was not "sufficiently active" to be included in the state's Alquist Priolo seismic hazard mapping program. Hart (1985) states:

> "As much as 35 miles and 11 miles of right-lateral displacement are reported since early Miocene and early Pliocene time, respectively. Major displacement of undetermined magnitude also has occurred since Plio-Pleistocene time and apparently has continued into late Quaternary time (Dibblee, 1976). Evidence of late Quaternary displacement is indirect but fairly strong, judging form the preponderance of right-laterally deflected drainages and other well-defined, large-scale geomorphic features observed on aerial photographs. Also, older alluvial fans of probably late Pleistocene age appear to be truncated northwest of Williams Hill, although faults were not exposed in gullies incised into that unit where it is crossed by the mapped trace.
>
> The general lack of ephemeral, small-scale geomorphic features (e.g. sidehill benches, offset minor drainages, scarplets or sharp tonals in young alluvium) normally associated with active strike-slip faults suggests that the fault has been inactive during Holocene time or that the fault has had a relatively low slip rate in Holocene time. Evidence of historic activity was not observed in the field; nor is it adequately supported by the recorded seismicity from 1969 to 1984."

Since Holocene activity on this fault has not been ruled out, it is our opinion that it must be considered potentially active for the purpose of evaluating seismic risk to the proposed subdivisions. Although the lack of youthful geomorphic features along the fault indicates that the

rate of activity on the fault is low, the probability of movement is the near future cannot be reliably assessed without specific movement history information for the fault. Therefore, we have not attempted a probabilistic seismic risk assessment. The following section presents a deterministic seismic risk assessment for the subject property.

For the purpose of evaluating deterministic ground motion parameters for the site, we have considered three seismic sources: the Rinconada fault, the San Gregorio-Hosgri fault and the San Andreas fault. While other faults or fault zones in this region may be active, their potential contribution to deterministic seismic hazards at the site is masked by these larger and/or closer faults. Table 3 shows the expected or maximum credible magnitude of earthquake, estimated recurrence interval, and the distance from the site for each of these fault systems. The reference sources used for data in Table 3 are shown in the footnotes.

Expected earthquakes are assigned to faults whose behavior is well enough understood that a likely earthquake magnitude can be assigned with a fair degree of confidence. Maximum credible magnitudes, (the largest earthquake that can reasonably be expected to occur on a fault), are assigned to faults whose behavior is poorly constrained. The maximum credible earthquake may be significantly larger than the one that will actually occur.

Also shown on Table 3 are expected on-site accelerations from the expected or maximum credible earthquakes. These accelerations are based on attenuation relationships derived from the analysis of historical earthquakes. Because the historical data can be interpreted in different ways, there are a number of different attenuation relationships available. We have employed two recent attenuation relationships in deriving the acceleration values listed in Table 3. The table lists site accelerations for sites underlain by hard bedrock and sites underlain by deep soils. Accelerations for rock sites tend to be smaller than those for deep soil sites because the loose soil layer amplifies ground motions in the frequency range that is relevant to structures. For the subject properties, the rock site accelerations will apply to areas directly underlain by granite or with only a thin soil cover; deep soil site accelerations apply to sites underlain by more than 40 feet of alluvium.

It should be noted that the acceleration values listed in Table 3 are only average values. We therefore caution that the listed values are to be used only as approximations, rather than as precise predictions. Actual measured "free-field" accelerations may be larger.Based on the results listed in Table 3, the largest predicted mean peak horizontal accelerations at the site are about 0.5g for soil sites from the postulated event on the Rinconada fault. The lack of evidence for recent activity on the Rinconada Fault suggests that this event is unlikely to affect the project during its economic lifetime (50-100 years). However, due to the lack of specific movement history information for the Rinconada fault and the other potentially active faults in the region, seismic ground motions of this magnitude should be considered for this project.

TABLE 3

SUMMARY OF FAULT DATA

Fault	Maximum Credible or Expected Earthquake Magnitude (ML)	Estimated Recurrence Interval (Years)	Distance From Site (Miles)	Estimated Mean Peak Horizontal Ground Acceleration At Site ROCK Site (g)	Estimated Mean Peak Horizontal Ground Acceleration At Site SOIL Site (g)
San Andreas Creeping Segment	6.0**	?	12.5	0.08(3) 0.07(4)	0.14(3) 0.13(4)
San Gregorio-Hosgri	7.8(1)	852(1)	28	0.09(3) 0.10(4)	0.14(3) 0.19(4)
Reliz-Rinconada	7.6(1)	1883(1)	6	0.38(3) 0.28(4)	0.49(3) 0.50(4)

**- estimated maximum credible event for the creeping segment of the fault, based on a consideration of historic seismicity for the region

1 Wesnousky, 1986
2 Working Group on California Earthquake Probabilities, 1990
3 Campbell (1993), strike slip faults
4 Boore et al (1993) random horizontal component; site class A = rock; site class C = soil

Ploessel and Slossen (1974) indicate that repeatable high ground accelerations (RHGA) are a more important parameter for seismic design than the peak acceleration. Their work indicates that RHGA are approximately two-thirds of the peak acceleration. This suggests that the maximum credible earthquake on the Rinconada fault would generate an RHGA of approximately 0.33g at the site.

Landsliding Hazard

The only steep slopes on the subject property where landsliding is likely to occur are situated on the easternmost portion of the San Vicente Vineyard property (Plate 1). These slopes are underlain by granitic rock, which is typically resistant to landsliding. During our site reconnaissance and aerial photo inspection of the subject properties we observed no evidence for previous landsliding. However, we did observe several very steep, v-shaped drainage swales on the San Vicente property. These drainages had fan shaped deposits of alluvium located at their mouths that may be the site of debris flow type landslide deposits during intense rainstorms.

Flooding Hazard

Both of the proposed subdivisions are located outside the 100-year and 500-year flood zones shown on the Federal Emergency Management Agency Flood Insurance Rate Map (FEMA, 1984). Therefore, we do not consider either site to be at risk of flooding. We note, however, that shallow drainage swales cross portions of both properties. There is a potential for flow along the axes of these channels during heavy precipitation.

Liquefaction Hazard

Soil liquefaction occurs as a result of strong seismic shaking of loose, saturated sediments. It typically occurs in the youngest river deposits adjacent to river banks, although it can and does occur in other environments. Based on observations from previous large earthquakes (Youd and Hoose (1978), there is a low likelihood that older alluvium (Qoa, Plate 1) will liquefy during an earthquake, and an elevated potential for the younger alluvium (Qa, Plate 1) to liquefy.

Hazards pertaining to earth embankment dams

The two earth embankment dams observed on the properties are being used to retain water for agricultural uses. Failure of either of these embankement dams could result in inundation of any structures located downstream. Unless these embankment dams are to be removed as part of the site development, they should be evaluated for stability, including stability under seismic shaking intensities expected at the sites.

CONCLUSIONS

1. Based on the information gathered and analyzed, it is our opinion that both of the properties are geologically suitable for residential development, provided that the recommendations contained in this report are properly implemented.

2. The properties are not located in an Alquist-Priolo special studies zone. No known or suspected active faults are mapped across the proposed development area and we did not identify any evidence for faulting on the properties during our site investigation. Therefore, we are of the opinion that the potential for surface ground rupture due to faulting is low on the subject properties.

3. There is a potential for strong seismic shaking at the site if a large earthquake occurs on the nearby Rinconada or related fault. Such an earthquake is expected to produce mean peak horizontal ground accelerations (randomly oriented horizontal component) of about 0.5g for sites underlain by deep soil (more than 40 feet of alluvium) and 0.28g to 0.38g for rock sites.

   These expected ground motions are based on a deterministic evaluation of seismic hazards. In our opinion, insufficient information is available on the activity of the Rinconada fault to provide for a valid probability assessment, although we are of the opinion that the probability of a large earthquake on the Reliz-Rinconada fault during the economic lifetime of a typical residential structure is low. Ground motion values estimated for the other principal seismogenic sources in the area, the San Andreas fault and the San Gregorio-Hosgri fault, are in the range of 0.07g to 0.1g for rock sites and 0.13g to 0.19g for soil sites. Large earthquakes on these faults are considered to be more likely than on the Reliz-Rinconada fault.

4. The potential hazard due to seismically induced liquefaction on the site is judged to be low for older alluvium (Qoa, Plate 1) and low to moderate for younger alluvium (Qa, Plate 1).

5. The likelihood of landsliding affecting the two proposed subdivisions is very low, with the exception of sites on or immediately adjacent to the steep slopes on the eastern margin of the San Vicente property. The lack of evidence for previous landsliding on these slopes indicates that the granitic bedrock is a competent slope forming material. However, we did identify several very steep, v-shaped drainages that could conduct debris flows during intense rainstorms. Evidence for past debris flows at these sites is equivocal, but for conservatism, we have made recommendations for setbacks for residential structures from the mouths of these steep drainages, as summarized in the Recommendations section, below.

6. The potential for flooding of the proposed subdivisions is judged to be low, provided that adequate drainage provisions are implemented for the ephemeral drainage courses depicted on Plate 1.

RECOMMENDATIONS

Based on the results of our investigation, we make the following recommendations:

1) The mean peak horizontal acceleration (randomly oriented component) that should be considered in dynamic or psuedostatic analyses for the project is 0.5g for deep soil sites and 0.38 g for rock sites. For design purposes, a repeatable high ground acceleration (RHGA) of 0.33g (soil) or 0.25g (rock) may be used for project design if the project engineer considers the RHGA to be a more appropriate design value.

   It is important that recommendations regarding seismic shaking be used in the design for any proposed development. Even with adequate design and construction, some damage to structures may occur during a great earthquake. However, the damage due to high intensity shaking may be reduced by careful placement and construction of the structure. Past experience has shown that the quality of design and construction is far more important than the precise evaluation of ground motion parameters.

   Many of the risks associated with earthquakes are not due to structural failure. Most injuries result from falling debris, overturned furniture, the disruption of utilities, and fires that occur as a result of broken utility lines, overturned gas stoves, etc. Large appliances (i.e. refrigerators, freezers, pianos, wall units, water heaters, etc.) should be firmly attached to the floor or to structural members of walls.

2) We recommend that the project geotechnical engineer prepare a quantitative assessment of liquefaction and seismically induced settlement potential once a development plan is chosen, with specific reference to areas underlain by younger alluvium.

3) We recommend that residential structures be set back 100 feet from the mouths of steep drainages identified as potential debris flow hazards on Plate 1. The recommended setbacks are indicated on Plate 1.

4) We recommend that any natural drainages on the subject properties be channelized and conducted across the development sites in appropriately engineered structures. We recommend that all drainage from improved surfaces such as walkways, patios, roofs and

driveways be collected in impermeable gutters or pipes and carried to neighborhood storm sewers or natural drainages. At no time should any concentrated discharge be allowed to spill directly onto the ground adjacent to a proposed building site. Any water landing on paved areas should not be allowed to flow towards a proposed building site. The control of runoff is essential for control of erosion and prevention of ponding water against building foundations.

5) We recommend that any embankment dams on the properties be evaluated for stability if they are to remain in use following development of the properties. Stability evaluations should include psuedostatic or dynamic stability analyses using peak horizontal ground motions recommended in 1), above.

6) This report is issued with the understanding that it is the duty and responsibility of the owner, or of his representative or agent, to ensure that this report is provided to and brought to the attention of the architect, engineer(s) and general contractor for the project, and that all recommendations made in the report are incorporated into the plans and specifications, and that the necessary steps are taken to see that the contractor and subcontractors carry out the report's recommendations in the field.

7) We recommend that our firm be provided the opportunity for a general review of the final design and specifications in order that our recommendations may be properly interpreted and implemented in the design and specification. If our firm is not accorded the privilege of making the recommended review we can assume no responsibility for misinterpretation of our recommendations.

If any unexpected variations in soil conditions, or if any unanticipated geologic conditions are encountered during construction, or if the proposed project will differ from that discussed or illustrated in this report, Nolan Associates should be notified so that supplemental recommendations can be given. Our conclusions and recommendations shall not be considered valid unless the changes are reviewed and the conclusions in this report are modified or verified in writing by a representative of Nolan Associates.

INVESTIGATIVE LIMITATIONS

1) Our services consist of professional opinions and recommendations made in accordance with generally accepted engineering geology principles and practices. No warranty, expressed or implied including any implied warranty of merchantability or fitness for the purpose is made or intended in connection with our services or by the proposal for consulting or other services, or by the furnishing of oral or written reports or findings. If the client desires assurances against project failures, he or she agrees to obtain appropriate insurance through his or her own insurance broker.

2) The analysis and recommendations submitted in this report are based on the geologic information derived from the steps outlined in the introduction section of this report. The information is derived from necessarily limited natural and artificial exposures. Consequently, the conclusions and recommendations should be considered preliminary.

3) The conclusions and recommendations noted in this report are based on probability and in no way imply the site will not possibly be subjected to ground failure or seismic shaking so intense that structures will be severely damaged or destroyed. The report does suggest that development of the proposed project at the noted site, in compliance with the recommendations noted in the report, is an acceptable risk.

4) The findings of this report are valid as of the present date. However, changes in the conditions of property and its environs can occur with the passage of time, whether they be due to natural processes or to the works of man. In addition, changes in applicable or appropriate standards occur whether they result from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated, wholly or partially, by changes outside our control. Therefore, the conclusions and recommendations contained in this report cannot be considered valid beyond a period of two years from the date of this report without review by a representative of this firm.

Sincerely,

NOLAN ASSOCIATES

Jeffrey M. Nolan
Principal Geologist
C.E.G # 1537

REFERENCES

Aerial Photographs:

Date	Flight Line	Photo Numbers
11-7-37	13-ABG	3-41 to 3-46 4-78 to 4-84
8/1/49	ABG	11F-78 to 81 11F-173 to 177
6/13/56	ABG	9R-149 to 151 17R-113 to 115
5-14-71	ABG	2MM-33 to 35 6MM-192 to 195
6-19-89	NAPP 1240	1891-75, 1894-58

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APPENDIX A
SCALE OF ACCEPTABLE RISKS DUE TO GEOLOGIC HAZARDS

SCALE OF ACCEPTABLE RISKS FROM SEISMIC GEOLOGIC HAZARDS

Level of Acceptable Risk	*Kinds of Structure*	*Extra Project Cost Probably Required to Reduce Risk to an Acceptable Level*
Extremely low[1]	*Structures whose continued functioning is critical, or whose failure might be catastrophic: nuclear reactors, large dams, power intake systems, plants manufacturing or storing explosives or toxic materials.*	*No set percentage (whatever is required for maximum attainable safety).*
Slightly higher than under "Extremely low" level.[1]	*Structures whose use is critically needed after a disaster: important utility centers; hospitals; fire, police and emergency communication facilities; fire station; and critical transportation elements such as bridges and overpasses; also dams.*	*5 to 25 percent of project cost.*[2]
Lowest possible risk to occupants of the structure.[3]	*Structures of high occupancy, or whose use after a disaster would be particularly convenient: schools, churches, theaters, large hotels, and other high rise buildings housing large numbers of people, other places normally attracting large concentrations of people, civic buildings such as fire stations, secondary utility structures, extremely large commercial enterprises, most roads, alternative or non-critical bridges and overpasses.*	*5 to 15 percent of project cost.*[4]
An "ordinary" level of risk to occupants of the structure.[3,5]	*The vast majority of structures: most commercial and industrial buildings, small hotels and apartment buildings, and single family residences.*	*1 to 2 percent of project cost, in most cases (2 to 10 percent of project cost in a minority of cases).*[4]

[1] Failure of a single structure may affect substantial populations.

[2] These additional percentages are based on the assumptions that the base cost is the total cost of the building or other facility when ready for occupancy. In addition, it is assumed that the structure would have been designed and built in accordance with current California practice. Moreover, the estimated additional cost presumes that structures in this acceptable risk category are to embody sufficient safety to remain functional following an earthquake.

[3] Failure of a single structure would affect primarily only the occupants.

[4] These additional percentages are based on the assumption that the base cost is the total cost of the building or facility when ready for occupancy. In addition, it is assumed that the structures would have been designed and built in accordance with current California practice. Moreover the estimated additional cost presumes that structures in this acceptable-risk category are to be sufficiently safe to give reasonable assurance of preventing injury or loss of life during and following an earthquake, but otherwise not necessarily to remain functional.

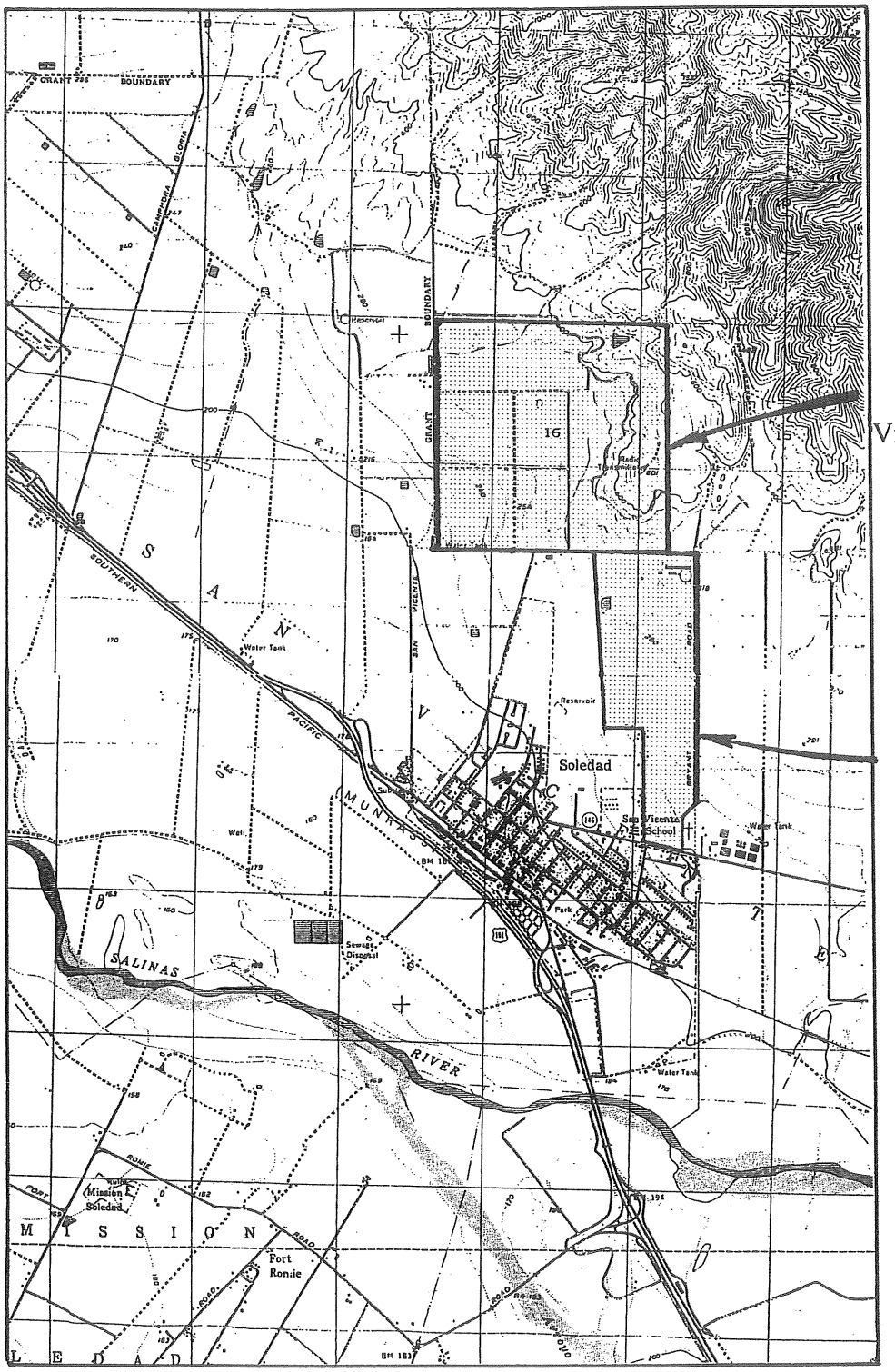
[5] "Ordinary risk": Resist minor earthquakes without damage: resist moderate earthquakes without structural damage, but with some non-structural damage; resist major earthquakes of the intensity or severity of the strongest experienced in California, without collapse, but with some structural damage as well as non-structural damage. In most structures it is expected that structural damage, even in a major earthquake, could be limited to repairable damage. (Structural Engineers Association of California)

Source: Meeting the Earthquake, Joint Committee on Seismic Safety of the California Legislature, Jan. 1974, p.9.

SCALE OF ACCEPTABLE RISKS FROM NON-SEISMIC GEOLOGIC HAZARDS[6]

Risk Level	Structure Type	Risk Characteristics
Extremely low risks.	*Structures whose continued functioning is critical, or whose failure might be catastrophic: nuclear reactors, large dams, power intake systems, plants manufacturing or storing explosives or toxic materials.*	*1. Failure affects substantial populations, risk nearly equals nearly zero.*
Very low risks.	*Structures whose use is critically needed after a disaster: important utility centers; hospitals; fire, police and emergency communication facilities; fire station; and critical transportation elements such as bridges and overpasses; also dams.*	*1. Failure affects substantial populations. Risk slightly higher than 1 above.*
Low risks.	*Structures of high occupancy, or whose use after a disaster would be particularly convenient: schools, churches, theaters, large hotels, and other high rise buildings housing large numbers of people, other places normally attracting large concentrations of people, civic buildings such as fire stations, secondary utility structures, extremely large commercial enterprises, most roads, alternative or non-critical bridges and overpasses.*	*1. Failure of a single structure would affect primarily only the occupants.*
"Ordinary" risks.	*The vast majority of structures: most commercial and industrial buildings, small hotels and apartment buildings, and single family residences.*	*1. Failure only affects owners /occupants of a structure rather than a substantial population.* *2. No significant potential for loss of life or serious physical injury.* *3. Risk level is similar or comparable to other ordinary risks (including seismic risks) to citizens of coastal California.* *4. No collapse of structures; structural damage limited to repairable damage in most cases. This degree of damage is unlikely as a result of storms with a repeat time of 50 years or less.*
Moderate risks.	*Fences, driveways, non-habitable structures, detached retaining walls, sanitary landfills, recreation areas and open space.*	*1. Structure is not occupied or occupied infrequently.* *2. Low probability of physical injury.* *3. Moderate probability of collapse.*

[6] Non-seismic geologic hazards include flooding, landslides, erosion, wave runup and sinkhole collapse



ref: Soledad Quadrangle, US Geological Survey topographic map series, 1949 (photorevised 1984)

SCALE 1" = 4000'

N

SITE INDEX MAP
San Vicente Vineyard and
Hambey Ranch Subdivisions
Soledad, Monterey County, California

Geology • Hydrogeology

Nolan Associates
331 Harrison Avenue, Santa Cruz, CA 95062

Figure 1

EXPLANATION

Quaternary

Marine and nonmarine deposits, some Pliocene and/or Pleistocene nonmarine sediments.

Tertiary

Marine and nonmarine deposits, some volcanics.

Volcanic rocks.

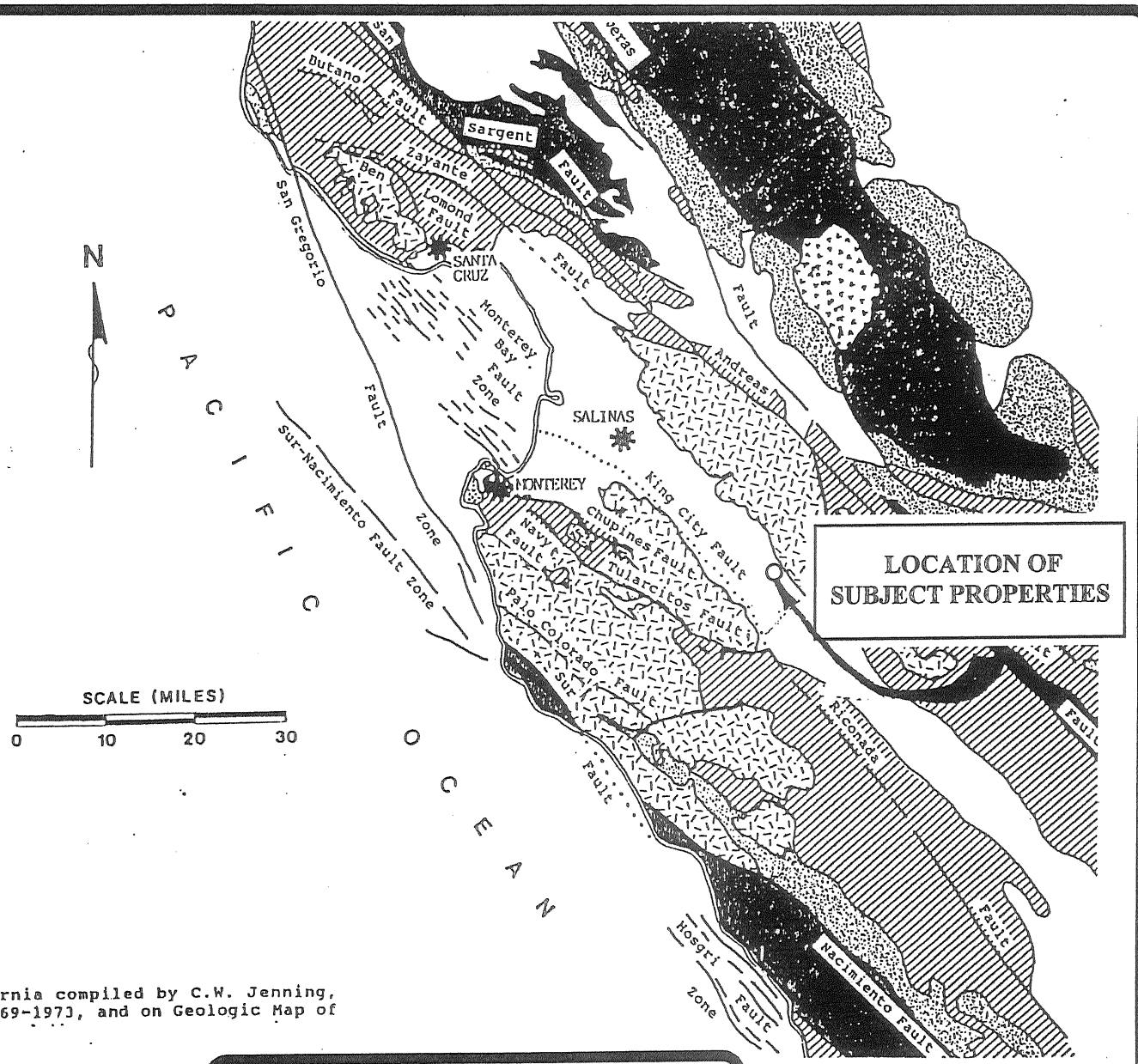
Cretaceous and Tertiary/Cretaceous

Marine sediments.

Cretaceous and Jurassic

Franciscan Formation -- fragmented and sheared melange, some metamorphic and ultramafic rocks.

Plutonic, Igneous, and Metamorphic Rocks--Mesozoic granitic rocks, Paleozoic or Mesozoic and Precambrian schists, Precenozoic metasedimentary and metavolcanic rocks, minor Paleozoic or Mesozoic limestone.



Based on Geologic Map of California compiled by C.W. Jenning, R.G. Strand, and T.H. Rogers, 1969-1973, and on Geologic Map of California compiled by U.S.G.S.

Geology · Hydrogeology

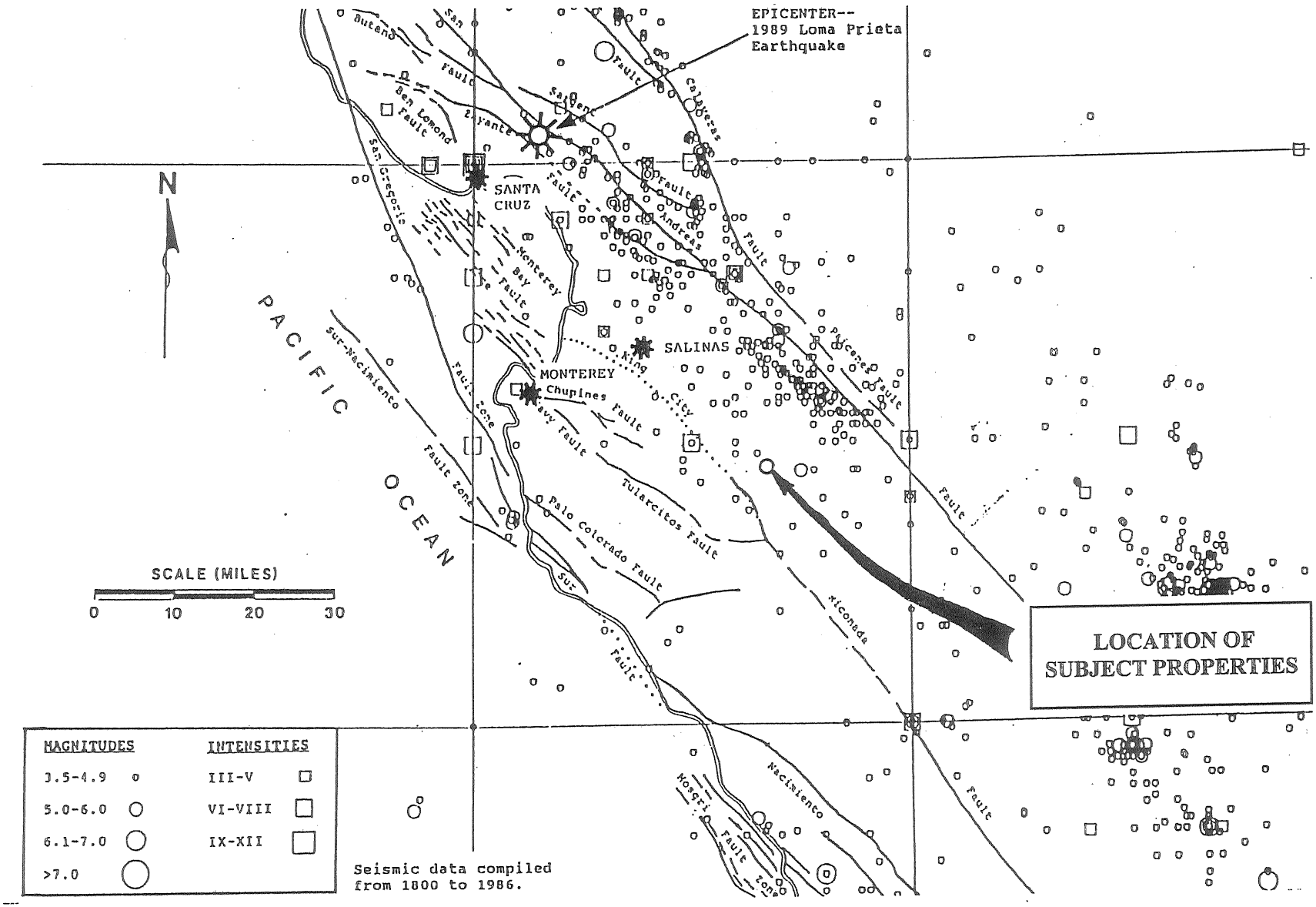
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REGIONAL GEOLOGIC MAP

San Vicente Vineyard and
Hambey Ranch Subdivisions
Soledad, Monterey County, California

Figure 2



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REGIONAL SEISMICITY MAP

San Vicente Vineyard and
Hambey Ranch Subdivisions
Soledad, Monterey County, California

Figure 3

3524

Rec'd 24 Oct 95

PRELIMINARY SOIL & FOUNDATION INVESTIGATION - EIR PHASE
PROPOSED MIRAVALE RESIDENTIAL DEVELOPMENT
PARCELS 1, 2, 3, 4, & 6 OF 19
SURVEY PAGE 76, (MS 95-004)
SOLEDAD, MONTEREY COUNTY, CALIFORNIA

FOR
Mr. Nadar Agha
471 Alvarado Street
Monterey, CA 93940

DONALD M THARP & ASSOCIATES
JOB NO. 95-26
OCTOBER, 1995

DONALD M THARP & ASSOCIATES
SITE ASSESSMENTS • FOUNDATION ENGINEERING • CONSTRUCTION MONITORING

2901 RESEARCH PARK DRIVE, SUITE D • SOQUEL • CALIFORNIA • 95073 • (408) 479 - 8165

October 19, 1995
Job No. 95-26

Mr. Nadar Agha
471 Alvarado Street
Monterey, CA 93940

SUBJECT: PRELIMINARY INVESTIGATION - EIR PHASE
Proposed Miravale Residential Development
Soledad, Monterey County, California
A Resubdivision Of Parcels 1,2,3,4 & 6
Of 19, Survey Page 76, (MS 95-004)

REFERENCE: Nolan Associates, 1995, Preliminary Geologic Hazards Investigation, Proposed Subdivisions, San Vicente Vineyards And Hambey Ranch Properties, APNs 417-151-082, -083, -084, & -085; 257-010-051, Monterey County, California, August 9, 1995, Job No. 95MT-001-17S6E

Dear Mr. Agha:

1. INTRODUCTION

1.1 Purpose

a. This report presents the results of our preliminary soil and foundation investigation for the EIR phase of the proposed Miravale Residential Development, Soledad, Monterey County, California.

b. The purpose of our investigation is to evaluate the proposed development with respect to the geotechnical conditions present, and to provide preliminary geotechnical design parameters and recommendations for development of the site. Conclusions and recommendations related to site suitability, grading, foundations, slabs-on-grade, retaining structures, and pavements are presented herein.

c. We have reviewed the following items in connection with the preparation of this report:

i. Preliminary Map, Miravale Subdivision, A Resubdivision Of Parcels 1,2,3,4 & 6, Of 19, Survey Page 76, (MS 95-004), Sheets 1 and 2 of 2, Scale 1 inch : 200 Feet, Stamp Dated October 12, 1995, Prepared By Bestor Engineers, Inc.

ii The Referenced Geologic Report.

d. Detailed, final grading, foundation, structural, and architectural plans are unavailable as of the date of this report. The intention, as we understand it, is to use the findings and recommendations of this report as a basis for developing such plans.

e. We have coordinated our investigation with that conducted by Nolan Associates in order to ensure adequate Geotechnical/Geologic interface throughout our investigation.

1.2 Proposed Development

a. Based on our review of the Preliminary Site Plans itemized in 1.c.i above and our discussions with the parties involved, it is our understanding that the subject project consists of the construction of a residential development on 2 parcels north and east of Soledad. According to the materials reviewed, the project is composed of one roughly rectangular parcel consisting of 260± acres and a roughly square parcel consisting of 640± acres. These parcels are currently in agricultural use including vineyards and row crops.

b. The plan further indicates that the proposed development is to be bordered on the north, south and west by undeveloped parcels and on the east by lightly developed residential tracts. The site is currently occupied by several, single story, wood-frame structures and related improvements related to the former uses. It is our understanding that these buildings and other improvements are to be removed during the grading phase of this project.

c. Anticipated construction consists of 1 and 2 story, single family residences, apartments, and public use structures composed of wood frame or masonry walls, wood roof joists, and slab-on-grade or wood floors. Exact wall, column and foundation loads are unavailable, but are expected to be typical of such construction.

d. Also anticipated is the construction of the attendant paved streets and drive areas, utilities, retaining structures (if required), sewage treatment facilities, schools, light commercial structures, detention ponds, police and fire facilities, library, individual septic systems on a few selected estate lots, concrete flatwork, and associated landscape improvements.

e. Our review of the conceptual layout shown on The Preliminary Subdivision Map indicates that a moderate amount of grading will be associated with the project as currently envisioned. Maximum cuts and fills are expected to be 20± and 10± feet respectively.

1.3 Scope of Services

The scope of services provided during the course of our investigation included:

a. Review of pertinent published and unpublished geologic literature and previous reports pertinent to the site, available in our files or provided by you.

b. Field exploration consisting of:

i. 26 borings drilled to depths of 11.5 to 51.5 feet in the proposed development area. The deeper borings were placed in the areas discussed as potential locations for septic disposal leach fields.

ii. Percolation testing in 8 locations. Test locations were chosen so as to provide percolation rates in areas considered representative of overall site conditions.

The field exploration was coordinated between representatives of the Project Geologist and the Geotechnical Consultant in the interest of economy and to assure adequate geologic / geotechnical interface throughout the investigation.

c. Logging the boring(s) by our Field Engineer.

d. Obtaining in-situ and bulk samples for classification and laboratory testing.

e. Laboratory testing of selected samples considered representative of site conditions, in order to ascertain or derive relevant engineering properties.

f. Geotechnical/Geologic analyses of field and laboratory data.

g. Assessment of project impacts and recommended mitigation measures.

h. Preparation of a Geotechnical Consultation report (4 copies) presenting our findings, conclusions and recommendations.

1.4 Authorization

This investigation, as outlined in our Proposal dated August 9, 1995, was performed in accordance with your written authorization of August 15, 1995.

2. FIELD EXPLORATION PROGRAM

Details of the field exploration, including the logs of borings, are presented in Appendix A.

3. LABORATORY TESTING PROGRAM

Laboratory testing was performed on relatively undisturbed and bulk samples considered representative of subsurface conditions. Details of the laboratory testing program are presented in Appendix B. Test results are presented on the boring logs and in Appendix B.

4. GEOLOGY AND SEISMICITY

Geology and Seismicity are discussed in detail in the Geology Report prepared for the site by Nolan Associates. See reference.

5. PERCOLATION TESTING

Percolation testing was performed at eight locations considered representative of the range of subsurface conditions present on the subject site. Testing was performed in accordance with Monterey County Guidelines, as discussed with representatives of The Monterey County Environmental Health Department. Details of the percolation testing program, including test results, are presented in Appendix D.

6. SITE DESCRIPTION

6.1 Location

The site is composed of 2 parcels, the San Vicente vineyard parcel, located on San Vicente Road, approximately 1 mile north of Soledad, and the Hambey Ranch parcel located on Bryant Road northeast of Soledad in unincorporated Monterey County. The project location is shown on the Location Map, Appendix A, Figure A-1.

6.2 Surface Conditions

a. San Vicente Vineyards Parcel:

i. The San Vicente Vineyards parcel is composed of two primary landforms, the valley floor and the foothills of the Gabilan Mountains. These landforms are in different uses.

ii. The valley floor is currently in agricultural use as a vineyard operated by Mirasou Winery. This portion of the parcel is generally gently sloping from northeast to southwest. Gradients are slight, averaging less than 10%. Two natural drainages are present in this area, one in the north central portion and one in the south eastern portion. The southwest corner of the parcel is currently occupied by the farm houses associated with the vineyards. Vegetation consists of vines, a few trees along the western parcel boundary and scattered grass and bushes.

iii. The foothill portion of the parcel is used as open range for cattle. This portion of the parcel slopes, steeply in some locations, generally from east to west. This portion of the property is characterized by bedrock outcrops, steep drainages, and a small cattle watering pond near the northeast corner of the parcel. Vegetation is sparse, consisting primarily of grass and scattered low brush.

iv. The proposed lots lie mostly on the gently sloping valley floor terrain on the western portion of the parcel, with select lots and ranchettes occupying the more steeply sloping topography (See Plate 1).

b. Hambey Ranch Parcel:

i. The Hambey Ranch Parcel is currently in agricultural use, planted with row crops. This portion of the parcel is generally gently sloping from northeast to southwest. Gradients are slight, averaging less than 10%. Other than the crops which are planted on this parcel, vegetation is sparse.

ii. The proposed single family residences are to occupy the northern portion of the Hambey Ranch Parcel with the southern portions proposed for apartments and light commercial use.

6.3 Subsurface Conditions

a. The results of our subsurface investigation indicate that the site possesses two primary subsurface profiles. The foothill portion of the site is characterized by a thin layer (usually less than 5 feet) of colluvium and slope wash which is underlain by granitic bedrock. This bedrock is generally weathered in the upper 3 to 4 feet, becoming less weathered with increasing depth. The valley floor portions, which include the western portion of the San Vicente Vineyards parcel and the entire Hambey Ranch parcel, are underlain by alluvium/colluvium. This material extends to the full depth of our investigation in the valley floor areas.

b. Alluvium/Colluvium:

i. The alluvial/colluvial soil which forms the surface layer in the valley floor areas is generally composed of an orange-brown mixture sand derived from weathering and erosion of the foothill granitic bedrock, and varying proportions of silt and clay. This material is generally loose to very dense, slightly moist to wet, nonplastic to medium plastic, and is of low to medium expansivity. The material in the valley floors is generally considered compressible. Additionally, the results of our laboratory testing indicates that the loose surficial material in the central and west valley floor areas (the areas represented by Borings 3, 9, and 13) possess an undesirably high collapse potential.

ii. The colluvial soil which forms the topsoil overlying the bedrock in the foothill areas generally is composed of a relatively thin veneer of angular, coarse grained sand and gravel with minor silt and clay components. This material is generally medium dense, dry to very slightly moist, nonplastic, of low expansivity, and considered to be slightly to moderately compressible.

c. Bedrock:

Underlying the colluvium and slope wash in the foothill areas, the material encountered consisted of granitic bedrock. These materials are generally hard to very hard, dry to slightly moist, nonplastic to slightly plastic, of low to moderate expansivity, with the exception of scattered deposits of highly expansive clay, and are considered only slightly compressible. The bedrock encountered is generally fractured and weathered near the surface, with reduced fracturing and weathering as depth increases. These materials are discussed in detail in the site geology report. (See Reference.)

d. Complete soil profiles for each boring are presented on the Logs of Borings, Appendix A, Figures A-3 through A-26. Boring locations are shown on the Boring Location Plan, Appendix A, Plate 1.

6.4 Groundwater

Static groundwater was not encountered during the course of our field investigation. Perched water was encountered at a depth of 16 feet in boring B-1 and at a depth of 30 feet in Boring B-10. Presumably the moisture contents and/or the elevation of subsurface perched water in these locations may vary with seasonal fluctuations in precipitation and irrigation.

6.5 Liquefaction

a. A quantitative liquefaction analysis was performed for the subject site using Liquefy2, a computer program for the empirical prediction of earthquake-induced liquefaction potential based on cyclic stress ratios developed by Seed and others in 1985.

b. The analysis performed was based on the subsurface profile of the southwest portion of the San Vicente Vineyards Property where perched water was encountered at a depth of 16 feet during our subsurface exploration. The profile analyzed is shown on the log of boring B-1. This portion of the subject site is considered to be the critical case.

c. Based on the results of our analysis, the potential for liquefaction to occur and cause damage to the proposed development is considered to be low.

7. CONCLUSIONS AND RECOMMENDATIONS

7.1 General

a. Based on the results of our review of the Preliminary Subdivision Map, we consider that development of the site is geotechnically compatible with the known geotechnical conditions, provided the recommendations of this report are incorporated into the project plans and specifications.

b. The recommendations included herein are provided for preliminary design and planning of grading and construction with regard to the aforementioned 200-scale Preliminary Subdivision Map. These recommendations are subject to review when detailed final grading plans become available, during grading when actual conditions are exposed, and after grading when the as-graded conditions are known.

c. The primary geotechnical conditions affecting the proposed development are:

i. The relatively thick alluvial/colluvial deposits underlying the valley floor areas of the site. These deposits, in their in situ condition are considered compressible under the proposed structural loads. It is anticipated that overexcavation and recompaction of these materials will be necessary prior to the placement of improvements.

ii. The collapsible nature of the alluvial/colluvial deposits underlying the valley floors in the south-central and western portions of the Vicente Vineyards parcel. It is anticipated that overexcavation and recompaction of these materials will be necessary in order to mitigate the potential adverse impacts of these materials within structural areas.

iii. The stability of existing and proposed cut and fill slopes.

iv. Areas near the mouths of steep drainages on the eastern portion of the San Vicente Vineyards parcel identified by the Project Geologist as potential debris flow areas requiring either the imposition of structural setbacks or further area-specific analysis.

v. The presence of a small cattle watering lake retained by an earth dam in the northeast corner of the San Vicente Vineyards parcel. It is our understanding that this feature is to be removed during the grading phase of the current project.

vi. The presence of scattered deposits of highly expansive clay in the foothill portion of the San Vicente Vineyards parcel.

vii. The presence of relatively shallow perched water in the southwestern portion of the San Vicente Vineyards parcel which may impact proposed septic disposal.

d. General geotechnical considerations applicable to site grading and preliminary recommendations for the proposed construction are discussed below:

7.2 Grading and Earthwork

7.2.1 General

Grading should be accomplished in accordance with the recommendations presented herein, and the grading requirements of the County of Monterey. Care should be excersized during removal operations adjacent to existing structures including roadways, stormdrains, and residences, including their adjoining slopes.

7.2.2 Site Preparation

a. Prior to grading, the site should be stripped and cleared of any vegetation, uncompacted fill, debris and/or existing structures. Excavations resulting from the removal of vegetation, uncompacted fill, debris or any buried obstructions should be backfilled with properly compacted fill.

b. Although none were observed during this investigation, abandoned wells, underground facilities such as cesspools, septic tanks, utilities, pipes or underground storage tanks may exist at the site. Should any such facilities be discovered prior to or during grading, recommendations will be given for their safe removal and proper backfilling of resulting voids. Removal of underground tanks is subject to state law as regulated by County or City Health and/or Fire Department agencies. If storage tanks containing hazardous or unknown substances are encountered, the proper authorities must be notified prior to any attempts at removing such objects.

7.2.3 Preparation of Existing Soils

a. All undocumented fill soils and debris should be removed in their entirety.

b. The results of our field exploration indicate the presence of scattered deposits of highly expansive clay soils, particularly in the eastern portions of the San Vicente Vineyards parcel where the valley floor transitions into the foothills. Where encountered, these materials should be removed from beneath proposed improvements.

c. The extent and depths of removal should be determined by the Geotechnical Consultant during grading operations.

7.2.4 Pad Preparation

7.2.4.1 Valley Floor Areas:

a. The results of our field investigation and laboratory testing indicate that the near-surface soils on the subject site at the typical bearing elevation of structures founded on conventional, shallow, spread and pad footings are composed of a mixture of loose to medium dense silt with some clay and sand. This soil is considered somewhat compressible in its in situ condition. In order to ensure uniform compression characteristics and to obviate any potential for differential settlements, site preparation, consisting of overexcavation and recompaction of the near-surface soils will be required prior to placement of new fills, pavements, slabs, and structures. Beneath the footings of structures founded on conventional, shallow, spread and pad footings, the native subgrade should be reworked to a depth sufficient to provide a zone of compacted fill whose width and depth, measured from the footing bottom, is equal to twice the width of the footing base, or to a depth of 5 feet below existing grade, whichever is greater. These depths are subject to review during grading.

b. The zone of reworked material beneath footings shall extend laterally beyond the edge of the footing a distance equal to the depth of overexcavation under the footing, with at least 5 feet beyond the perimeter footings.

7.2.4.2 Foothill Areas:

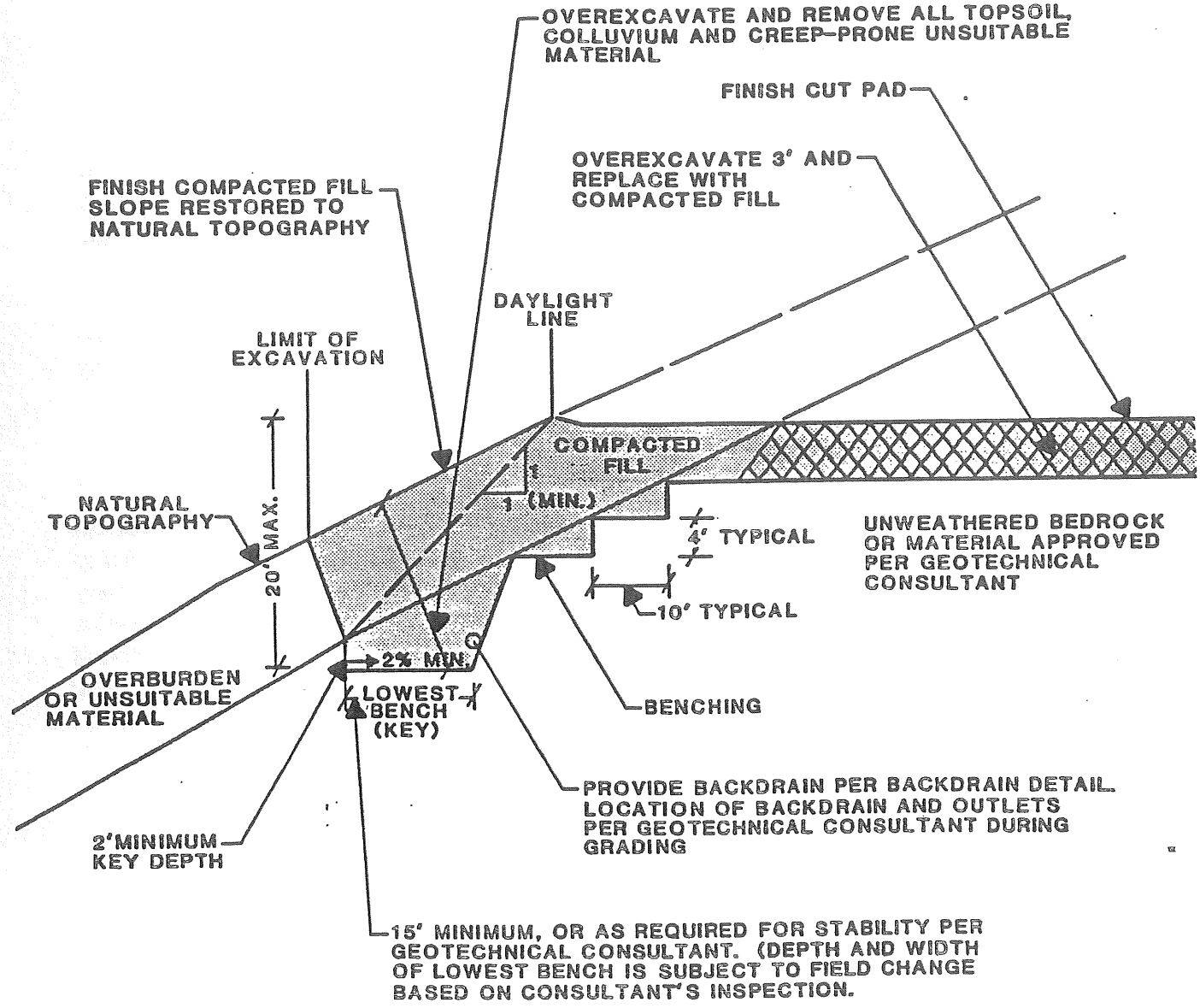
a. Based on our review of the Preliminary Subdivision Map, and our discussions with representatives of Bestor Engineering, the Project Civil Engineers, it is our understanding that development of the foothill portions of the subject project will generally result in the formation of mass graded cut and cut/fill transition pads and several custom ranchette lots. Recommendations for the construction of the mass graded lots are presented below. It is anticipated that grading for the custom ranchette lots will be minimal. Recommendations for the custom lots should be provided by the Geotechnical Consultant on a case by case basis prior to development.

b. Cut Pads

After excavation to proposed pad grade, portions of the cut pads are anticipated to expose unsuitable soils due either to the presence of oversize rocks, or soils with inconsistent expansion/compression characteristics. We recommend that for planning purposes, overexcavation and recompaction of a minimum of 3 feet of these soils be anticipated. Actual overexcavation requirements should be evaluated by the Geotechnical consultant as the lots are brought to finish grade.

c. Daylight Cut Lots

If the proposed grading will create cut lots above descending natural slopes, the outer surficial zone along the daylight cut line should be stabilized by the construction of daylight shear keys. Daylight shear keys should be constructed in accordance with the detail provided in Figure 1. The actual dimensions of the shear key should be determined when conditions are exposed during grading, based on the slope inclination and thickness of surficial deposits on the slope. It is anticipated that at a minimum, the shear keys will be 5 feet wide and 3-5 feet deep.



Tharp & Associates Geotechnical Consultants	TYPICAL DETAIL	Figure
	DAYLIGHT SHEAR KEY	1

c. Transition Pads

i. Our review of the Preliminary Subdivision Map indicates that grading, as proposed, will probably result in a transition (bedrock/fill) condition on some lots, particularly in the lower elevations of the foothills.

ii. The building pads on cut/fill transition lots should be overexcavated a minimum of 3 feet below finish grade, and reworked to include placement of compacted fill in accordance with the Transition Lot Detail provided in Figure 2.

d. Fill Pads

i. Prior to placement of fill materials, the native colluvium and weathered bedrock beneath areas to recieve fill should be excavated to a depth where firm material is encountered. It is anticipated that the depth of excavation required will not exceed 2± feet, subject to review during grading. The exposed surface should then be moisture conditioned, and compacted prior to placement of fill materials.

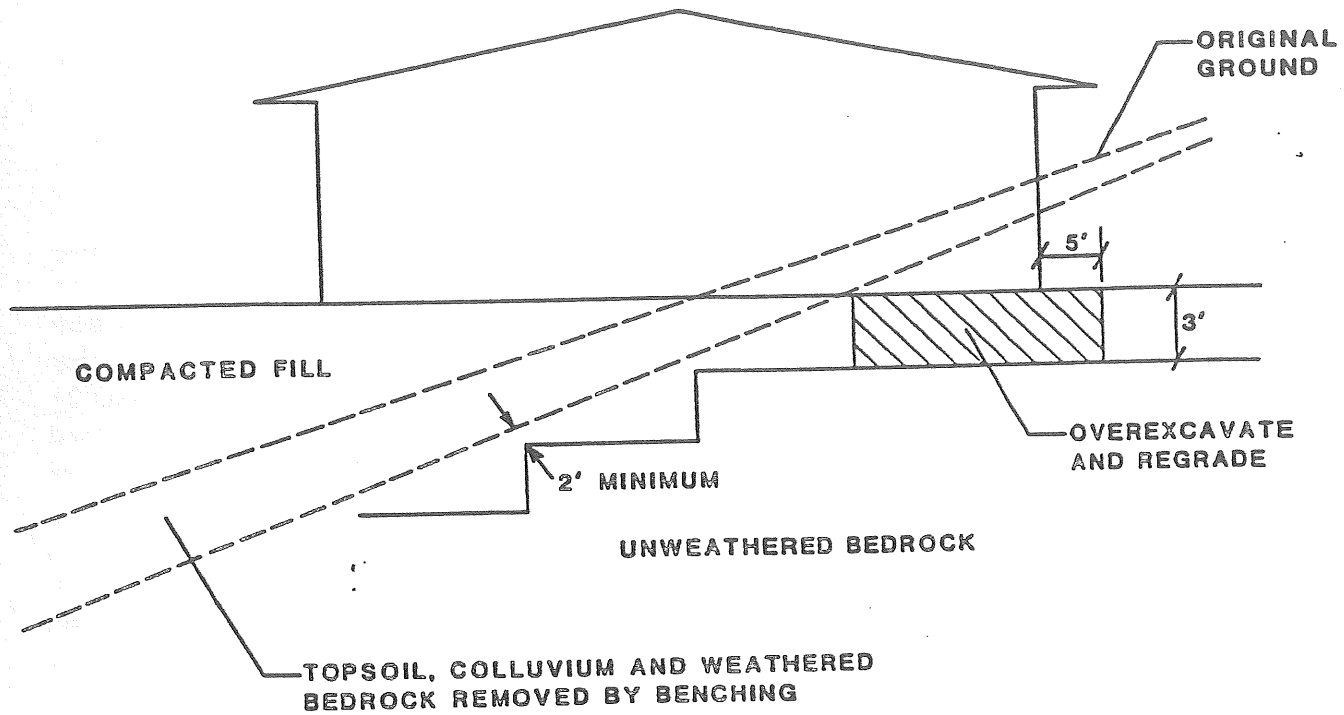
ii. Fill pads constructed on natural slopes must be constructed per the recommendations for placement of fill-over-native materials presented herein. See subparagraph 7.2.9.c. and Figure 3.

7.2.4.3 General (All Areas):

a. Prior to placing fill the exposed surface should be scarified to a depth of 6 to 8 inches, moisture conditioned, and compacted.

b. Due to the fact that the depth of reworking will be dependent of the final foundation dimensions, depths of embedment, slab and pavement grades etc., our office should be provided with a copy of the final, approved plans prior to the commencement of earthwork operations. The depths of reworking required are subject to review by the Geotechnical Consultant during grading when subsurface conditions become exposed.

CUT/FILL LOT (TRANSITION)



Tharp & Associates Geotechnical Consultants	TYPICAL DETAIL	Figure
	TRANSITION LOT	2

c. Settlements may need to be evaluated should the planned grades result in the ground surface being raised 3 or more feet above the existing grades in Valley Floor areas and 10 feet or more in Foothill areas. Should this occur, some additional reworking of existing materials may be required.

d. The depths of overexcavation should be reviewed by the Geotechnical Consultant during the actual construction. Any surface or subsurface obstructions, or questionable material encountered during grading, should be brought immediately to the attention of the Geotechnical Consultant for proper processing as required.

7.2.5 Subgrade Below Slabs-On-Grade

The native subgrade beneath slabs-on-grade shall be overexcavated and recompacted to a depth of 2 feet below the bottom of the baserock or to a depth of 3 feet below existing grade, whichever is greater. This zone of reworking shall extend a minimum of 5 feet laterally beyond the slab footprint.

7.2.6 Subgrade Below Pavements

In pavement areas the native subgrade should be reworked to a depth sufficient to provide a zone of compacted fill extending at least 12 inches below the original ground surface and should result in at least 12 inches of reworked material below the aggregate base course. This zone of reworking should extend laterally a minimum of 5 feet beyond the pavement.

7.2.7 Oversize Rock/Rock Disposal

a. Based on the subsurface exploration and observations of natural exposures, significant quantities of oversized rock may be generated during grading, particularly in areas of deeper bedrock cuts in the foothill areas.

b. Structural fills should not contain material over 12 inches in maximum dimension and nothing larger than 4 inches should be placed within 1 foot of finish grade.

c. Oversized rock should not be used in the fill areas within the influence zone of structural improvements.

7.2.8 Fill Material

a. With the exception of the scattered pockets of highly expansive clay, the on-site colluvial/alluvial soils are considered suitable for use as compacted fill, provided they are free of vegetation, and organic matter exceeding 3%, debris and oversized material (greater than 12 in). In addition, no oversized material greater than 4 in should be placed within 1 ft of any footings or slabs.

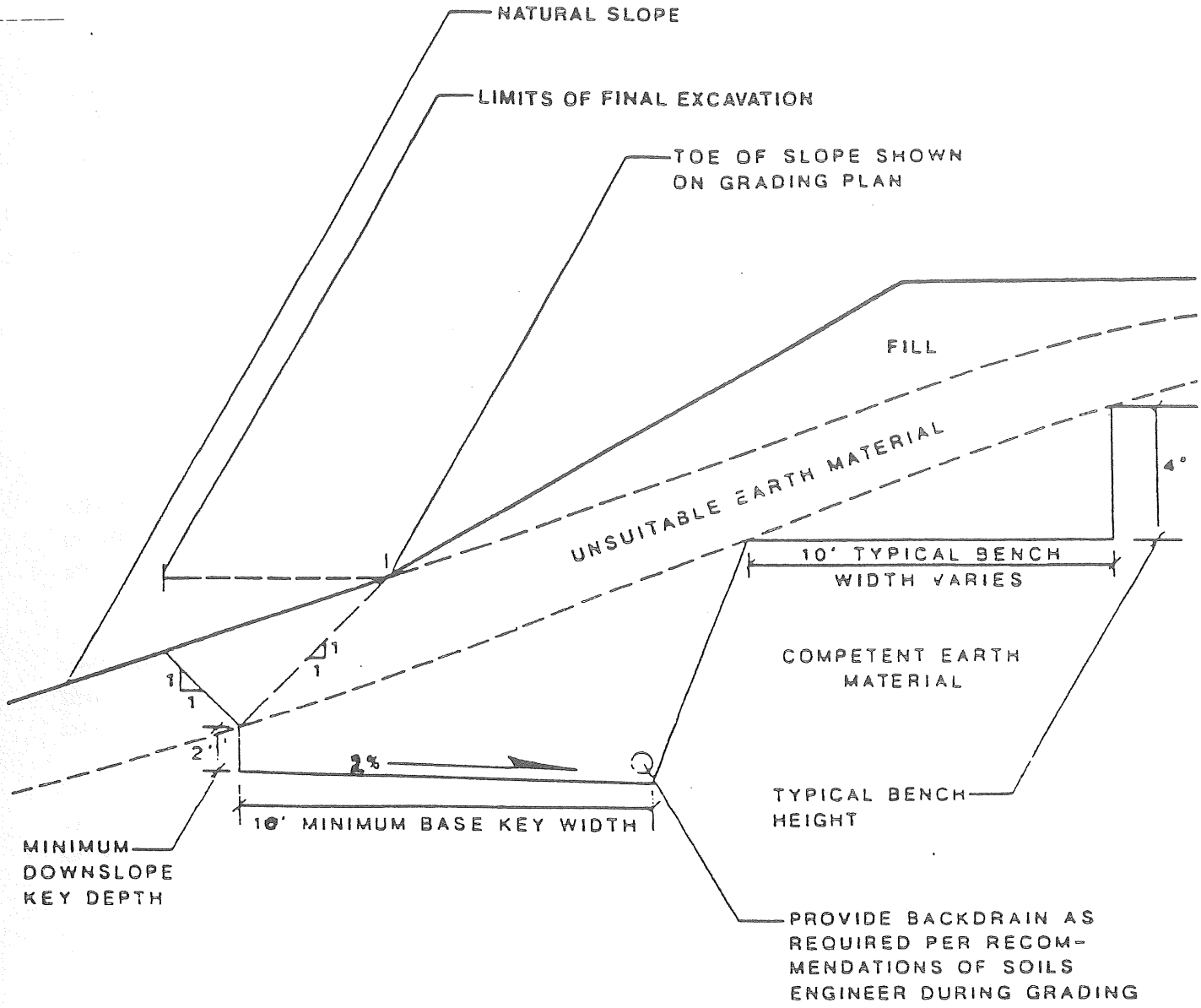
b. Imported fill, if required, should be of expansivity not greater than medium and be free of vegetation, and organic matter exceeding 3%, debris and oversized material (greater than 12 in).

7.2.9 Compaction and Method of Fill Placement

a. With the exception of the upper 12 inches of subgrade beneath paved areas, all fill soils should be placed in 6- to 8-in thick loose lifts, brought to near-optimum moisture content and compacted to a minimum 90% relative compaction. In the upper 6 inches of subgrade beneath paved areas, all fill soils should be placed in 6- to 8-in thick loose lifts, brought to near-optimum moisture content and compacted to a minimum 95% relative compaction.

b. Base course beneath pavements and slabs-on-grade should be placed in 6- to 8-in thick loose lifts, brought to near-optimum moisture content and compacted to a minimum 95% relative compaction.

c. When placing fill in horizontal lifts over areas sloping steeper that 5:1 (horizontal:vertical), keys and benches should be excavated into the adjacent slope as shown on the corresponding typical detail in Figure 3. Keying and benching should be sufficient to provide at least 10-ft wide benches with a minimum 4-ft vertically between benches within competent natural ground or engineered fill. No fill should be placed in an area subsequent to keying and benching until the area has been observed by the geotechnical consultant. Material generated by the benching operation should be moved sufficiently away from the bench area to allow for the recommended observation of the bench prior to the placement of fill.



WHERE NATURAL SLOPE GRADIENT IS 5:1 OR LESS, BENCHING IS NOT NECESSARY. HOWEVER, FILL IS NOT TO BE PLACED ON COMPRESSIBLE OR UNSUITABLE MATERIAL.

Tharp & Associates Geotechnical Consultants	TYPICAL KEY AND BENCH DETAIL FILL OVER NATIVE SLOPE	Figure 3

d. Fill should be tested for compliance with the recommended relative compaction and moisture conditions. Field density testing should conform to ASTM D 1556, 2922 and/or 2937. Tests should be taken at approximately every 2 vertical ft and for every 1,000 yd^3 of fill placed. Base course below paved areas should be tested a minimum of every 150 linear feet of pavement. All fill found not to be in conformance with the grading recommendations should be removed or otherwise handled as recommended by the geotechnical consultant.

7.2.10 Shrinkage and Subsidence/Settlement

a. Based on analyses of the subsurface soil conditions, the on-site alluvial soils can be estimated to shrink on the order of 10% to 15% for initial planning purposes. The on-site bedrock can be expected to bulk on the order of 2%.

b. These factors do not include clearing/grubbing/stripping volummes, or losses due to handling. These factors can be reviewed periodically during grading, based on actual surveyed and volummetric data, if requested.

c. Subsidence due to the placement of fill and the movement of construction equipment is expected to be 1 inch. This is an estimate, subject to confirmation during grading.

d. Postgrading total and differential settlements under spread and continuous footings are expected to be within tolerable limits. Additional vertical movements due to the footings loads are expected to be no greater than 1 inch, and differential movements are expected to be no greater than 1/2 inch for the anticipated spacings and loads. These preliminary estimates should be reviewed by the Geotechnical Consultant when foundation plans and loads for the proposed structures are available.

7.2.11 Excavating Conditions

a. Valley Floor Areas:

We anticipate that excavation of on-site materials in the valley floor areas may be accomplished with standard earthmoving or trenching equipment.

b. Foothill Areas:

In foothill areas we anticipate that the materials in the upper 3 to 5 feet may be excavated using standard earthmoving equipment. However, below these depths, concretionary or cemented zones may be encountered in the weathered bedrock materials requiring specialized excavating equipment, and resulting in over-sized materials requiring disposal off-site or other special handling. If excavation of the very hard unweathered, crystalline, granite bedrock materials is necessary, blasting may be required.

c. Static groundwater was not encountered during the course of our field investigation and is not expected to affect grading operations. However, perched water was encountered at a depth of 16 feet in boring B-1 and at a depth of 30 feet in Boring B-10. This may result in wet conditions, particularly after periods of above normal precipitation, in the areas in the southwest portion of the San Vicente Vineyards parcel if the depth of excavations performed in connection with the construction of retention/detention ponds approaches the elevation of the perched water tables encountered.

7.2.12 Cut and Fill Slopes

a. Fill Slopes

i. All fill slopes should be constructed with engineered fill meeting the minimum density requirements of this report and have a gradient no steeper than 2:1 (horizontal:vertical). Fill slopes should not exceed 15 feet in vertical height unless specifically reviewed by the Geotechnical Consultant . Where the vertical height exceeds 15 feet, intermediate benches must be provided. These benches should be at least 6 feet wide and sloped to control surface drainage. A lined ditch should be used on each bench.

ii. Fill slopes shall be benched and keyed into the native slopes by providing a base keyway whose minimum width is 10 feet and which is sloped negatively at least 2% back into the slope. The depth of keyways will vary, depending on the materials encountered, but at all locations shall be at least 2 feet into firm material. This keyway should be combined with intermediate benching as required. Refer to Figure No. 3 for general details.

iii. If a fill slope is to be placed above a cut slope, the toe of the fill slope should be set back at least 8 feet horizontally from the top of the cut slope. A lateral surface drain should be placed in the area between the cut and fill slopes.

iv. Fill slopes should either be over built laterally a minimum of at least 3 ft and cut back to a firm and unyielding surface or backrolled to achieve same at no greater than 4-ft vertical intervals. Feathering of fill over the tops of slopes should not be permitted.

b. Cut Slopes

i. Foothill Areas:

Cut slopes in the foothill area shall not exceed a 1.5:1 (horizontal:vertical) gradient and a 15 foot vertical height unless specifically reviewed by the Geotechnical Consultant . Where the vertical height exceeds 15 feet, intermediate benches must be provided. These benches should be at least 6 feet wide and sloped to control surface drainage. A lined ditch should be used on each bench.

ii. Valley Floor Areas

Slopes cut in connection with construction of the detention ponds in the valley floor areas may be constructed as follows:

- Cut slopes less than 15 feet high should not exceed a slope inclination of 1.5:1 (Horizontal : Vertical).
- Cut slopes between 15 and 20 feet high should not exceed a slope inclination of 2:1 (Horizontal : Vertical).
- Cut slopes between 20 and 30 feet high should not exceed a slope inclination of 2.5 :1 (Horizontal : Vertical).

iii. Cut slopes exceeding a height of 20 feet should be reviewed by the Geotechnical Consultant on an individual basis.

c. General

i. In order to maintain stable slopes at the recommended gradients, it is important that any seepage forces and accompanying hydrostatic pressure encountered be relieved by adequate drainage. Drainage facilities may include subdrains, gravel blankets, rockfill surface trenches or horizontally drilled drains. Configurations and type of drainage will be determined by the Geotechnical Consultant during the grading operations.

ii. The surfaces of all cut and fill slopes should be worked to reduce erosion. This work, as a minimum, should include track rolling of the fill slopes and effective planting of all slopes. The protection of the slopes should be installed as soon as practicable so that a sufficient growth will be established prior to inclement weather conditions. It is vital that no slope be left standing through a winter season without the erosion control measures having been provided.

iii. The above recommended gradients do not preclude periodic maintenance of the slopes, as minor sloughing and erosion may take place.

7.2.13 Expansive Soils

a. The expansion potential of the proposed pad subgrade soils is anticipated to be low to medium.

b. Additional expansion tests should be performed at the completion of grading in order to verify that post grading expansivities conform to tested values.

7.2.14 Sulfate Content

Based on the results of our laboratory testing and on experience in the vicinity we anticipate the sulfate content of the subsurface soils to be less than 0.2 percent. Type II cement is therefore considered adequate for concrete in contact with on-site soil. This should be verified by additional sulfate content testing performed at the completion of grading.

7.2.15 Utility Trenches

a. Bedding material should consist of sand with an SE not less than 30, which may then be jetted. (Jetting may not be effective if adequate drainage is not available.)

b. Existing soils may be utilized for trench backfill, provided they are free of organic materials and rocks over 6 inches in diameter.

c. Backfill of all exterior and interior trenches should be compacted to achieve a relative compaction of not less than 90 percent, the compaction standard being obtained per ASTM: D 1557. Care should be taken not to damage utility lines.

d. Alternatively, backfill may be jetted if sand of an SE not less than 30 is used. (Jetting may not be effective if adequate drainage is not available.)

e. Trenches should be capped with 1.5± feet of relatively impermeable soil.

f. Jetting in trenches adjacent to buildings or slopes should be carried out only under the specific approval of the Geotechnical Consultant.

g. Trenches should be located so as not to impair the bearing capacity or cause settlement under foundations. As a guide, trenches subparallel to foundations should be clear of a 45-degree plane extending outward and downward from the edge of the foundations.

h. The walls of temporary construction trenches are expected to be stable when excavated nearly vertical, with only minor sloughing, provided the total depth does not exceed about 4 feet. Shoring of excavation walls or flattening of slopes may be required, if greater depths are necessary.

i. All work associated with trench shoring must conform to the State of California Safety Code.

7.3 Stability of Slopes

7.3.1 General

a. The subject site consists of relatively flat agricultural lands and neighboring foothills. Bedrock cuts are anticipated in the foothill areas and cut slopes in alluvium/colluvium are anticipated in the valley floor areas in connection with the construction of the proposed detention ponds. Slope stability calculations were performed for cases considered representative of the ranges of conditions in each of these areas, including the critical conditions.

b. Slopes considered representative of the proposed postconstruction configurations were analyzed for both static and pseudostatic (earthquake) cases. Repeatable high ground accelerations (RHGA) of 0.33g for deep soils and .25g for rock sites were used for the pseudostatic cases in accordance with the recommendations of the Project Geologist. See Reference.

c. The results of our analyses indicate that the proposed cut slopes, if constructed of appropriate materials, at the recommended inclinations, will generally possess Factors of Safety against overall and surficial instability, in excess of the values of 1.5 and 1.2 for the static and pseudostatic cases respectively, considered the minimum standard of practice in Monterey County. Some buttressing of specific cut slopes may be required as addressed below.

d. The exposed surfaces of all cut slopes should be evaluated during the initial stages of grading, with recommendations regarding the need for buttressing or stabilization fills made at that time based on exposed geologic conditions.

e. Methodology and results of the slope stability analyses are presented in Appendix C.

7.3.2 Detention Pond Cut Slopes

a. The stability of cut slopes in the detention pond areas was analyzed for configurations considered representative of site conditions. The pond cut slopes were modeled under rapid draw down effects that would occur when the pond drains. This is considered the critical case.

b. Material properties chosen for these analyses are conservatively based on laboratory test results for soil types considered representative of those encountered in areas proposed for the detention ponds. Shear parameters are based on saturated strengths and can be found in Appendix B and on the Boring Logs.

c. The proposed slopes were analyzed to determine the maximum stable cut slope height at several slope inclinations. Although not anticipated at this time, cut slopes exceeding a height of 20 feet should be reviewed on a case-by-case basis. The results of the analyses are presented in Table 1.

Table 1

Detention Pond Cut Slopes

Slope Inclination	Maximum Stable Height, ft.	Static Factor of Safety	Pseudostatic Factor of Safety
1.5:1	15	1.6	1.6
2:1	20	1.6	1.5
2.5:1	30	1.5	1.3

7.3.3 Foothill Area Bedrock Cuts

a. Anticipated bedrock cuts in the foothill area were analyzed for a slope inclination of 1.5:1 and a maximum slope height of 50 feet.

b. The cut slopes analyzed were conservatively modeled to include a water table perched on the unweathered bedrock underlying the surficial materials. This configuration represents the anticipated wet weather conditions and is considered the critical case.

c. Material properties chosen for these analyses are based on laboratory test results for the samples taken from borings in the foothills vicinity. Shear parameters are based on saturated strengths and can be found in Appendix B and on the Boring Logs.

7.3.4 Surficial Stability

Surficial slope stability analyses, assuming submergence of the upper 3 feet, were performed for typical slopes considered representative of proposed project conditions. The results of these analyses indicate that the anticipated cut slopes on the subject project, if constructed at the recommended inclinations of 1.5:1, 2:1, and 2.5:1(H:V) or less, possess a factor of safety in excess of the value of 1.5 considered the standard of practice in Monterey County. The results of our surficial stability analyses are presented in Appendix C, Figures C-3.1, 3.2 and 3.3.

7.3.5 Natural Slopes

Qualitative stability of the natural slopes adjacent to the subject site and the potential for landsliding has been addressed in the Geologic Report prepared for the site by Nolan Associates. See Reference. Quantitative analyses should be performed in cases where modifications to the setbacks recommended by the Project Geologists are desired.

7.3.6 Maintenance of Slopes

a. General

Maintenance of slopes is important to their long-term performance. The following is a list of recommended procedures provided as a guide for slope maintenance.

b. Slope Protection

i. All slope drainage should be provided in accordance with the Uniform Building code, Chapter 70, latest edition.

ii. Consideration should be given to berms, concrete v-ditches, or drainage swales at top of all slopes.

iii. Slopes should be planted with appropriate drought-resistant vegetation as recommended by a landscape architect.

iv. Slopes should not be over-irrigated. Heavy ground cover combined with over watering is a primarily source of surficial slope failures.

v. At no time should water be allowed to flow unchecked over the slope face.

vi. Animal burrows can serve to collect normal sheet flow on slopes and cause rapid and destructive erosion, and should be controlled or eliminated.

vii. In no instance should roof drainage, yard drainage, or water from swimming pools or other sources be diverted to flow onto graded or natural slopes.

viii. Modifications to slopes, including all placement of fill materials or excavations that steepen or otherwise modify the designed or natural slope angle, should not be attempted by the unadvised homeowner. All modifications to slope should be made under the direction of approval of the Geotechnical Consultant.

ix. Erosion control and slope maintenance measures should be maintained throughout the life of the project.

7.4 Subsurface and Surface Drainage

7.4.1 Subsurface Drainage

a. It is anticipated that subdrains will be required in the bottom of any canyon fills, in the keyways of all fill slopes and behind all retaining walls.

b. Typical specifications regarding subdrain installation are presented in Figure 4.

c. Final determination of the need for drainage devices should be made by the Geotechnical Consultant during grading.

7.4.2 Surface Drainage/Drainage Device Maintenance

a. Pad drainage should be at a gradient of a minimum of 2% away from foundation areas.

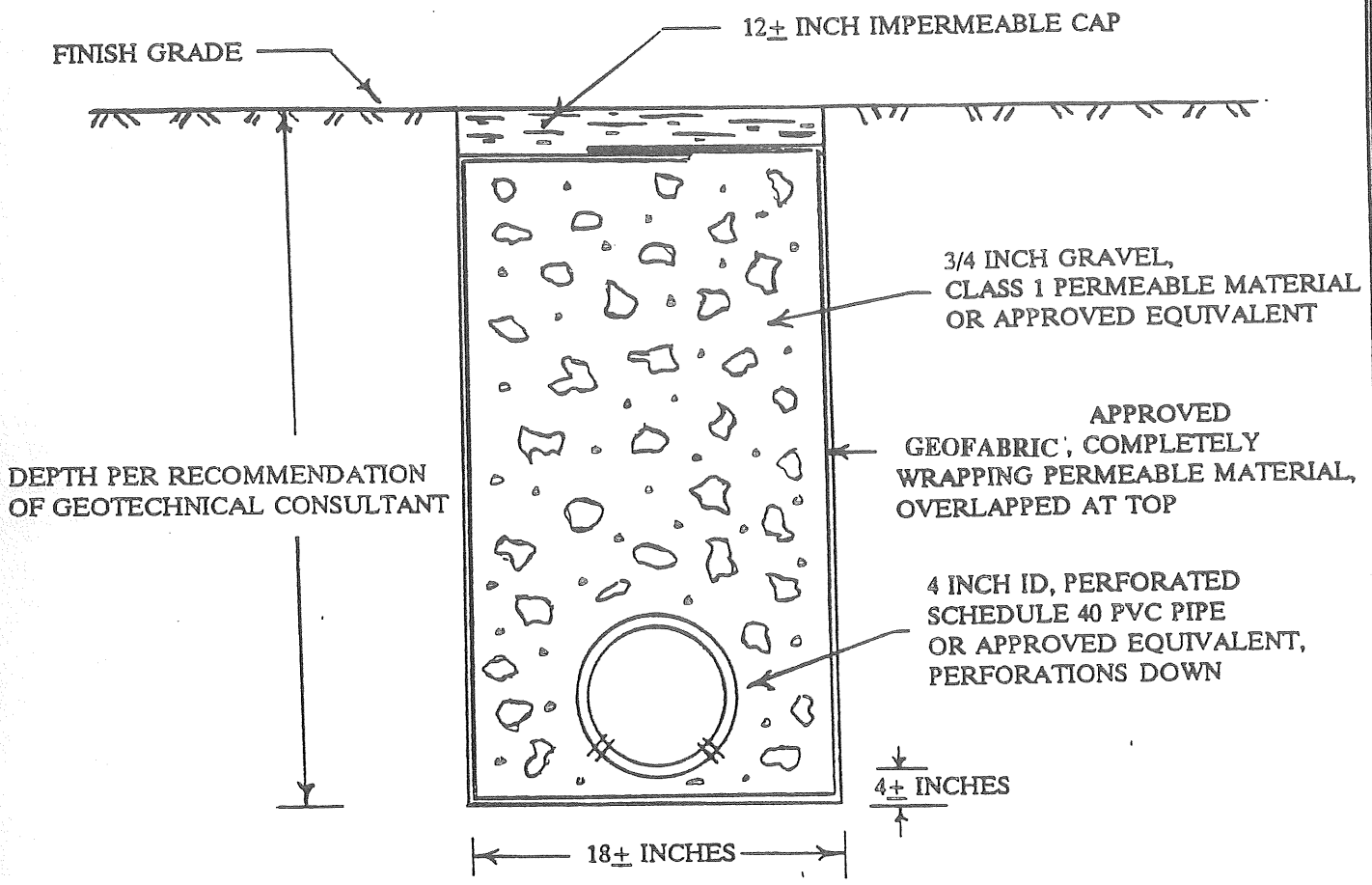
b. Drainage patterns established at the time of grading should be maintained throughout the life of the project.

c. Graded berms, swales, area drains, terrace drains and brow ditches are designed to carry surface water from pad and slope areas and should not be blocked or destroyed.

d. Water should not be allowed to pond in pad areas. Roof drains should outlet to proper drainage devices.

e. Sources of uncontrolled water, such as leaky water pipes, drains, etc., should be repaired.

f. The natural surface drainage features discharging onto the subject site in the north central and southeastern portions of the San Vicente Vineyards parcels should be collected in lined channels and discharged to suitable locations.



Tharp & Associates Geotechnical Consultants	**RECOMMENDED SUBDRAIN CONFIGURATION** TYPICAL DETAIL	Figure 4

7.4.3 Detention/Retention Ponds

a. The results of our field exploration and laboratory testing indicate that the material in the area of the proposed retention/detention ponds is composed of alluvial/colluvial deposits of sand derived from decomposed granitic bedrock with varying clay and silt contents.

b. Based on the results of the percolation testing performed, and our experience with similar materials in the area, an infiltration rate of 1.5 inches per hour may be assumed for preliminary design purposes. This value should be verified at the conclusion of rough grading when subsurface conditions become exposed.

7.5 Foundations

7.5.1 General

a. The foundation recommendations contained herein are for those buildings to be founded on the mass-graded pad areas. Foundation recommendations for structures to be located on the larger custom lots should be provided on a case-by-case basis in connection with the selection of specific building envelopes on these lots. The proposed structures, of the type anticipated, located on the mass-graded lots, may be founded on conventional, shallow, spread and pad footings. The criteria presented below should be adopted.

b. At the time we prepared this report, the grading plans and foundation details had not been completed and the locations of the structures had not been finalized. We request an opportunity to review these items during the design stages to determine if supplemental recommendations will be required.

c. Due to the anticipated difficulty in excavating portions of the foothill areas, pier and grade beam foundation systems may be economically attractive for structures constructed in these areas. Such foundation systems are considered geotechnically suitable. Recommendations for pier and grade beam systems may be provided upon request if their use proves advantageous.

7.5.2 Conventional Shallow Foundations

a. Footing widths should be based on the allowable bearing value but not less than 12 inches for 1 story and 15 inches for 2 story structures. Footing depths should be at least 12 inches for 1 story and 18 inches for 2 story sections. Should local building codes require deeper embedment of the footings or wider footings, the local codes must apply.

b. Footing excavations must be checked by the Geotechnical Consultant before steel is placed and concrete is poured to insure bedding into proper material. Excavations should be thoroughly wetted down just prior to pouring concrete.

c. The allowable bearing capacity may be determined from the following equation:

$$q_a ll = 500 + 700D + 250B$$

where:

$q_a ll$	=	allowable bearing capacity (lb/ft^2)
D	=	Depth of embedment (ft) measured from the lowest adjacent grade.
B	=	minimum footing width (ft)

d. The allowable bearing capacity used should not exceed 3000 lbs/ft^2.

e. The minimum recommended depth of embedment is 2 feet for exterior wall footings.

f. The allowable bearing capacity values above may be increased by one-third in the case of short duration loads, such as those induced by wind or seismic forces.

g. The allowable bearing capacity values above apply to both square pad footings and shallow strip footings, although they are slightly conservative for the pad footing case.

h. Bearing capacities should be re-evaluated when loads have been obtained and footings sized.

i. In computing the pressures transmitted to the soil by the footings, the embedded weight of the footing may be neglected.

j. The footings should contain steel reinforcement as determined by the Project Structural Engineer in accordance with applicable UBC or ACI Standards. As a minimum, steel in continuous footings should be as follows:

   i. With Very High expansivity soil - 4x#4 bars, 2 on top and 2 at the bottom.

   ii. With High expansivity soil - 2x#4 bars, 1 on top and 1 at the bottom.

k. In the event that as-graded subgrade soils under the proposed residences are of medium or greater expansivity, a concrete moisture cutoff barrier, consisting of a tie beam or thickened slab edge extending to a corresponding minimum depth of 24 inches below the lowest adjacent final grade, should be provided between exterior individual footings.

l. Foundations adjacent to downslopes should be located at a depth such that the horizontal setback of the leading edge of the bottoms of footings from the competent face of the slope is 1/2 x slope height, and at least 6 feet. The distance need not exceed 15 feet.

m. In the event that footings are founded in structural fill consisting of imported materials, the allowable bearing capacities will depend on the type of these materials and should be re-evaluated.

n. Embedment depths should not be allowed to be affected adversely, such as through erosion, softening, digging, etc.

o. Planter areas should not be sited adjacent to walls. In addition, measures should be implemented to contain irrigation water and prevent it from seeping into walls and under foundations, or into the slope areas.

p. Footing excavations should be observed and foundation plans and loads should be reviewed by the Geotechnical Consultant.

q. Total and differential settlements under spread and continuous footings are expected to be within tolerable limits.

7.6 Slabs-On-Grade

a. Concrete floor slabs may be founded on reworked existing soils or compacted fill. The subgrade should be proof-rolled just prior to construction to provide a firm, relatively unyielding surface, especially if the surface has been loosened by the passage of construction traffic.

b. If a floor covering that would be critically affected by moisture is to be used, a 10-mil plastic vapor barrier is recommended. This sheeting should be covered with 2 inches of sand.

c. The subgrade should be presoaked as follows;

i.	Highly expansive soil -	5 percentage points above optimum, or to 125% of optimum, whichever is greater; to 2 feet depth.
ii.	Medium expansive soil -	5 percentage points above optimum, or to 125% of optimum, whichever is greater; to 1.5 feet depth
iii.	Low or Very Low expansive soil -	4 percentage points above optimum, or to 120% optimum, whichever is greater; to 1 foot depth

d. The expansivity of the on-site soils is generally considered to be Medium, subject to confirmation at the conclusion of mass grading.

e. Slabs should be at least 4 inches thick (nominal). Joints should be provided per usual practice.

f. Slabs should be underlain by a minimum 4 inches of granular base.

g. Steel should be provided in slabs-on-grade per the recommendations of the Structural Engineer, with a minimum as follows:

i. With Very High expansivity soil -
6x6-W2.9xW2.9 WWF, supported on chairs

ii. With less expansive soil -
6x6-W1.4xW1.4 WWF

h. Bearing capacities should be re-evaluated when loads have been obtained and footings sized.

i. In computing the pressures transmitted to the soil by the footings, the embedded weight of the footing may be neglected.

j. The footings should contain steel reinforcement as determined by the Project Structural Engineer in accordance with applicable UBC or ACI Standards. As a minimum, steel in continuous footings should be as follows:

   i. With Very High expansivity soil - 4x#4 bars, 2 on top and 2 at the bottom.

   ii. With High expansivity soil - 2x#4 bars, 1 on top and 1 at the bottom.

k. In the event that as-graded subgrade soils under the proposed residences are of medium or greater expansivity, a concrete moisture cutoff barrier, consisting of a tie beam or thickened slab edge extending to a corresponding minimum depth of 24 inches below the lowest adjacent final grade, should be provided between exterior individual footings.

l. Foundations adjacent to downslopes should be located at a depth such that the horizontal setback of the leading edge of the bottoms of footings from the competent face of the slope is 1/2 x slope height, and at least 6 feet. The distance need not exceed 15 feet.

m. In the event that footings are founded in structural fill consisting of imported materials, the allowable bearing capacities will depend on the type of these materials and should be re-evaluated.

n. Embedment depths should not be allowed to be affected adversely, such as through erosion, softening, digging, etc.

o. Planter areas should not be sited adjacent to walls. In addition, measures should be implemented to contain irrigation water and prevent it from seeping into walls and under foundations, or into the slope areas.

p. Footing excavations should be observed and foundation plans and loads should be reviewed by the Geotechnical Consultant.

q. Total and differential settlements under spread and continuous footings are expected to be within tolerable limits.

7.6 Slabs-On-Grade

a. Concrete floor slabs may be founded on reworked existing soils or compacted fill. The subgrade should be proof-rolled just prior to construction to provide a firm, relatively unyielding surface, especially if the surface has been loosened by the passage of construction traffic.

b. If a floor covering that would be critically affected by moisture is to be used, a 10-mil plastic vapor barrier is recommended. This sheeting should be covered with 2 inches of sand.

c. The subgrade should be presoaked as follows;

i.	Highly expansive soil -	5 percentage points above optimum, or to 125% of optimum, whichever is greater; to 2 feet depth.
ii.	Medium expansive soil -	5 percentage points above optimum, or to 125% of optimum, whichever is greater; to 1.5 feet depth
iii.	Low or Very Low expansive soil -	4 percentage points above optimum, or to 120% optimum, whichever is greater; to 1 foot depth

d. The expansivity of the on-site soils is generally considered to be Medium, subject to confirmation at the conclusion of mass grading.

e. Slabs should be at least 4 inches thick (nominal). Joints should be provided per usual practice.

f. Slabs should be underlain by a minimum 4 inches of granular base.

g. Steel should be provided in slabs-on-grade per the recommendations of the Structural Engineer, with a minimum as follows:

i. With Very High expansivity soil -
6x6-W2.9xW2.9 WWF, supported on chairs

ii. With less expansive soil -
6x6-W1.4xW1.4 WWF

iii. It is necessary that the mesh be properly positioned in the middle of the slab to control cracking. In our experience, proper positioning of welded wire fabric is usually not achieved in practice, due to adequate care not being taken. In these circumstances consideration should be given to utilizing the equivalent rebar, supported on chairs.

iv. Low slump concrete should be used to minimize shrinkage cracking. The concrete should be cured properly.

v. If hooking of fabric is employed on this project, it shall be at the Contractor's discretion, and the contractor shall be solely responsible for placing the fabric uniformly at mid-depth of the slab.

h. The recommendations presented in Subsections 7.5 and 7.6 above which refer to very highly expansive soils are provided as a contingency measure should the expansion potential of the subgrade soils after mass gradeing be other than that previously tested.

i. The FFL should be at least 6 inches above highest adjacent grade.

j. i. The utilization of post-tensioned concrete slabs may be considered in lieu of conventional concrete slabs. There are inherent advantages with this system, especially the characteristics that the propagation or widening of cracks that may otherwise develop is inhibited. Additional geotechnical recommendations for post-tensioned slabs are as follows:

ii. Minimum thickness: 4 inches (structural/construction considerations would govern.)

iii. Substructure: 1 inch sand, over 10-mil plastic sheet, over prepared subgrade. (Not required for garage slabs, unless the Structural Engineer prefers the placement of the sand.)

iv. Minimum embedment of edge beam below lowest adjacent exterior grade: 18 inches.

v. The subgrade moisture content should be maintained at the same level as when the soil was processed during grading: generally to $4\pm$ percentage points above optimum, subject to review during construction. Some moisture conditioning of the subgrade should be anticipated. The sand layer should be kept moist prior to pouring the concrete.

7.7 RETAINING STRUCTURES

7.7.1 Lateral Earth Pressures

a. The lateral earth pressures presented in Table 3 are recommended for the design of retaining structures with a gravel blanket and backfill soils of expansivity not higher than Medium. Should the slope behind the retaining walls be other than level or 2:1 horizontal to vertical, supplemental design criteria will be provided for the active earth or at-rest pressures for the particular slope angle.

Table 3. Lateral Earth Pressures

Type	Soil Profile	Soil Pressure (psf/ft)	
		Unrestrained Wall	Rigidly Supported Wall
Active Pressure	Level 2:1	40 60	- -
At-Rest Pressure	Level 2:1	- -	65 80
Passive Pressure (ignore upper 0.5 ft)	Level 2:1	400 200	200 100

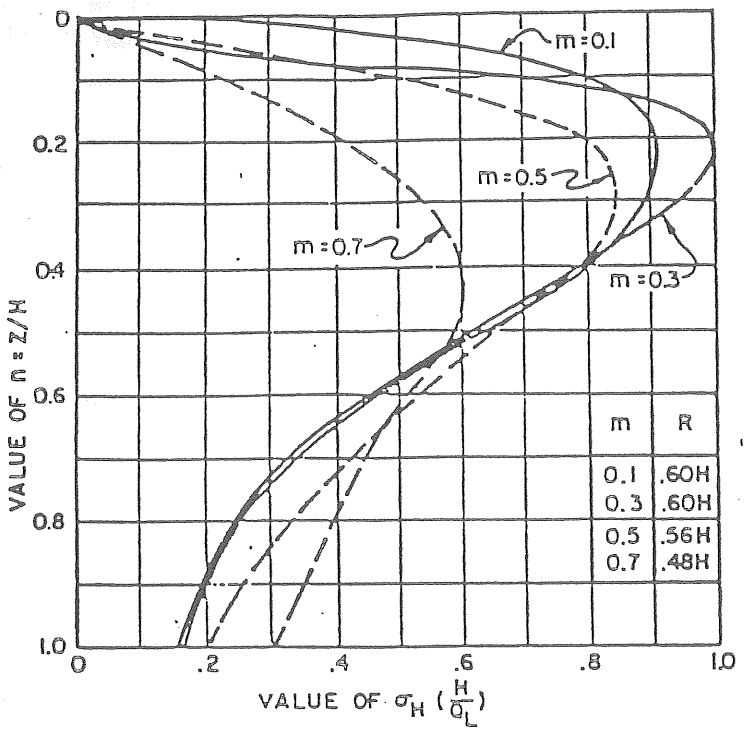
b. Friction coefficient - 0.35

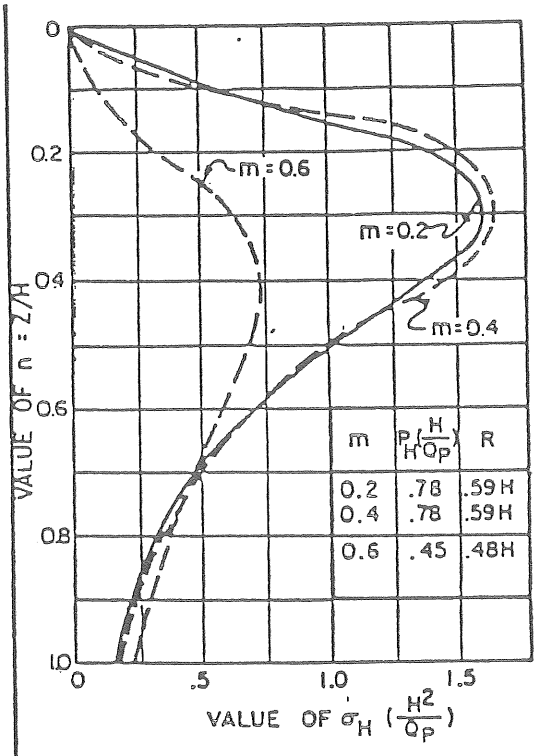
c. Where both friction and the passive resistance are utilized for sliding resistance, either of the values indicated should be reduced by one-third.

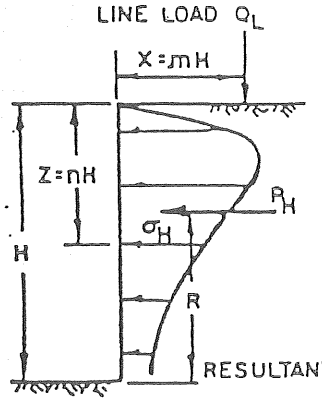
d. These are ultimate values.

e. Pressure due to any surcharge loads from adjacent footings, traffic, etc., should be analyzed separately. Pressures due to these loading can be estimated from Figure 5. and can supplied upon receipt of the appropriate plans and loads.

f. These values apply to the existing soil and to compacted backfill generated from in-situ material. Imported material should be evaluated separately.







FOR $m \leq 0.4$:

$$\sigma_H\left(\frac{H}{Q_L}\right) = \frac{0.20n}{(0.16+n^2)^2}$$

$$P_H = 0.55\,Q_L$$

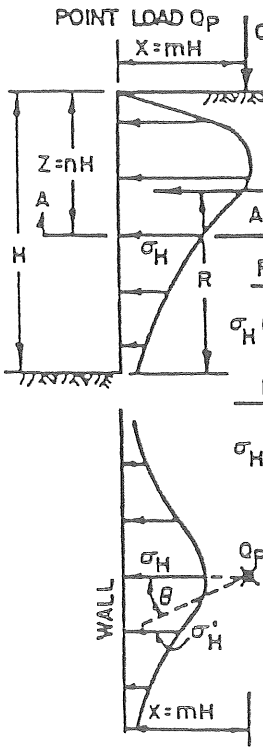
FOR $m > 0.4$:

$$\sigma_H\left(\frac{H}{Q_L}\right) = \frac{1.28\,m^2 n}{(m^2+n^2)^2}$$

PRESSURES FROM LINE LOAD Q_L

(BOUSSINESQ EQUATION MODIFIED BY EXPERIMENT)

Reference: Design Manual
NAVFAC DM-7.2
Figure 11
Page 7.2-74



FOR $m \leq 0.4$:

$$\sigma_H\left(\frac{H^2}{Q_P}\right) = \frac{0.28n^2}{(0.16+n^2)^3}$$

FOR $m > 0.4$:

$$\sigma_H\left(\frac{H^2}{Q_P}\right) = \frac{1.77\,m^2n^2}{(m^2+n^2)^3}$$

$$\sigma_H' = \sigma_H \cos^2(1.1\theta)$$

SECTION A-A

PRESSURES FROM POINT LOAD Q_P

(BOUSSINESQ EQUATION MODIFIED BY EXPERIMENT)

Tharp & Associates Geotechnical Consultants	SURCHARGE PRESSURE DIAGRAM LATERAL SURCHARGE PRESSURE DUE TO ADJACENT VERTICAL LOADS	Figure 5

7.7.2 Backfill

a. Backfill should be placed under engineering control.

b. Highly expansive soils should not be used as backfill.

c. It is recommended that, where feasible, granular backfill be utilized, for a width equal to approximately 1/4 x wall height, and not less than 1.5 feet.

d. The granular backfill should be capped with at least 18 inches of relatively impermeable material.

e. Backfill should be compacted to achieve a minimum 90 percent relative compaction, the compaction standard being obtained in accordance with ASTM: D 1557.

f. Precautions should be taken to ensure that heavy compaction equipment is not used immediately adjacent to walls, so as to prevent undue pressures against, and movement of, the walls.

g. The use of water-stops/impermeable barriers should be considered for any basement construction, and for building stem walls which retain earth.

7.7.3 Backfill Drainage/Subdrains

a. i. Subdrains should be provided in the backfill of the stem walls.

ii. Weepholes or subdrains should be provided in the backfill of free-standing retaining walls. Subdrains are recommended for walls exceeding 4 feet in height of soil retained.

iii. Subdrains should be per Subsections b) to f) below.

b. Subdrains should consist of 4-inch diameter Schedule 40, PVC pipe or equivalent, embedded in approximately 3 ft^3/linear foot of Class 2 Permeable Material or equivalent, with the pipe being 6± inches above the trench bottom; a gradient of 1±% being provided to the pipe and trench bottom; discharging into suitably protected outlets.

c. 3/4-inch down open-graded gravel, enveloped in Supac 5NP geofabric filter or equivalent, may be used instead of the Class 2 Permeable Material.

d. Perforations in subdrains are recommended as follows: 3/8-inch diameter, in 2 rows at the ends of a 120° arc, at 3-inch centers in each row, staggered between rows, placed downward.

e. Subdrains placed behind retaining walls should be approved by the Geotechnical Consultant prior to the placement of fill.

f. An unobstructed outlet should be provided at the lower end of each segment of subdrain. The outlet should consist of an unperforated pipe of the same diameter, connected to the perforated pipe and extended to a protected outlet at a lower elevation, on a continuous gradient of at least 1 percent.

7.7.4 Footings - Retaining Walls

a. Footings should be embedded to minimum depths below lowest adjacent grade, as indicated in Subsection 7.5.

b. Setbacks from tops of slopes should be as indicated in Subsection 7.5.2.

c. The allowable bearing capacity may be taken as indicated in Subsection 7.5.2., subject to stability requirements.

d. If retaining walls are to be situated at the tops of slopes, such walls should reviewed/analyzed for overall slope stability. Setbacks, embedment depths and allowable bearing pressures may need to be modified accordingly.

7.8 Seismicity

Issues related to seismicity are addressed in detail in the Geologic Report Prepared for the Site by Nolan Associates. See Reference. As a minimum, structures should be designed for seismic forces in accordance with UBC Section 2312, for Zone 4.

7.9. Asphalt Concrete Pavement

a. Based upon an estimated R-Value of 21 and the Traffic Indices (TI) indicated, the following tentative pavement sections are recommended for preliminary design purposes.

Location/Pavement Utilization		TI	Asphalt Concrete Surface Course (in)	Aggregate Base Course (in)
i.)	Auto Parking/Driveways	4.0	3	4.5
ii.)	Circulation Drives w/ Infrequent Trucks	4.5	3	6.0
iii.)	Moderate Use Drives w/ Truck Traffic	5.5	3	9.0

b. The actual R-Value should be obtained at the conclusion of mass grading and the tentative pavement sections reviewed at that time. Pavement sections for Traffic Indices other than those presented may be supplied upon request.

c. The subgrade should be compacted to achieve a relative compaction of at least 95 percent through the upper 12 inches.

d. The Aggregate Base should be compacted to achieve a relative compaction of at least 95 percent.

e. Base material should meet the requirements of the Standard Specifications for Public Works Construction (Green Book), or for Class 2 Aggregate Base per Cal Trans. Compaction of subgrade and base course should be in accordance with ASTM D 1557.

7.10 Exterior Concrete Flatwork/Pavement

a. The long-term performance of exterior concrete flatwork/pavement at the site will be influenced by any expansive soils. Positive drainage and maintaining soil moisture at above optimum conditions prior to pouring concrete will help improve the performance of concrete flatwork at the site.

b. Concrete flatwork should be divided into as nearly square panels as possible. Frequent joints should be provided to give articulation to the concrete panels. Landscaping and planters adjacent to concrete flatwork should be designed in such a manner as to direct drainage away from concrete areas to approved outlets.

c. It is assumed that flatwork other than pavement will be subjected only to pedestrian traffic.

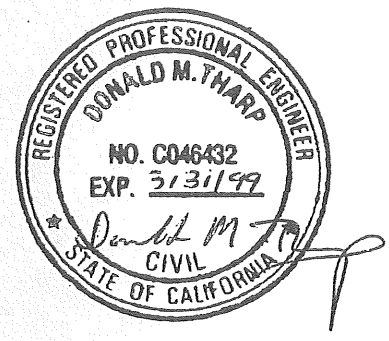
7.11 Subsequent Grading Operations

Prior to the commencement of additional grading operations on-site, including precise grading of building and pavement areas, as well as backfilling of trenches, the Geotechnical Consultant should be notified to provide appropriate recommendations and observation and testing services as required.

It is a pleasure being associated with you on this project. If you have any questions, or if we may be of further assistance, please do not hesitate to contact our office.

Sincerely,

DONALD M. THARP & ASSOCIATES



Donald M. Tharp, PE
Principal Engineer
R.C.E. 46432
Expires 3/31/99

Yvette M. Dumas
Staff Engineer
E.I.T. XE093322

Appendices:	1.	Appendix A	Field Exploration
	2.	Appendix B	Laboratory Testing
	3.	Appendix C	Slope Stability
	4.	Appendix D	Percolation Testing

Attachments:	1.	Plate 1	Boring Location Map

Distribution: (3) Addressee
(1) Bestor Engineering
Attn: Carl Hooper PE

GEOTECHNICAL INVESTIGATION - PRELIMINARY DESIGN PHASE
PROPOSED MIRAVALE III SUBDIVISION
VICENTE ROAD, SOLEDAD, CALIFORNIA

FOR
Mr. Nader Agha
471 Alvarado Street,
Monterey, CA 93940

THARP & ASSOCIATES, INC.
JOB NO. 06-33
AUGUST, 2006

THARP & ASSOCIATES, INC.
SITE ASSESSMENTS • FOUNDATION ENGINEERING • CONSTRUCTION MONITORING

347 SPRECKELS DRIVE • APTOS • CALIFORNIA • 95003 • Tel: (831) 662-8590 Fax: (831) 662-8592

August 29, 2006
Project No. 06-33

Mr. Nader Agha
471 Alvarado Street
Monterey, CA 93940

SUBJECT: **GEOTECHNICAL INVESTIGATION - PRELIMINARY DESIGN PHASE**
Proposed Miravale III Subdivision
Miravale, Soledad, California

REFERENCE: Tharp & Associates, Inc., 1995, Preliminary Soil & Foundation Investigation - EIR Phase, Proposed Miravale Residential Development, Parcels 1,2,3,4,&6 of 19, Survey Page 76,(MS 95-004), Soledad, Monterey County, California, October 19, 1995, Project No. 95-26.

Dear Mr. Agha,

1. INTRODUCTION

1.1 Purpose

a. This report presents the results of our geotechnical investigation for the preliminary design phase of the proposed Miravale III Development, Soledad, California.

b. The purpose of our investigation is to evaluate the proposed development with respect to geotechnical conditions present, and provide preliminary geotechnical design parameters and recommendations for development of the site. Conclusions and recommendations related to site suitability, grading, foundations, pavements, and associated improvements are presented herein.

c. Final grading, structural, and foundation plans are unavailable as of the date of this report. The intention, as we understand it, is to use the findings and recommendations of this report as a basis for developing such plans.

d. We have reviewed the following items in connection with the preparation of this report:

i. Preliminary Plan Set, Phase III, Miravale Subdivision, Soledad, California, Sheets 1 through 3, Sheets 1 and 3 Dated 5/30/06, Sheet 2 Dated 6/23/06.

ii. The referenced geotechnical report.

1.2 Proposed Development

a. Based on our review of the Preliminary Plan Set itemized in 1.d.i. above, and our discussions with you and your Civil Engineer, it is our understanding that the subject project consists of the construction of a residential subdivision, two churches, a commercial development, a golf practice range, a golf course clubhouse and maintenance yard, a 16.25 acre PUD for future development, a 4 acre PUD, a 15.12 acre middle school parcel and the future development area north and west of this parcel. Also included are two detention ponds on a roughly rectangular 285 acre parcel located west of San Vincente Road.

b. Also anticipated is the construction of the attendant utilities, paved drives and parking areas, including the realignment of San Vincente Road, as well as landscape and drainage improvements.

1.3 Scope of Services

The scope of services provided during the course of our investigation included:

a. Review of previous geotechnical reports and maps pertinent to the site.

b. Field exploration consisting of 25 borings drilled to depths of 10 ± to 50 ± feet below existing grade.

c. Percolation testing in 3 locations. Test locations were chosen by the client.

d. Logging and sampling of the borings by our Field Engineer, including the collection of soil samples for laboratory testing.

e. Laboratory testing of soil samples considered representative of subsurface conditions.

f. Geotechnical analyses of field and laboratory data.

g. Assessment of project impacts and recommended mitigation measures.

h. Preparation of a report (10 copies) presenting our findings, conclusions and recommendations.

1.4 Authorization

This investigation, as outlined in our Proposal dated July 21, 2006, was performed in accordance with your written authorization of July 24, 2006.

2. FIELD EXPLORATION PROGRAM

Details of the field exploration, including the Boring Logs, Figures A-3 through A-27, are presented in Appendix A.

3. LABORATORY TESTING PROGRAM

Laboratory testing was performed on relatively undisturbed and bulk samples considered representative of subsurface conditions. Details of the laboratory testing program are presented in Appendix B. Test results are presented on the Boring Logs, Figures A-3 through A-, and in Appendix B.

4. INFILTRATION TESTING

Infiltration testing was performed at three locations on this parcel. Two tests were performed in the location proposed for the north detention pond and one test was performed in the location proposed for the southern detention pond. Test results are presented in subsection 7.3.3..

5. SITE DESCRIPTION

5.1 Location

The project site is located on 285 acres west of San Vincente Road, Soledad, California. The site location is shown on the Location Map, Figure 1.

5.2 Surface Conditions

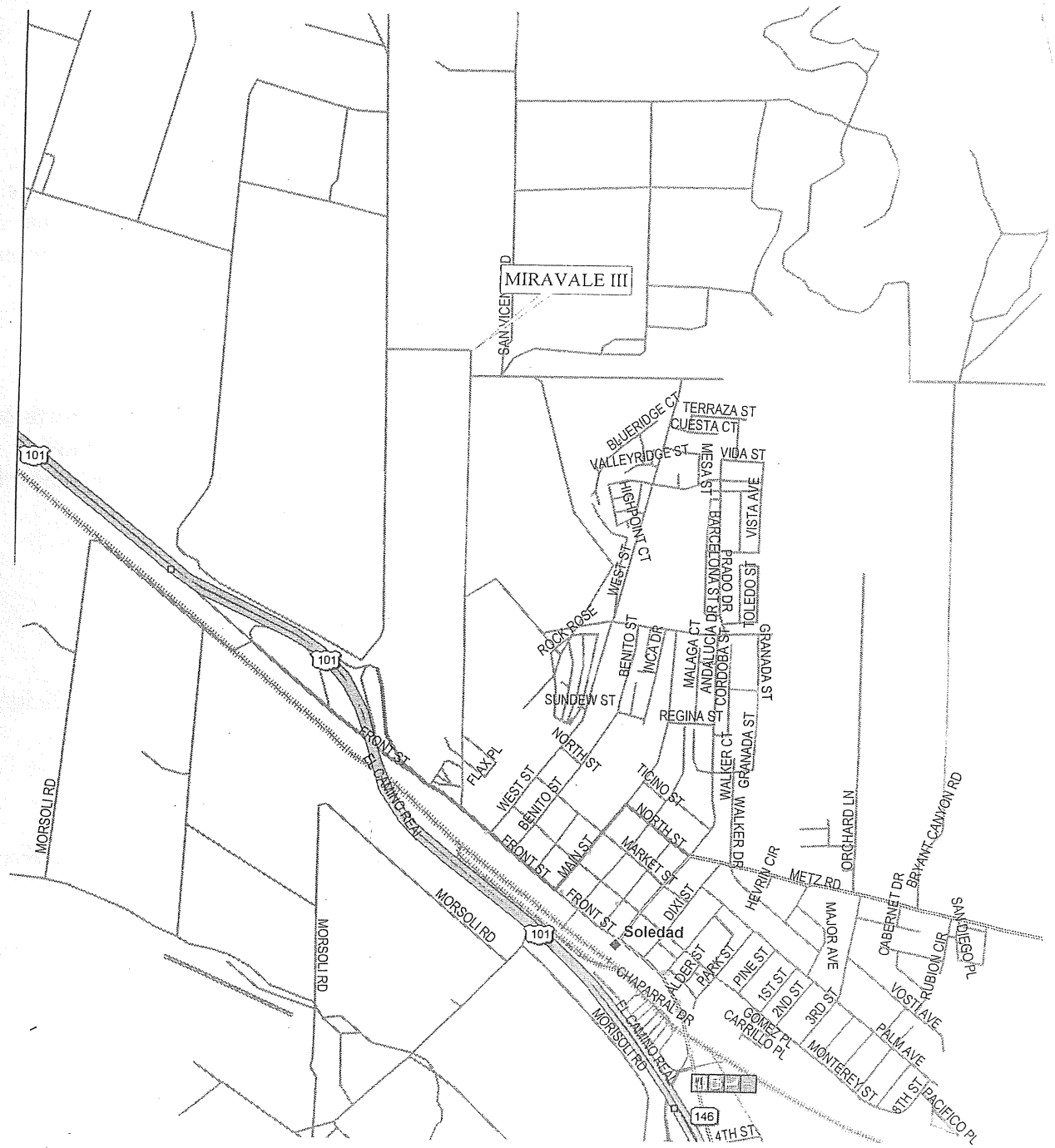
a. The subject property is currently in agricultural use and consists of relatively flat agricultural fields generally sown with row crops.

b. The surface soils are generally composed of dark brown to red brown clayey sand. The surface soils were very loose to medium dense, moist except where irrigated, and slightly to medium plastic at the time of our field exploration.

5.3 Subsurface Conditions

a. The results of our field exploration indicate that the subsurface soils present on the site are relatively consistent.

b. The soils encountered consist of a relatively thick alluvial/colluvial deposit composed of clayey sand with varying amounts of silt and gravel overlying sands and gravels with lesser clay contents. The clayey sands in the upper stratum anticipated to impact the proposed development are generally loose to medium dense, somewhat compressible, and of low expansivity.



Tharp and Associates, Inc. Geotechnical Consultants	**LOCATION MAP** Miravale III Subdivision	Figure 1

The sands and gravels which primarily underlie the southern portions of the site, are generally medium to very dense, considered to be only slightly compressible, and of very low expansivity.

c. Regional groundwater was only encountered in the extreme southern portion of the site in the sand / gravel deposits at a depth of 30 feet in the boring B-3. However, shallow groundwater was encountered perched on the dense clayey sand layers in the central portions of the site. This groundwater was encountered at an average depth of approximately 11 feet and appears to be perched on the denser clayey sand materials encountered at a depth of approximately 20 feet.

d. Complete soil profiles are presented on the Boring Logs, Appendix A, Figures A-3 through A-27. The boring locations are shown on the Boring Location Plan, Figure A-1.

6. GEOTECHNICAL HAZARDS

6.1 General

a. Geotechnical hazards to man made structures at this site include ground shaking, ground rupture, landsliding, liquefaction, lateral spreading, and differential compaction.

b. Ground shaking caused by earthquakes is a complex phenomenon. Structural damage can result from the transmission of earthquake vibrations from the ground into the structure. The intensity of shaking depends on, amongst other items, the proximity of the site to the focal point of the earthquake. Structures built on unconsolidated material generally experience movements of higher amplitude and lower acceleration. In the event of an earthquake, frame and semi-rigid structures with proper seismic parameters incorporated into their design and construction should display only moderate damage. The structure must be designed in accordance with the applicable seismic design parameters outlined in the 1997 Uniform Building Code. See Table I.

Table I. Seismic Design Parameters

		Seismic Coefficient		Near Source Factor		
Soil Profile Type	Seismic Zone Z	C_a	C_v	N_a	N_v	Seismic Source Type
S_d	0.4	0.44 N_a	0.64 N_v	1.0	1.1	B

c. The subject site is generally flat. Landsliding is therefore not expected to present a threat to the proposed development.

d. Liquefaction, lateral spreading and differential compaction tend to occur in loose, unconsolidated, noncohesive soils with shallow groundwater. Groundwater was encountered during our field investigation at approximately 11 feet in Boring B-9, representative of the central portion of the proposed project and at a depth of 30 feet in Boring B-3, representative of the southern portion of the site. To determine the potential for liquefaction to occur at these locations on the subject site, a quantitative liquefaction analysis was performed. See subsection 6.2 below.

5.2 Liquefaction

5.2.1 General

a. Liquefaction tends to occur in loose, poorly graded, sandy and unconsolidated soils below the ground water table. The material underlying the central portion of the proposed project site from approximately 11 to 20 feet (See Boring B-9), and the southern portion of the site from 45 to 50 feet (See Boring B-3) represents the critical configuration for liquefaction analysis as the soils encountered in these areas were generally characteristic of potentially liquefiable soils. The soils are composed of poorly graded sand with trace to some clay.

b. A quantitative liquefaction analysis was therefore performed for subsurface conditions corresponding to encountered during our field exploration. The conditions analyzed are considered representative of the critical subsurface conditions in these areas of the site. The subsurface profiles used in our analysis correspond to those encountered in Borings B-9 and B-3.

5.2.2 Methodology

a. A quantitative liquefaction analysis was performed using empirical predictions of earthquake-induced liquefaction potential. The analysis is based on a comparison of the in situ cyclic stress ratio (CSR) with that historically present in areas experiencing liquefaction for a given earthquake magnitude and recorded soil grain size distribution and penetration resistance (as expressed by SPT blows\ft). The analysis is based on the method presented within the paper by R.B. Seed, K.O. Cetin, R.E.S. Moss, A.M. Kammerer, J. Wu, J.M. Pestana, M.F. Riemer, R.B. Sancio, J.D. Bray, R.E. Kayen, A. Faris, Recent Advances In Soil Liquefaction Engineering: A Unified And Consistent Framework, Dated April 30, 2003.

b. Our analysis was performed assuming a peak ground acceleration of 0.344g. This value was determined based on the USGS/CGS Probabilistic Seismic Hazards Assessment (PSHA) Model, 2002 (revised April 2003) which represents a peak ground acceleration with a 10% probability of being exceeded in 50 years. A magnitude of 7.9 on the San Andreas Fault Zone was used in the analysis based on the same model.

c. Grain size analyses were performed on three samples considered representative of the potentially liquefiable soils encountered. Results of our grain size analyses are presented in Appendix B, Figures B-16 through B-18.

5.2.3 Results and Discussion

a. The results of our liquefaction analyses indicate that under the conditions anticipated during the design seismic event, an approximately 9 foot thick layer of the poorly graded sand with trace to some clay underlying the central portion of the site at depths of approximately 11 to 20 feet are potentially liquefiable. Surface deformations of approximately 3 inches may be assumed to occur as a result.

b. The results of our liquefaction analyses further indicate that under the conditions anticipated during the design seismic event, an approximately 6 foot thick layer of the poorly graded sand with trace clay underlying the southern portion of the site at depths of approximately 45 to 50 feet are potentially liquefiable. Surface deformations of approximately 2 inches may be assumed to occur as a result.

7. CONCLUSIONS AND RECOMMENDATIONS

7.1 General

a. Based on the results of our review of the Preliminary Plan Set, we consider that development of the site is geotechnically compatible with the known geotechnical conditions, provided the recommendations of this report are incorporated into the project plans and specifications.

b. The recommendations included here-in are provided for preliminary design and planning of grading and construction with regard to the aforementioned Preliminary Plan Set. These recommendations are subject to review when detailed final grading plans become available, during grading when actual conditions are exposed, and after grading when the as-graded conditions are known.

c. The Primary geotechnical conditions affecting the proposed development are:

i. The presence of potentially liquefiable soils underlying the central and southern portions of the site. It is anticipated that rigid mat or waffle slab foundations will be necessary in order to mitigate the potential adverse impacts of these materials within structural areas.

ii. The collapsible and somewhat compressible nature of the near-surface alluvial/colluvial deposits underlying the valley floor areas of the site. It is anticipated that overexcavation and recompaction of these materials will be necessary in order to mitigate the potential adverse impacts of these materials within structural areas.

iii. The stability of the existing and proposed cut and fill slopes.

iv. The presence of relatively shallow perched water which may impact utility installation and or excavation of the retention / detention ponds.

d. General geotechnical considerations applicable to site grading and preliminary recommendations for the proposed construction are discussed below:

7.2 Grading and Earthwork

7.2.1 General

Grading should be accomplished in accordance with the recommendations presented herein, and the grading requirements of the County of Monterey. Care should be exercised during removal operations adjacent to existing structures including roadways, storm drains, and residences, including their adjoining slopes.

7.2.2 Site Preparation

a. Prior to grading, the areas to be developed for structures, pavements and other improvements, should be stripped of any vegetation and cleared of any surface or subsurface obstructions, including any existing foundations, utility lines, basements, septic tanks, pavements, stockpiled fills, and miscellaneous debris.

b. Although none were observed during the investigation, abandoned wells underground facilities such as cesspools, septic tanks, utilities, pipes or underground storage tanks may exist at the site. Should any such facilities be discovered prior to or during grading, recommendations will be given for their safe removal and proper backfilling of resulting voids. Removal of underground tanks is subject to state law as regulated by County or City Health and/or Fire Department agencies. If storage tanks containing hazardous or unknown substances are encountered, the proper authorities must be notified prior to any attempts at removing such objects.

c. Holes resulting from the removal of buried obstructions that extend below finished site grades should be backfilled with compacted engineered fill.

7.2.3 Preparation of Existing Soils

a. All undocumented fill soils and debris should be removed in their entirety.

b. The extent and depths of removal should be determined by the Geotechnical Consultant during grading operations.

7.2.4 Pad Preparation

a. Prior to placing fill the exposed surface should be scarified to a depth of 6 to 8 inches, moisture conditioned, and compacted.

b. Due to the fact that the depth of reworking will be dependent of the final foundation dimensions, depths of embedment, slab and pavement grades etc., our office should be provided with a copy of the final, approved plans prior to the commencement of earthwork operations. The depths of reworking required are subject to review by the Geotechnical Consultant during grading when subsurface conditions become exposed.

c. Settlements may need to be evaluated should the planned grades result in the ground surface being raised 3 or more feet above the existing grades in the Valley Floor. Should this occur, some additional reworking of existing materials may be required.

d. The depths of overexcavation should be reviewed by the Geotechnical Consultant during the actual construction. Any surface or subsurface obstructions, or questionable material encountered during grading, should be brought immediately to the attention of the Geotechnical Consultant for proper processing as required.

7.2.5 Subgrade Below Waffle or Mat Foundation Elements

Beneath all waffle or mat foundation elements, the loose clayey sand should be reworked to a depth where the dense clayey sand is encountered or to a depth sufficient to provide a zone of compacted, engineered fill, extending to a depth equal to twice the **width** of the stiffening elements or edge sections measured from the bottom of the element or edge section, whichever is greater. It is anticipated that this will equate to approximately 3 to 4 feet below existing grade. The exposed surface at the base of the excavation should then be scarified, moisture conditioned, and compacted to a minimum of 90% relative compaction. The material which was removed should then be replaced as compacted engineered fill per the recommendations presented in Subsection 7.2.9.. This zone of reworking should extend a minimum of 5 feet laterally beyond the building footprint.

7.2.6 Subgrade Below Slabs-On-Grade and Pavements

Beneath other concrete slabs-on-grade and/or pavements, the loose surficial clayey sand should be reworked to a depth where the dense clayey sand is encountered or to a depth sufficient to provide a zone of compacted, engineered fill, extending a minimum of 2 feet below the bottom of the baserock, or 3 feet below existing grade, whichever is less. The exposed surface should then be scarified, moisture conditioned, and compacted to a minimum of 90% relative compaction. The material which was removed may then be replaced as compacted engineered fill per the recommendations presented in Subsection 7.2.9. This zone of reworking shall extend a minimum of 2 feet laterally beyond the slab and pavement footprint.

7.2.7 Oversize Rock/Rock Disposal

a. Based on the subsurface exploration and observations of natural exposures, some oversized rock may be generated during grading, particularly in areas of deeper cuts performed during construction of the southern detention pond.

b. Structural fills should not contain material over 12 inches in maximum dimension and nothing larger than 4 inches should be placed within 1 foot of finish grade.

c. Oversized rock should not be used in the fill areas within the influence zone of structural improvements.

7.2.8 Fill Material

a. The on-site colluvial/alluvial soils are considered suitable for use as compacted fill, provided they are free of vegetation, and organic matter exceeding 3%, debris and oversized material (greater than 12 inches). In addition, no oversized material greater than 4 inches should be placed within 1 foot of any footings or slabs.

b. Imported fill, if required, should be of expansivity not greater than medium and be free of vegetation, and organic mater exceeding 3%, debris and oversized material (greater than 12 inches).

7.2.9 Compaction and Method of Fill Placement

a. With the exception of the upper 12 inches of subgrade beneath paved areas, all fill soils should be placed in 6 to 8 inch thick loosse lifts, brought to near-optimum moisture content and compacted to a minimum 90% relative compaction. In the upper 6 inches of the subgrade beneath paved areas, all fill soils should be placed in 6 to 8 inch thick lifts, brought to near-optimum moisture content and compacted to a minimum of 95% relative compaction.

b. Base course beneath pavements and slabs-on-grade should be placed in 6 to 8 inch thick loose lifts, brought to near-optimum moisture content and compacted to a minimum 95% relative compaction.

c. When placing fill in horizontal lifts over areas sloping steeper than 5:1 (horizontal:vertical), keys and benches should be excavated into adjacent slope as shown on the corresponding typical detail in Figure. Keying and benching should be sufficient to provide at least 10 feet wide benches with a minimum 4 feet vertically between benches within competent natural ground or engineered fill. No fill should be placed in an area subsequent to keying and benching until the area has been observed by the geotechnical consultant. Material generated by the benching operation should be moved sufficiently away from the bench area to allow for the recommended observation of the bench prior to the placement of fill.

d. Fill should be tested for compliance with the recommended relative compaction and moisture conditions. Field density testing should conform to ASTM 1556, 2922, and/or 2937. Tests should be taken at approximately every 2 vertical feet and for every 1000 yd^3 of fill placed. Base course below paved areas should be tested a minimum of every 150 linear feet of pavement. All fill found not to be in conformance with the grading recommendations should be removed or otherwise handled as recommended by the Geotechnical Consultant.

7.2.10 Shrinkage and Subsidence/Settlement

a. Based on analyses of the subsurface soil conditions, the on-site alluvial soils can be estimated to shrink on the order of 10% to 15% for initial planning purposes. These factors do not include clearing/grubbing/stripping volumes, or losses due to handling. These factors can be reviewed periodically during grading, based on actual surveyed and volumetric data, if requested.

b. Subsidence due to the placement of fill and the movement of construction equipment is expected to be 1 inch. This is an estimate, subject to confirmation during grading.

c. Post-grading total and differential settlements under static loading are expected to be within tolerable limits. Additional vertical movements due to the footings loads re expected to be no greater than ½ inch for the anticipated spacings and loads. These preliminary estimates should be reviewed by the Geotechnical Consultant when foundation plans and loads for the proposed structures are available.

d. Under seismic loading, liquefaction induced settlements of 3 ± and 2± inches should be anticipated beneath the central and southern portions of the site respectively.

7.2.11 Excavating Conditions

a. We anticipate that the excavation of on site materials may be accomplished with standard earthmoving or trenching equipment.

b. Regional ground water was not encountered at a depth expected to affect grading operations. However, perched water was encountered at depths of 11 ± feet beneath the central portions of the site. This may result in wet conditions, particularly after periods of above normal precipitation, if the depth of the excavations performed in connection with the construction of retention/detention ponds approaches the elevation of the perched water tables encountered.

7.2.12 Cut and Fill Slopes

a. Fill Slopes

i. All fill slopes should be constructed with engineered fill meeting the minimum density requirements of this report and have a gradient no steeper than 2:1 (horizontal:vertical). Fill slopes should not exceed 15 feet in vertical height unless specifically reviewed by the Geotechnical Consultant. Where the vertical height exceeds 15 feet, intermediate benches must be provided. These benches should be at least 6 feet wide and sloped to control surface drainage. A lined ditch should be used on each bench.

ii. Fill slopes shall be benched and keyed into the native slopes by providing a base keyway whose minimum width is 10 feet and which is sloped negatively at least 2% back into the slope. The depth of keyways will vary depending the materials encountered, but all locations shall be at least 2 feet in firm material. This keyway should be combined with intermediate benching as required. Refer to Figure 2 for general details.

iii. If a slope is to be placed above a cut slope, the toe of the fill slope should be set back at least 8 feet horizontally from the top of the cut slope. A lateral surface drain should be placed in the area between the cut and fill slopes.

iv. Fill slopes should either be over built laterally a minimum of at least 3 feet and cut back to a firm and unyielding surface or back rolled to achieve same at no greater than 4 foot vertical intervals. Feathering of fill over the tops of slopes should not be permitted.

b. Cut Slopes

i. Slopes cut in connection with construction of the detention ponds may be constructed as follows:

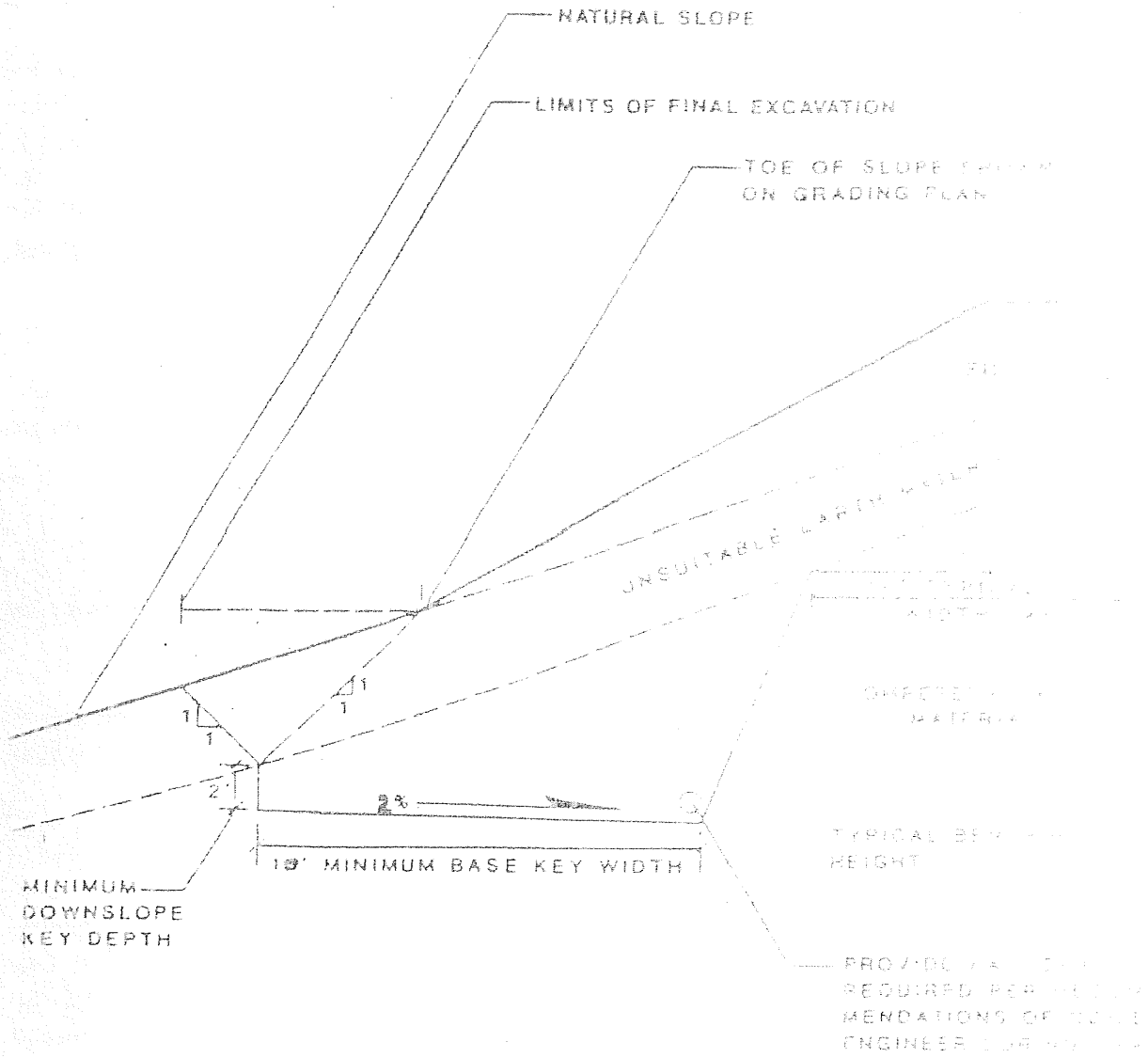
- Cut slopes less than 20 feet high should not exceed a slope inclination of 2:1 (horizontal:vertical).

- Cut slopes between 20 and 30 feet high should not exceed a slope inclination of 2.5:1 (horizontal:vertical).

ii. Cut slopes exceeding a height of 20 feet should be reviewed by the Geotechnical Consultant on an individual basis.

c. General

i. In order to maintain stable slopes at the recommended gradients, it is important that any seepage forces and accompanying hydrostatic pressure encountered be relieved by adequate drainage. Drainage facilities may include subdrains, gravel blankets, rockfill surface trenches or horizontally drilled drains. Configurations and type of drainage will be determined by the Geotechnical Consultant during the grading operations.



WHERE NATURAL SLOPE GRADIENT IS
BENCHING IS NOT NECESSARY. HOWEVER,
NOT TO BE PLACED ON COMPRESSIBLE OR
ABLE MATERIAL.

Tharp & Associates, Inc. Geotechnical Consultants	Miravale III Subdivision FILL OVER NATIVE SLOPE - TYPICAL KEY AND BENCH DETAIL	Figure

ii. The surfaces of all cut and fill slopes should be worked to reduce erosion. This work, as a minimum, should include track rolling of the fill slopes and effective planting of all slopes. The protection of the slopes should be installed as soon as practicable so that a sufficient growth will be established prior to inclement weather conditions. It is vital that no slope be left standing through a winter season without erosion control measures having been provided.

iii. The above recommended gradients do not preclude periodic maintenance of the slopes, as minor sloughing and erosion may take place.

7.2.13 Expansive Soils

a. The expansion potential of the proposed pad subgrade soils is anticipated to be low.

b. Additional expansion tests should be performed at the completion of grading in order to verify that post grading expansivities conform to tested values.

7.2.14 Sulfate Content

Based on the results of our laboratory testing and on experience in the vicinity we anticipate the sulfate content of the subsurface soils to be less than 0.2 percent. Type II cement is therefore considered adequate for the concrete in contact with the on-site soil. This should be verified by additional sulfate content testing performed at the completion of grading.

7.2.15 Utility Trenches

a. Bedding material should consist of sand with an SE not less than 30, which may then be jetted. (Jetting may not be effective if adequate drainage is not available.)

b. Existing soils may be utilized for trench backfill, provided they are free of organic materials ans rocks over 6 inches in diameter.

c. Backfill of all exterior and interior trenches should be compacted to achieve a relative compaction of not less than 90 percent, the compaction standard being obtained per ASTM: D1557. Care should be taken not to damage utility lines.

d. Alternatively, backfill may be jetted if sand of an SE not less than 30 is used. (Jetting may not be effective if adequate drainage is not available.)

e. Trenches should be capped with 1.5± feet of relatively impermeable soil.

f. Jetting in trenches adjacent to buildings or slopes should be carried out **only** under the specific approval of the Geotechnical Consultant.

g. Trenches should be located so as not to impair the bearing capacity or cause settlement under foundations. As a guide, trenches subparallel to foundations should be clear of a 45 degree plane extending outward and downward from the edge of the foundations.

h. The walls of temporary construction trenches are expected to be stable when excavated nearly vertical, with only minor sloughing, provided the total depth does not exceed 4 feet. Shoring of the excavation walls or flattening of slopes may be required, if greater depths are necessary.

i. All work associated with trench shoring must conform to the State of California Safety Code.

7.3 Subsurface and Surface Drainage

7.3.1 Subsurface Drainage

a. It is anticipated that subdrains will be required in the bottom of any canyon fills, in the keyways of all fill slopes and behind all retaining walls.

b. Based on the results of our field exploration, it is considered likely that during wet winter months moisture may perch on the dense clayey sands and accumulate in the looser surficial soils. We therefore recommend that mitigation measures be provided to prevent moisture infiltration beneath the residences. If the residences are to have raised wood floors, foundation drains should be constructed around the residences. If the residences are to be constructed with slab-on-grade floors, the concrete used should be a waterproof mix with a water/cement ratio not exceeding 0.45 and incorporating a water-proofing admixture such as zypex or approved equivalent.

c. If foundation drains are installed they should extend to the depth the lowest foundation element and consist of 4-inch diameter Schedule 40, perforated PVC pipe or equivalent, embedded in approximately 3 ft^3/linear foot of 3/8 inch to 3/4 inch, clean crushed gravel, enveloped in **Mirafi Filter weave 300** or approved equivalent. The pipe should be 4± inches above the trench bottom; a gradient of 1±% being provided to the pipe and trench bottom; discharging into suitably protected outlets. A typical detail is shown in Figure 3.

d. Perforations in foundation drains are recommended as follows: 3/8-inch diameter, in 2 rows at the ends of a 120 degree arc, at 3-inch centers in each row, staggered between rows, placed downward.

e. The perforated section of the foundation drains should extend around the entire footprint of the structure. An unobstructed outlet should be provided at the lower end of the subdrain. The outlet should consist of an unperforated pipe of the same diameter, connected to the perforated pipe and extended to a protected outlet at a lower elevation on a continuous gradient of at least 1 percent. Subdrains should be approved by the Geotechnical Consultant prior to the placement of backfill.

f. Final determination of the need for drainage devices should be made by the Geotechnical consultant upon receipt of the final plans and in the field during grading.

7.3.2 Surface Drainage/Drainage Device Maintenance

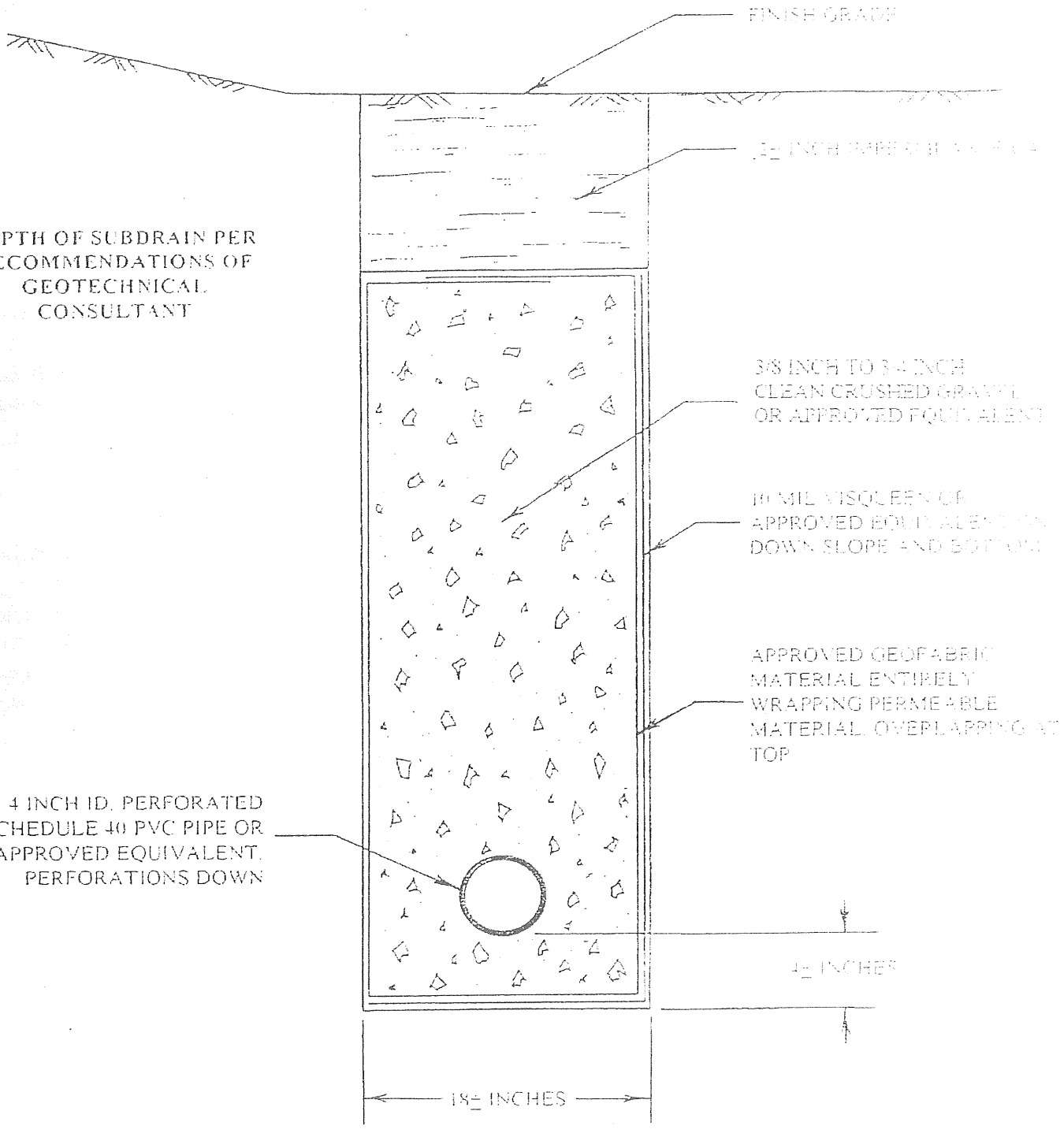
a. Pad drainage should be at a gradient of a minimum of 2% away from foundation areas.

b. Drainage patterns established at the time of grading should be maintained throughout the life of the project

c. Graded berms, swales, area drains, terrace drains and brow ditches are designed to carry surface water from pad and slope areas and should not be blocked or destroyed.

d. Water should not be allowed to pond in pad areas. Roof drains should outlet to proper drainage devices.

e. Sources of uncontrolled water, such as leaky water pipes, drains, etc., should be repaired.



Tharp & Associates, Inc. Geotechnical Consultants	Miravale III Subdivision RECOMMENDED FOUNDATION DRAIN CONFIGURATION - TYPICAL DETAIL	Figure 3

f. The natural surface drainage features discharging onto the subject site should be collected in lined channels and discharged to suitable locations.

7.3.3. Detention/Retention Ponds

a. The results of our field exploration and laboratory testing indicate that the material in the area of the proposed retention/detention ponds are composed of alluvial/colluvial deposits of sand derived from decomposed granitic bedrock with varying clay contents. Two, 8-inch diameter holes were drilled to depths of 6 and 20 feet in two locations near the proposed South Pond, and two holes were drilled to a depth of 5 feet near the location of the proposed North Pond. A perforated pipe was installed in each of the holes and the holes were presoaked 24 hours in advance of the testing. Infiltration tests were performed in each hole after pre-soaking was complete.

b. South Pond

Based on the results of our infiltration testing, and our experience with similar materials in the area, an infiltration rate of more than 60 minutes per inch should be assumed for the near-surface clayey sands in the area of the south pond. An infiltration rate of 3 minutes per inch may be assumed for the sand / gravel materials above the water table in the location of the South Pond. These are preliminary design values which should be verified at the conclusion of the rough grading when subsurface conditions become exposed.

c. North Pond

Based on the results of our infiltration testing, and our experience with similar materials in the area, an infiltration rate of 60 minutes per inch should be assumed for the near-surface clayey sands in the area of the north pond. These are preliminary design values which should be verified at the conclusion of the rough grading when subsurface conditions become exposed.

7.4 Foundations

7.4.1 General

a. The foundation recommendations contained herein are for the anticipated one and two story, wood-frame residential buildings to be founded on the mass-graded pad areas. Foundation recommendations for the proposed churches, commercial development, golf course clubhouse, middle school, and other structures to be located on the portions of the site designated as future development areas should be provided on a case-by-case basis in connection with the selection of specific building envelopes for these structures. Further geotechnical investigation may be required to develop foundation recommendations for these areas.

b. The purposed structures, of the type anticipated, located on the mass-graded lots, may be founded on rigid mat or waffle slab foundations. The criteria presented below should be adopted. These foundations should consist of a "grade beam waffle", slab-on-grade, or similar construction combined with flexible utility connections.

c. At the time we prepared this report, the grading plans and foundation details had not been completed and the locations of the structures had not been finalized. We request an opportunity to review these items during the design stages to determine if supplemental recommendations will be required.

7.4.2 Mat Foundations

a. Residential structures should be founded on a rigid, reinforced concrete, mat foundation composed of a "grade beam waffle", slab-on-grade, or similar construction combined with flexible utility connections.

b. The mat foundation system should be designed to possess sufficient stiffness so as to allow the foundation and structure to act as a rigid body should the soil settle 3 $\pm$ inches beneath all or any portion of the slab as a result of deformation during the design seismic event.

c. A modulus of subgrade reaction, k_c, = 300 kcf may be assumed for design purposes.

d. The use of a"waffle" type slab with prestressed thickened sections or post-tensioned slabs on grade may be considered for use on this project.

e. The mat foundations used on this project should be combined with flexible utility connections in order to prevent breakage should the foundation tilt at a result of soil settlement.

f. This foundation system has the advantage that should the design seismic event produce significant soil deformation beneath the structure, the resulting tilting should produce only moderate damage and may be repaired by pressure grouting or other leveling procedures. If desired, precast grout channels may be incorporated into the slab design to make the leveling process, should it become necessary, easier.

g. Such a rigid mat foundation system should be supported on compacted, engineered fill placed per subsection 7.2.5..

h. Minimum embedment depth for the thickened edge sections of a rigid mat foundation should be 18 inches, although structural considerations may govern.

i. The allowable bearing capacity for thickened edge sections may be determined from the following equation:

$$q_{all} = 1000D + 350B$$

where:

q_{all} = allowable bearing capacity (lb/ft^2)

D = Depth of embedment (ft) measured from the lowest adjacent grade.

B = minimum footing width (ft)

j. Allowable soil bearing capacity used for such a system should not exceed 3000 lbs/ft^2.

7.5 Slabs-On-Grade

a. Concrete floor slabs may be founded on reworked existing soils or compacted fill. The subgrade should be proof-rolled just prior to construction to provide a firm, relatively unyielding surface, especially if the surface has been loosened by the passage of construction traffic.

b. If a floor covering that would be critically affected by moisture is to be used, a 10-mil plastic vapor barrier is recommended. This sheeting should be covered with 2 inches of sand.

c. The expansivity of the on-site soils is generally considered to be Low, subject to confirmation at the conclusion of mass grading.

d. The subgrade should be pre-soaked to 4 percentage points above optimum, or 120% optimum, whichever is greater: to a 1 foot depth.

e. Slabs should be underlain by a minimum 4 inches of granular base.

f. Steel should be provided in slabs-on-grade per the recommendations of the Structural Engineer.

g. The utilization of post-tensioned concrete slabs may be considered in lieu of conventional concrete slabs. There are inherent advantages with this system, especially the characteristics that the propagation or widening of cracks.

7.6 Retaining Structures

7.6.1 Lateral Earth Pressures

a. The lateral earth pressures presented in Table II are recommended for the design of retaining structures with a gravel blanket and backfill soils of expansivity not higher than Medium. Should the slope behind the retaining walls be other than level or 2:1 horizontal to vertical, supplemental design criteria will be provided for the active earth or at-rest pressures for the particular slope angle.

Table II. Lateral Earth Pressures

Type	Soil Profile	Soil Pressure (psf/ft)	
		Unrestrained Wall	Rigidly Supported Wall
Active Pressure	Level 2:1	40 60	- -
At-Rest Pressure	Level 2:1	- -	70 110
Passive Pressure (ignore upper 1 ft)	Level 2:1	400 200	200 100

b. Friction coefficient - 0.35, between soil and rough concrete.

c. Where both friction and the passive resistance are utilized for sliding resistance, either of the values indicated should be reduced by one-third.

d. These are ultimate values, no factor of safety has been applied.

e. Pressure due to any surcharge loads from adjacent footings, traffic, etc., should be analyzed separately. Pressures due to these loading can be supplied upon receipt of the appropriate plans and loads. Refer to Figure 4.

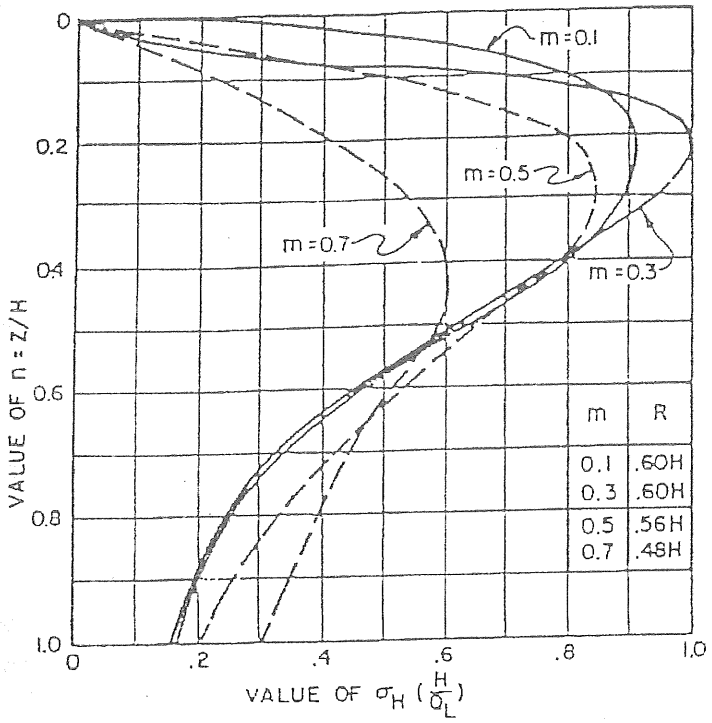
f. These values apply to the existing soil and to compacted backfill generated from in-situ material. Imported material should be evaluated separately.

7.6.2 Backfill

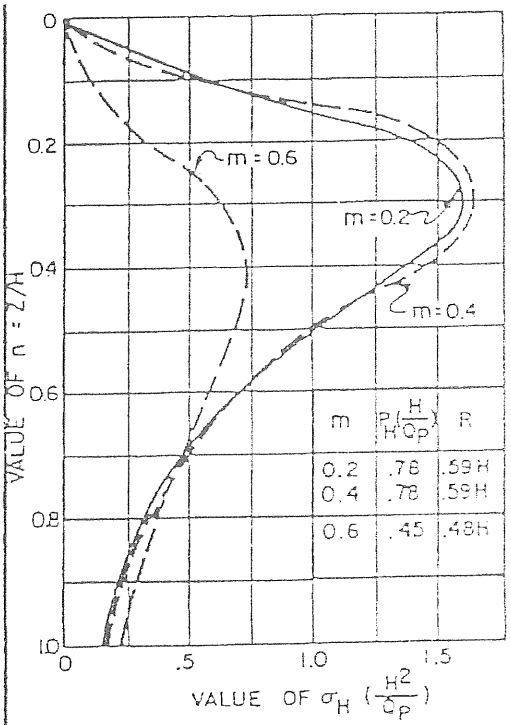
a. Backfill should be placed under engineering control.

b. Highly expansive soils should not be used as backfill.

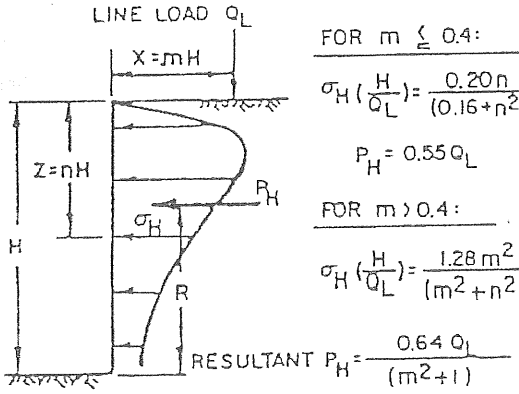
c. it is recommended that, where feasible, granular backfill be utilized, for a width equal to approximately 1/4x the wall height, and not less than 1.5 feet.



m	R
0.1	.60H
0.3	.60H
0.5	.56H
0.7	.48H



m	$P\left(\frac{H}{H^2 Q_P}\right)$	R
0.2	.78	.59H
0.4	.78	.59H
0.6	.45	.48H



FOR $m \leq 0.4$:

$$\sigma_H \left(\frac{H}{Q_L}\right) = \frac{0.20n}{(0.16+n^2)^2}$$

$$P_H = 0.55 Q_L$$

FOR $m > 0.4$:

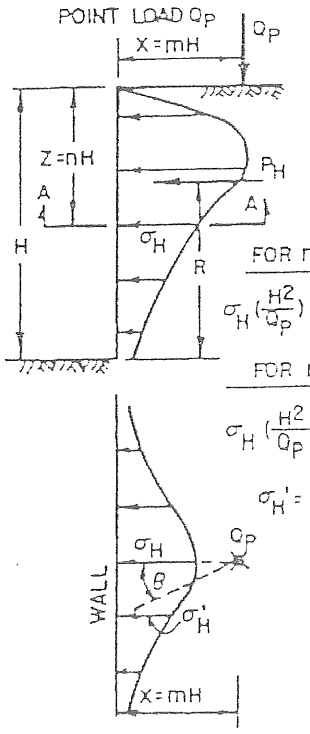
$$\sigma_H \left(\frac{H}{Q_L}\right) = \frac{1.28 m^2 n}{(m^2+n^2)^2}$$

RESULTANT $P_H = \frac{0.64 Q_L}{(m^2+1)}$

PRESSURES FROM LINE LOAD Q_L

(BOUSSINESQ EQUATION MODIFIED BY EXPERIMENT)

Reference: Design Manual
NAVFAC DM-7.2
Figure 11
Page 7.2-74



FOR $m \leq 0.4$:

$$\sigma_H \left(\frac{H^2}{Q_P}\right) = \frac{0.28 n^2}{(0.16+n^2)^3}$$

FOR $m > 0.4$:

$$\sigma_H \left(\frac{H^2}{Q_P}\right) = \frac{1.77 m^2 n^2}{(m^2+n^2)^3}$$

$$\sigma_H' = \sigma_H \cos^2(1.1\theta)$$

SECTION A-A

PRESSURES FROM POINT LOAD Q_P

(BOUSSINESQ EQUATION MODIFIED BY EXPERIMENT)

Tharp & Associates, Inc. Geotechnical Consultants	Miravale III Subdivision	Figure
	SURCHARGE PRESSURE DIAGRAM- LATERAL SURCHARGE PRESSURE DUE TO ADJACENT VERTICAL LOADS	4

d. The granular backfill should be capped with at least 18 inches of relatively impermeable material.

e. Backfill should be compacted to achieve a minimum 90 percent relative compaction, the compaction standard being obtained in accordance with ASTM D-1557.

f. Precautions should be taken to ensure that heavy compaction equipment is not used immediately adjacent to walls, so as to prevent undue pressures against, and movement of, the walls.

g. The use of water-stops/impermeable barriers and appropriate waterproofing should be considered for any basement construction, and for building walls which retain earth.

7.6.3 Backfill Drainage/Subdrains

a. i. Backdrains should be provided in the backfill of the stem walls.

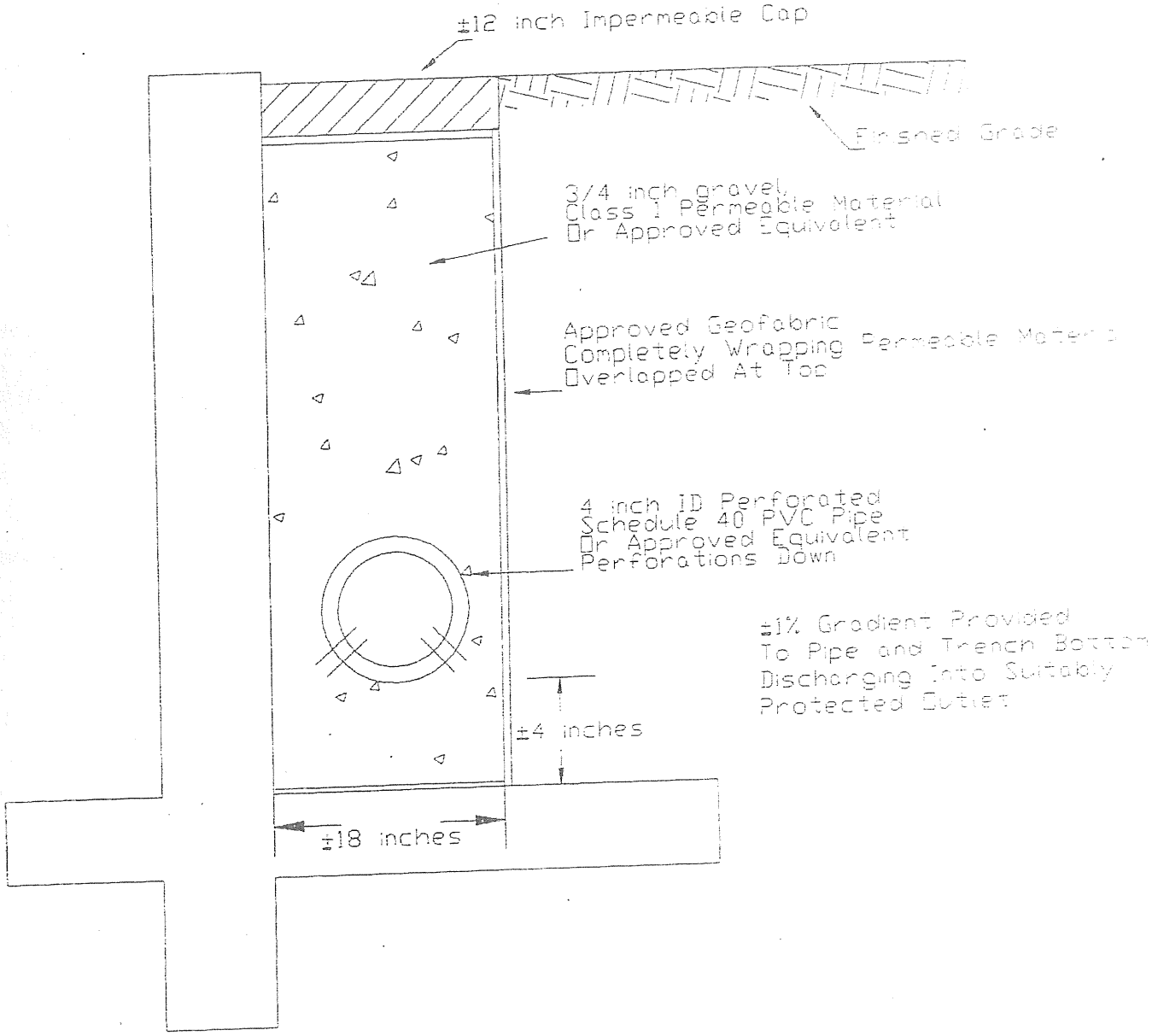
ii. Weepholes or subdrains should be provided in the backfill of free-standing retaining walls. Subdrains are recommended for walls exceeding 4 feet in height of soil retained.

iii. Backdrains should be per Subsections b) to f) below.

b. Backdrains should consist of 4-inch diameter Schedule 40, PVC pipe or equivalent, embedded in approximately 3 ft^3/linear foot of 3/8 inch to 3/4 inch, clean crushed gravel, enveloped in **Mirafi Filter weave 300** or approved equivalent. The pipe should be 4± inches above the trench bottom; a gradient of 1±% being provided to the pipe and trench bottom; discharging into suitably protected outlets. See Figure 5 for a standard detail.

d. Perforations in backdrains are recommended as follows: 3/8-inch diameter, in 2 rows at the ends of a 120° arc, at 3-inch centers in each row, staggered between rows, placed downward.

e. Backdrains placed behind retaining walls should be approved by the Geotechnical Consultant prior to the placement of fill.



Tharp & Associates, Inc. Geotechnical Consultants	Miravale III Subdivision	Figure
	TYPICAL BACKDRAIN CONFIGURATION - DETAIL	5

f. An unobstructed outlet should be provided at the lower end of each segment of subdrain. The outlet should consist of an unperforated pipe of the same diameter, connected to the perforated pipe and extended to a protected outlet at a lower elevation, on a continuous gradient of at least 1 percent.

7.6.4 Footings - Retaining Walls

a. Minimum embedment depth for retaining wall footings should be 24 inches, although structural considerations may govern.

b. If retaining walls are to be situated at or near the tops of slopes, such walls should be reviewed/analyzed on a case by case basis by the geotechnical consultant for both internal and overall slope stability. Setbacks, embedment depths and allowable bearing pressures may need to be modified accordingly.

c. The allowable bearing capacity may be taken as indicated in the equation presented in subparagraph7.4.2.a., subject to stability requirements.

7.7 Asphalt Concrete Pavement

a. The results of our R-Value testing, presented in Appendix B, Table B-3, may be used for preliminary design purposes.

b. The actual R-Value should be obtained at the conclusion of mass grading and the tentative pavement sections reviewed at that time.

c. The subgrade should be compacted to achieve a relative compaction of at least 95 percent through the upper 12 inches.

. The Aggregate Base should be compacted to achieve a relative compaction of at least 95 percent.

e. Base material should meet the requirements of the Standard Specifications for Public Works Construction (Green Book), or for Class 2 Aggregate Base per Cal Trans. Compaction of subgrade and base course should be in accordance with ASTM D 1557.

7.8 Exterior Concrete Flatwork/Pavement

a. The long-term performance of exterior concrete flatwork/pavement at the site will be influenced by any expansive soils. Positive drainage and maintaining soil moisture at above optimum conditions prior to pouring concrete will help improve the performance of concrete flatwork at the site.

b. Concrete flatwork should be divided into as nearly square panels as possible. Frequent joints should be provided to give articulation to the concrete panels. Landscaping and planters adjacent to concrete flatwork should be designed in such a manner as to direct drainage away from concrete areas to approved outlets.

c. It is assumed that flatwork other than pavement will be subjected only to pedestrian traffic.

7.9 Subsequent Grading Operations

Prior to the commencement of additional grading of building and pavement areas, as well as backfilling trenches, the Geotechnical Consultant should be notified to provide appropriate recommendations and observation and testing servicesas required.

7. LIMITATIONS

a. Our investigation was performed in accordance with the usual and current standards of the profession, as they relate to this and similar localities. No other warranty, expressed or implied, is provided as to the conclusions and professional advice presented in this report.

b. The samples taken and tested, and the observations made, are considered to be representative of the site; however, soil and geologic conditions can vary significantly between sample locations.

c. As in most projects, conditions revealed during construction excavation may be at variance with preliminary findings. If this occurs, the changed conditions must be evaluated by the Project Geotechnical Consultant and the Geologist, and revised recommendations be provided as required.

d. This report is issued with the understanding that it is the responsibility of the Owner, or of his Representative, to ensure that the information and recommendations contained herein are brought to the attention of the Architect and Engineer for the project and incorporated into the plans, and that it is ensured that the Contractor and Subcontractors implement such recommendations in the field.

e. This firm does not practice or consult in the field of safety engineering. We do not direct the Contractor's operations, and we are not responsible for other than our own personnel on the site; therefore, the safety of others is the responsibility of the Contractor. The Contractor should notify the Owner if he considers any of the recommended actions presented herein to be unsafe.

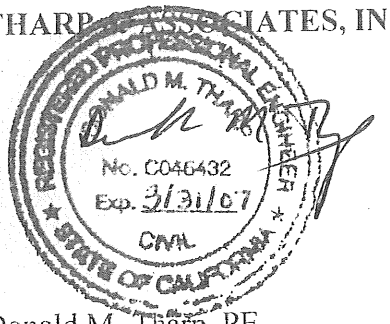
f. The findings of this report are considered valid as of the present date. However, changes in the conditions of a site can occur with the passage of time, whether they be due to natural events or to human activities on this or adjacent sites. In addition, changes in applicable or appropriate codes and standards may occur, whether they result from legislation or the broadening of knowledge.

g. Accordingly, this report may become invalidated wholly or partially by changes outside our control. Therefore, this report is subject to review and revision as changed conditions are identified.

It is a pleasure being associated with you on this project. If you have any questions, or if we may be of further assistance, please do not hesitate to contact our office.

Sincerely,

THARP & ASSOCIATES, INC.



Donald M. Tharp, PE
Principal Engineer
R.C.E. 46432
Expires 3/31/07

Appendices
1. Appendix A Field Exploration
2. Appendix B Laboratory Testing

Distribution:
(8) Addressee
a. Denise Duffy Associates
(1) Bestor Engineers

• Engineering Geology
• Hydrogeology
• GIS Services

NOLAN ASSOCIATES

GEOLOGIC HAZARDS INVESTIGATION UPDATE

Miravale III Subdivision
Martines Property: APNs 257-081-005, -026, -027, and -032
Section 16: APNs 417-151-082, -083, -084, and -085
Monterey County, California

Prepared for:
Mr. Nader Agha
449 Alvarado St.
Monterey, CA 93940

Prepared by:
Nolan Associates
1509 Seabright Ave, Ste A2
Santa Cruz, CA 95062

Job No. 06045
September 27, 2006

• Engineering Geology
• Hydrogeology
• GIS Services

NOLAN ASSOCIATES

September 27, 2006 Job No. 06045

Mr. Nader Agha
449 Alvarado St.
Monterey, CA 93940

SUBJECT: GEOLOGIC HAZARDS INVESTIGATION UPDATE

PROJECT: Miravale III Subdivision
Martines Property: APNs 257-081-005, -026, -027, and -032
Section 16: APNs 417-151-082, -083, -084, and -085
Monterey County, California

Dear Mr. Agha:

We have completed our geologic hazards investigation addressing the above-referenced subdivision. This report presents our findings and engineering geologic recommendations for the project.

This report is intended to update and extend our previous geologic report to cover current geologic conditions for the proposed project. We evaluated the potential effects of geologic hazards posed to the project, as shown on the Miravale III Subdivision Tentative Map by Bestor Engineers, dated 8/7/06. We developed engineering geologic recommendations to reduce the effects of these hazards to acceptable levels.

Our recommendations are intended principally to lower the risks posed to habitable structures by geologic hazards. This report in no way implies that the subject property will not be subject to earthquake shaking, landsliding, faulting or other acts of nature. Such events could damage the property and affect the property's value or its viability in ways other than damage to habitable structures. We have not attempted to investigate or mitigate all such risks and we do not warrant the project against them. We would be happy to discuss such risks with you, at your request.

We recommend that you make this report available to the design professionals assisting you on this project. Please contact us if you have any questions.

Sincerely,
Nolan Associates

Jeffrey M. Nolan
Principal Geologist
C.E.G. #2247

1509 Seabright Ave. Suite A2 Santa Cruz, California Tel. 831-423-7006 Fax 831-423-7008 Email: na@nolangeology.com

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NOTE: This report should not be considered complete without all listed figures and plates.

GEOLOGIC HAZARDS INVESTIGATION
Miravale III Subdivision
Martines Property: APNs 257-081-005, -026, -027, and -032
Section 16: APNs 417-151-082, -083, -084, and -085
Monterey County, California

INTRODUCTION

This report presents the results of our updated geologic hazards investigation for the proposed Miravale III subdivision located north of the City of Soledad, Monterey County, California (Figure 1, Topographic Index Map).

The proposed subdivision is to include 2,600 single-family homes, 1,600 multi-family units, 300 senior housing units, a 120-room hotel, 250,000 square feet of retail space, and an 18-hole golf course. San Vicente Road divides the subdivision site into two portions: Section 16 lies to the east, and the Martines properties lie to the west. The subject properties are presently being used for agricultural production.

PURPOSE OF INVESTIGATION

The purpose of our investigation was to evaluate geologic hazards on the subject properties to provide for prudent development of residential housing and associated facilities. Our investigation focused on the planned development indicated on a Tentative Map set by Bestor Engineers, dated August 7, 2006. Where particular geologic hazards were found to present greater than acceptable risks to the project, we developed recommendations to reduce these risks. Our geologic hazards analysis was based on an assumed 50-year design life span for the project.

SCOPE OF SERVICES

Work performed during this study included:

1. A review of geologic literature and maps pertinent to the project site.

2. Examination and interpretation of stereo pair vertical aerial photographs to assess the recent geologic history of the project site.

3. Review of the geologic report produced by Nolan Associates in 1995 for the San Vicente Vineyards Property (report dated August 1995).

4. Field reconnaissance and geologic mapping around the project site, completed on September 14, 2006.

5. Analysis and interpretation of the geologic data and preparation of this report.

REGIONAL GEOLOGY

The project site is situated on the eastern flank of the Salinas Valley and is bounded to the east by the foothills of the Gabilan Range, a granitic massif that forms a portion of the Coast Ranges Physiographic Province of California. The Coast Ranges Province consists of a series of coastal mountain chains paralleling the pronounced northwest-southeast structural grain of central California geology.

The Gabilan Range and adjacent portions of the Salinas Valley are underlain by a large, northwest-trending, fault bounded, elongate prism of granitic and metamorphic basement rocks, known collectively as the Salinian Block. The Salinian Block is separated from contrasting basement rock types to the northeast and the southwest by the San Andreas and the Sur-Nacimiento fault systems, respectively (Figure 2, Regional Geologic Map). Overlying the granitic basement rocks on the Salinian Block is a sequence of dominantly marine sediments of Paleocene to Pliocene age and non-marine sediments of Pliocene to Pleistocene age, all of which show evidence of uplift and deformation.

In the study area, alluvial deposits of Quaternary age are the only sedimentary rocks exposed at the surface. These deposits are in depositional contact with granitic basement exposed in the foothills of the Gabilan Range. Older sedimentary units crop out to the south and west in the Salinas valley and may occur at depth in the vicinity of the subject properties. These units include marine shales of the Monterey Formation, of Miocene age, marine sandstones and siltstones of the Pancho Rico Formation, of Pliocene age, and heterogeneous non-marine sediments of the Paso Robles Formation, of Plio-Pleistocene age.

REGIONAL FAULTING

Throughout the late Cenozoic Era (approximately the past 25 million years), central California has been dominated by tectonic forces associated with lateral or "transform" motion between the North American and Pacific crustal plates, producing a complex system of northwest-trending faults (the San Andreas Fault system). These faults show horizontal displacements measured in tens or hundreds of miles. Uplift, deformation, erosion, and subsequent re-deposition of sedimentary rocks have been driven primarily by the northwest-directed, horizontal (strike-slip) movement of the plates and the associated southwest to northeast-oriented compressive stress. The region continues to be characterized by moderate to high rates of tectonic and seismic activity (Figure 3, Regional Seismicity Map).

Active or potentially active faults which may impact the site (Cao et al., 2003) include the Reliz-Rinconada, San Andreas, San Gregorio-Hosgri, and Monterey Bay-Tularcitos fault zones (Figure 3). These faults are discussed in the following sections. Earthquake epicenters associated with these faults are shown on Figure 3. Smaller north and northwest trending faults are also present in the region, particularly in the Santa Lucia Mountains, on the western side of the Salinas Valley (Figure 2). These faults are not generally associated with significant historic seismicity, do not appear to have been a source of any large earthquakes in historic times, and are not considered to

be significant potential sources of strong seismic shaking at the subject site, based on current knowledge.

Reliz, Rinconada, and King City Faults

The Reliz, Rinconada and King City faults, as mapped by Rosenberg (2001) are roughly parallel to the San Andreas fault zone and skirt the eastern foothills of the Santa Lucia Mountains for almost the entire length of the Salinas Valley. These faults have been considered to be one structure by some researchers (Dibblee, 1976; Peterson et al., 1996). The alignment and total length of the fault zone cited by different researchers therefore depends on whether the Reliz and King City faults are included with the Rinconada fault system as a single seismogenic structure or are considered separately. The State of California (Peterson et al., 1996; Cao et al., 2003) gave a length of 190 +/- 16 km for the Rinconada fault, which includes the King City and Reliz faults. We consider the Reliz and Riconada faults to be linked and will refer to them here collectively as the Rinconada fault. The Rinconada fault passes about six miles west of the proposed development.

The King City Fault (Ross and Brabb, 1973) extends northwestward from the northern-most mapped portion of the Reliz fault along the southwest side of the Salinas Valley, separating the tectonically elevated Sierra de Salinas and other portions of the Santa Lucia Mountains from the Salinas valley (Jennings, 1994). Since the Santa Lucias are considered to be Plio-Pleistocene in age, this hypothesis would have much of the vertical component of displacement on this fault occurring by mid-Pleistocene. To our knowledge, the King City fault is not exposed at the ground surface and no geologic evidence for Quaternary activity on the King City fault has been observed. Tinsley and Dohrenwned (1979) cite an exposure of the Reliz (King City) fault in the Greenfield area that is covered by unfaulted stream terrace deposits estimated to be 100,000 years old. Greene (1977) found no evidence for activity on any offshore faults that might connect with the King City fault. Ross and Brabb (1973), some of the early proponents for the King City fault, considered it to be older than Miocene. We are of the opinion that the King City fault is not a significant seismogenic source for this project.

Geologic evidence suggests that the Rinconada fault is a high angle, right-lateral, strike-slip fault which has experienced cumulative offset of up to 40 miles since the Miocene age (Dibblee, 1976). No historic earthquakes have been reported on this fault, though it is considered active (Peterson et al., 1996; Cao et al., 2003). Hart and Bryant (1999) did not consider the Rinconada fault to show sufficient evidence of Holocene activity to be included in the state's Alquist-Priolo active fault mapping program, although this does not preclude youthful activity on the fault. Mapping along the fault by Hart and Bryant (1999) revealed offset drainages, anomalous ridges, and other geomorphic features that could result from active faulting, but he did not observe any offset or disturbance of Holocene deposits across the trace of the fault. Cao et al. (2003) has calculated that the Rinconada fault is capable of generating a magnitude 7.5 earthquake. Peterson et al. (1996) cite a 1764-year recurrence interval for a magnitude 7.3 earthquake.

San Andreas Fault

The San Andreas fault is active and represents the major seismic hazard in northern California (Jennings, 1994; Buchanan-Banks et al., 1978). The main trace of the San Andreas fault trends northwest-southeast and extends over 700 miles from the Gulf of California through the Coast Ranges to Point Arena, where the fault extends offshore.

Geologic evidence suggests that the San Andreas fault has experienced right-lateral, strike-slip movement throughout the latter portion of Cenozoic time, with cumulative offset of hundreds of miles. Surface rupture during historical earthquakes, fault creep, and historical seismicity confirm that the San Andreas fault and its branches, the Hayward, Calaveras, and San Gregorio faults, are all active today.

Historic earthquakes along the San Andreas fault and its eastern branches have caused significant seismic shaking around Monterey County. There were large earthquakes along the San Andreas fault in 1838, 1865 and 1890 (Sykes and Nishenko, 1984). The most intense earthquake to have affected this area was the great San Francisco earthquake of April 18, 1906. This 8.3 magnitude temblor caused severe seismic shaking and structural damage to many buildings in Northern California, including Santa Cruz, Santa Clara, San Mateo, and Monterey Counties. (Lawson, 1908). The recent magnitude 7.1 Loma Prieta earthquake (October 17, 1989) caused seismic shaking as intense as that of 1906 in parts of the Santa Cruz Mountains.

Geologists have recognized that the San Andreas fault system can be divided into segments with "characteristic" earthquakes of different magnitudes and recurrence intervals (Working Group On California Earthquake Probabilities, 1988 and 1990;WGONCEP, 1996). The Creeping segment, located about 15 miles northeast of the properties, is the closest segment of the San Andreas fault zone to the site. It is marked by continuous creep at a rate of 34 +/- 5 mm/year (Cao et al, 2003). Since the creep rate is about the same as the long term creep rate for the San Andreas fault, the central creeping segment is not considered to be a source for large magnitude earthquakes (WGCEP, 1988). Cao et al. (2003) give a characteristic earthquake of magnitude 6.2 for this segment. There have been a few historical events in this size range spatially associated with this segment of the San Andreas fault (Figure 3).

San Gregorio-Hosgri Fault Zone

The San Gregorio fault, as mapped by Greene (1977), and Weber et al. (1995) skirts the coastline of Santa Cruz County northward from Monterey Bay, and trends onshore at Point Año Nuevo and at Half Moon Bay. Northward from Half Moon Bay, it passes offshore again, to connect with the San Andreas fault near Bolinas. Southward, the San Gregorio fault passes through Big Sur to connect with the Hosgri fault in south-central California (Dickinson et al., 2005). Based on it presumed connection with the Hosgri fault, the San Gregorio fault zone has a length of about 250 miles.

The landward extensions of the San Gregorio fault at Point Año Nuevo and Half Moon Bay show evidence of late Pleistocene and Holocene displacement (Weber and Cotton, 1981; Simpson et al. 1999). Although stratigraphic offsets at Año Nuevo indicate a history of horizontal and

vertical displacements, the San Gregorio-Hosgri fault is a right-lateral strike slip fault with 97 miles of dextral displacement during its history (Dickinson et al., 2005).

In addition to stratigraphic evidence for Holocene activity, the historical seismicity in the region is partially attributed to the San Gregorio fault. Due to inaccuracies of epicenter locations, even the magnitude 6+ earthquakes of 1926, tentatively assigned to the Monterey Bay fault zone, may have actually occurred on the San Gregorio fault (Greene, 1977).

Cao et al. (2003) divided the San Gregorio-Hosgri fault into San Gregorio North, San Gregorio South and Hosgri segments. The project site is about equidistant from the San Gregorio South and Hosgri segments. The San Gregorio South segment has been assigned a slip rate that results in a magnitude 7.0 characteristic earthquake (Cao et al., 2003), with an effective recurrence interval of 411 years (Peterson et al., 1996). The characteristic earthquake on the Hosgri segment is a magnitude 7.5 (Cao et al., 2003) with a recurrence interval of 646 years (Peterson et al., 1996).

Monterey Bay-Tularcitos Fault Zone

The Monterey Bay fault zone is 6 to 9 miles wide, about 25 miles long, and consists of many en échelon faults identified during shipboard seismic reflection surveys (Greene, 1977). The fault zone trends northwest-southeast and intersects the coast in the vicinity of Seaside and Ford Ord. At this point, several onshore fault traces have been tentatively correlated with offshore traces in the heart of the Monterey Bay fault zone (Greene, 1977; Clark et al., 1974; Burkland and Associates, 1975). These onshore faults are, from southwest to northeast, the Tularcitos-Navy, Berwick Canyon, Chupines, Seaside, and Ord Terrace faults. It must be emphasized that these correlations between onshore and offshore portions of the Monterey Bay-Tularcitos fault zone are only tentative; for example, no concrete geologic evidence for connecting the Navy and Tularcitos faults under the Carmel Valley alluvium has been observed, nor has a direct connection between these two faults and any offshore trace been found. Rosenberg and Clark (1995) consider the Monterey Bay and Tularcitos faults connected; this correlation has been adopted by the State of California (Peterson et al., 1996; Cao et al., 2003).

Outcrop evidence indicates a variety of strike-slip and dip-slip movement associated with onshore and offshore traces. Earthquake studies suggest the Monterey Bay-Tularcitos fault zone is predominantly right-lateral, strike-slip in character (Greene, 1977). Stratigraphically, both offshore and onshore fault traces in this zone have displaced Quaternary beds and, therefore, are considered potentially active (Buchanan-Banks et al., 1978). One offshore trace, which aligns with the trend of the Navy fault, has displaced Holocene beds and is therefore active by definition (Buchanan-Banks et al., 1978).

Seismically, the Monterey Bay-Tularcitos fault zone may be historically active. The largest historical earthquakes *tentatively* located in the Monterey Bay-Tularcitos fault zone are two events, estimated at 6.2 on the Richter Scale, in October 1926 (Greene, 1977). Because of possible inaccuracies in locating the epicenter of these earthquakes, it is possible that they actually occurred on the nearby San Gregorio fault zone (Greene, 1977).

Another earthquake in April 1890 might be attributed to the Monterey Bay-Tularcitos fault zone (Burkland and Associates, 1975); this earthquake had an estimated Modified Mercalli Intensity of VII (Table 2) for Monterey County on a whole.

The WGONCEP (1996) assigned a magnitude 7.1 earthquake with an effective recurrence interval of 2,600 years to the Monterey Bay-Tularcitos fault zone, based on Holocene offshore offsets. Petersen et al. (1996) have a similar earthquake magnitude, but for a recurrence interval of 2,841 years. Their earthquake is based on a composite slip rate of 0.5 millimeters per year (after Rosenberg and Clark, 1995). Cao et al. (2003) assigned a magnitude 7.3 characteristic earthquake to this fault.

SITE DESCRIPTION

Topography

The subject properties are located on broad, gently sloping alluvial fans at the foot of the western slope of the Gabilan Range on the east side of the Salinas Valley. The easternmost portion of the San Vicente Vineyard property extends onto the foothills of the Gabilan range (Figure 1 and Plate 1). The alluvial fans abut flat lying Salinas River fluvial deposits southwest of the site (Figure 1). Elevations at the site range from 200 to 680 feet above sea level. The land to the east of the property is more rugged, ridge-and-valley topography that rises rapidly to elevations greater than 2000 feet. Surface slopes on the alluvial portion of the subject parcels are approximately 5 to 8% gradient. Steep slopes on the eastern portion of the Section 16 property approach 70% gradient, but more commonly fall in the range of 30% to 45%.

Drainage

Drainage of surface water in the vicinity of the proposed sites generally occurs by overland sheet flow towards shallow drainage courses on the subject property (Plate 1). The drainages are ephemeral and it is unlikely that substantial surface flow occurs except during periods of high rainfall. Hydrophilic vegetation on a portion of Section 16 (Plate 1) indicates a locally elevated groundwater level, probably perched on relatively less impermeable alluvial strata. A seasonal spring is present near the northeast corner of Section 16 (Plate 1). This spring was not active at the time of our site visit. We were told by a local farmer that the opening around the spring had caved in several years ago. We did not observe surface flow or standing water anywhere on the site, except within artificially-constructed reservoir ponds (Plate 1).

Grading

Aside from agriculture-related plowing, grading activities at the property have been limited. Fill supports San Vicente Road along the southeast boundary of the Martinez property: this fill slope is up to 12 feet high, and shows evidence of accelerated erosion. Fill has also been placed around two water reservoirs on the site. The tentative map (Bestor Engineers, 2006) indicates that these fills are to be removed as part of project grading.

Minor cuts and fills are associated with unpaved roadways traversing the properties. We did not find any cuts or fills exceeding 5 feet in height, or about 1 ½:1 (horizontal:vertical) in slope. Project grading, as shown on the tentative map (Bestor Engineers, 2006) will remove these roadways and the associated cuts and fills.

Grading associated with construction of two large water tanks near the southeast corner of Section 16 in 2005 produced cuts of up to 30 feet in height, at gradients of about 2:1 (horizontal:vertical), in weathered granite and alluvial fan material. Our understanding is that the material excavated from this area was exported offsite.

Earth Materials

Our geologic mapping for the subject property is depicted on Plate 1. The most recent regional-scale geologic mapping around the project site was completed by Rosenberg (2001), depicted on Figure 4. Our site specific mapping differed from the regional mapping presented by Rosenberg (2001), which was prepared for the entire County of Monterey. It is not unusual for larger scale, site specific mapping to identify features or conditions that were not apparent when preparing a small scale, regional map.

Specifically, Rosenberg (2001) identified areas underlain by undifferentiated flood plain deposits on the southeastern portion of the property (Figure 4). Our aerial photo analysis and geologic mapping at the site indicate that the area mapped as flood plain deposits on the subject property is part of the alluvial fan sequence. The stream channel associated with the flood plain deposits is distributory, in keeping with an alluvial fan environment. Please refer to Plate 1 for the discussion of site geology.

The mountainous east and northeast part of Section 16 is underlain by the Cretaceous Granodiorite of Gloria Road (Kgdg), part of the granitic massif that comprises the Gabilan Range (Plate 1). Much of the area underlain by granodiorite is covered by a weathering mantle of soil derived from decomposed granite. These soils are described in the soils section, below. A few isolated granodiorite outcrops were found on steeper slopes, hill tops and in recent cuts for a pair of water towers on Section 16. The hill surfaces appear roughly terraced: this morphology is inferred to reflect jointing in the underlying granodiorite. We also mapped inferred granodiorite outcrops surrounded by alluvium in the north and south central portions of the property (Plate 1). These outcrops coincide with local topographic highs observed on older aerial photographs that would not have been formed by normal alluvial deposition and are therefore interpreted as bedrock highs.

The remainder of the property is underlain by Quaternary alluvial fans which onlap onto the eastern flank of the granodiorite. Rosenberg (2001) subdivided the alluvial fans into Middle Pleistocene (Qfpm), Late Pleistocene (Qfpl), and Holocene (Qhf) units (Figure 4). We did not differentiate the fans on the subject property by age. We have numbered the fans Qaf1 through Qaf3 to distinguish individual fan surfaces. We found exposures of fan material in cuts for driveways, reservoirs and water tanks around the site, consisting of moderately-sorted sands and silts with abundant subrounded to subangular granodiorite pebbles and cobbles. The fan surfaces are generally convex and slope southeastward into the center of the Salinas valley.

The subsurface information obtained for the subject properties as part of the geotechnical investigation included borings up to 51.5 feet in depth (Tharp, 1995; Tharp, 2006). None of the borings drilled out in the deep alluvium areas appear to have encountered granitic rocks. Therefore, the thickness of the Quaternary sediments at the project site, depicted on cross sections A-A' and B-B' (Plate 2) are estimates only.

Soils

At the project site, thin soils mantle slopes underlain by granodiorite, and thicker tilled soils occupy flatter areas. Rosenberg (2001) produced a soils map of Monterey County, based on the U.S. Department of Agriculture soil survey (2006). Figure 5 depicts soil units across the project site. Table 1 lists these soil units.

Because soils are generally derived from in-situ weathering of the underlying earth materials, the distribution of soil types (Figure 5) generally correlates with the distribution of geologic units (Figure 4). Areas underlain by granodiorite bedrock on sloping terrain are generally mantled with Vista coarse sandy loam and rock outcrops. Arroyo Seco, Chualar, Gloria and Placentia soils overlie alluvial fan deposits. Salinas and Hanford soils tend to overlie flood plain deposits. The engineering properties of the site soils are summarized in Appendix C

Table 1: Soil Units

Source: Rosenberg, 2001; USDA, 2006

AsA	ARROYO SECO GRAVELLY SANDY LOAM, 0 TO 2 PERCENT SLOPES
AsB	ARROYO SECO GRAVELLY SANDY LOAM, 2 TO 5 PERCENT SLOPES
AvB	ARROYO SECO GRAVELLY LOAM, 2 TO 5 PERCENT SLOPES
CbA	CHUALAR LOAM, 0 TO 2 PERCENT SLOPES
CbB	CHUALAR LOAM, 2 TO 5 PERCENT SLOPES
GhC	GLORIA SANDY LOAM, 2 TO 9 PERCENT SLOPES
GhD	GLORIA SANDY LOAM, 9 TO 15 PERCENT SLOPES
HbB	HANFORD GRAVELLY SANDY LOAM, 0 TO 5 PERCENT SLOPES
PnA	PLACENTIA SANDY LOAM, 0 TO 2 PERCENT SLOPES
PnC	PLACENTIA SANDY LOAM, 2 TO 9 PERCENT SLOPES
SbA	SALINAS CLAY LOAM, 0 TO 2 PERCENT SLOPES
VaE	VISTA COARSE SANDY LOAM, 15 TO 30 PERCENT SLOPES
VaG	VISTA COARSE SANDY LOAM, 30 TO 75 PERCENT SLOPES
Vb	VISTA-ROCK OUTCROP COMPLEX

Faulting

There are 32 faults of known or suspected Quaternary age activity within a one hundred mile radius of the site (Bryant, 2005). These faults are summarized in Table 2. The nearest mapped fault considered to be potentially active is the Reliz fault, part of the Rinconada fault zone, located approximately 4.6 miles southwest of the site (Rosenberg, 2001). Other active faults of significance to the project include the San Andreas fault, located about 12 miles northeast of the project site, the Monterey Bay-Tularcitos fault, located about 12 miles southeast of the site, and the San Gregorio-Hosgri fault, located about 29 miles southwest of the site.

There are many faults located within the Santa Lucia Mountains west of the subject property. Bryant (2005) depicts these faults as Late Quaternary in age, in agreement with the Plio-Pleistocene age of the Santa Lucia range. With the exception of the Tularcitos fault, these faults are not considered active seismic sources by the State of California (Cao et al., 2003), although some slip that has occurred on the northern San Gregorio fault in the past may have been partitioned to these faults (Clark and Rosenberg, 1999).

There are no mapped faults depicted on or adjacent to the subject properties by any of the published geologic maps reviewed for this study. We reviewed five sets of stereographic aerial photos spanning the time period of 1937 to 2003. We observed no evidence for tonal or topographic lineaments that would indicate the presence of faulting on the subject properties.

Table 2: Faults Within 100-Mile Radius of the Site
Grouped according to known or suspected age of most recent movement
Faults with Historic Movement: San Andreas, Calaveras, Nunez, Greenville, Los Positas, Hayward
Faults with Holocene Movement (known or suspected): Ortigalita, Verona, Pleasanton, Tres Pinos, Hosgri, Monterey Bay-Tularcitos, Los Osos, San Simeon, San Juan, Quien Sabe, Corral Hollow-Carnegie, Sargent, San Gregorio
Faults with Late Quaternary Movement (known or suspected): Rinconada, Reliz, Cambria, San Joaquin, Midway, Zayante-Vergeles, Oceanic, Southern San Luis Range, West Huasna, Pine Rock, Williams, Cascade, Monte Vista-Shannon

GEOLOGIC HAZARDS

The following section summarizes geologic hazards with respect to the proposed development. We have included discussions of seismic shaking, landsliding, flooding, liquefaction, soil shrink-swell, and embankment dam failure hazards. In our opinion, other geologic hazards are not likely to affect the project site. Recommendations for mitigating geologic hazards to acceptable levels are presented in the following section. Acceptable risk levels attributable to geologic hazards are defined in Appendix B.

Seismic Shaking Hazard

Seismic shaking at the subject site may be intense during the next major earthquake along one of the local fault systems. A common measure of the intensity of ground shaking is the Modified Mercalli Intensity Scale (Table 3), a subjective measure of the effect of ground shaking on man, man-made structures, and the earth's surface. Intensity varies with distance from the causative fault, but can also vary greatly with local geologic setting. Lawson et al. (1908) lists a Mercalli Intensity of about VI to VII for the site as a result of the 1906 earthquake, although it should be emphasized that this estimate is based on a small number of field observations in an area sparsely populated in 1906. Stover et al. (1990) reported a Mercalli Intensity of VI for the 1989 Loma Prieta Earthquake (Table 3).

We have estimated expected deterministic seismic shaking intensities for the site. A deterministic assessment considers only the effects of the largest ground motion that can be expected at a given site, regardless of how likely it is to occur within the typical 50-year design life of a single family residence.

Table 3: Modified Mercalli Intensity Scale

The modified Mercalli scale measures the intensity of ground shaking as determined from observations of an earthquake's effect on people, structures, and the Earth's surface. This scale assigns to an earthquake event a Roman numeral from I to XII as follows:

I	Not felt by people, except rarely under especially favorable circumstances.
II	Felt indoors only by persons at rest, especially on upper floors. Some hanging objects may swing.
III	Felt indoors by several. Hanging objects may swing slightly. Vibration like passing of light trucks. Duration estimated. May not be recognized as an earthquake.
IV	Felt indoors by many, outdoors by few. Hanging objects swing. Vibration like passing of heavy trucks; or sensation of a jolt like a heavy ball striking the walls. Standing automobiles rock. Windows, dishes, doors rattle. Wooden walls and frame may creak.
V	Felt indoors and outdoors by nearly everyone; direction estimated. Sleepers wakened. Liquids disturbed, some spilled. Small unstable objects displaced or upset; some dishes and glassware broken. Doors swing; shutters, pictures move. Pendulum clocks stop, start, change rate. Swaying of tall trees and poles sometimes noticed.
VI	Felt by all. Damage slight. Many frightened and run outdoors. Persons walk unsteadily. Windows, dishes, glassware broken. Knickknacks and books fall off shelves; pictures off walls. Furniture moved or overturned. Weak plaster and masonry cracked.
VII	Difficult to stand. Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary buildings; considerable in badly designed or poorly built buildings. Noticed by drivers of automobiles. Hanging objects quiver. Furniture broken. Weak chimneys broken. Damage to masonry; fall of plaster, loose bricks, stones, tiles, and unbraced parapets. Small slides and caving in along sand or gravel banks. Large bells ring.
VIII	People frightened. Damage slight in specially designed structures; considerable in ordinary substantial buildings, partial collapse; great in poorly built structures. Steering of automobiles affected. Damage or partial collapse to some masonry and stucco. Failure of some chimneys, factory stacks, monuments, towers, elevated tanks. Frame houses moved on foundations if not bolted down; loose panel walls thrown out. Decayed pilings broken off. Branches broken from trees. Changes in flow or temperature of springs and wells. Cracks in wet ground and on steep slopes.
IX	General panic. Damage considerable in specially designed structures; great in substantial buildings, with some collapse. General damage to foundations; frame structures, if not bolted, shifted off foundations and thrown out of plumb. Serious damage to reservoirs. Underground pipes broken. Conspicuous cracks in ground; liquefaction.
X	Most masonry and frame structures destroyed with their foundations. Some well-built wooden structures and bridges destroyed. Serious damage to dams, dikes, embankments. Landslides on river banks and steep slopes considerable. Water splashed onto banks of canals, rivers, lakes. Sand and mud shifted horizontally on beaches and flat land. Rails bent slightly.
XI	Few, if any masonry structures remain standing. Bridges destroyed. Broad fissures in ground; earth slumps and landslides widespread. Underground pipelines completely out of service. Rails bent greatly.
XII	Damage nearly total. Waves seen on ground surfaces. Large rock masses displaced. Lines of sight and level distorted. Objects thrown upward into the air.

For comparison, we have also included the results of two probabilistic seismic shaking assessments covering the project site (Rosenberg. 2001; Cao et al., 2003). A probabilistic seismic analysis differs from a deterministic analysis in that it evaluates the probability for shaking of a certain intensity to occur at a particular site within a given time frame (50 years for residential development). Because these values were not directly calculated by us using a complete set of site-specific parameters, these values should be considered Sample Prescribed Parameter Values (CGS, 1997).

The intensity of seismic ground shaking is typically characterized as the peak acceleration that a point on the ground experiences during the shaking. Acceleration is measured as a proportion of the acceleration of the Earth's gravity, g.

Deterministic Seismic Shaking Analysis

For the purpose of evaluating deterministic peak ground accelerations for the site, we have considered the faults listed in Table 4 as potential seismic sources. While other faults in this region may be active, their potential contribution to seismic hazards at the site is overshadowed by these closer and/or faults.

Table 4: Distances and Directions to Local Active Faults

Fault	Distance from site (km)	Distance from site (miles)	Direction from site
Rinconada	7.4	4.6	Southwest
San Andreas	18.5	11.6	Northeast
Monterey Bay-Tularcitos	18.7	11.7	Southwest
San Gregorio-Hosgri	47.5	29.7	Northeast

Table 5 shows estimated magnitudes ($M_{W(MAX)}$) and rupture geometries for the maximum expected earthquakes on each of the above-listed fault systems (Cao et al., 2003). Estimated mean peak (PGA) and mean peak plus one dispersion (PGA + ∂) horizontal ground acceleration values for the site are calculated using these magnitudes and geometries, and the fault distances shown in Table 4. These accelerations are based on an attenuation relationship derived from the analysis of historical earthquakes (Sadigh et al., 1997), and are for sites founded on rock. We caution that the listed values are approximations, based on theoretical curves fit to a relatively small data set: actual measured accelerations may be larger. The PGA + ∂ value is a conservative design value that is intended to compensate for the uncertainty in the attenuation relationships.

The duration of strong seismic shaking shown in Table 4 is calculated from a magnitude-dependent formula proposed by Dobry et al., (1978). Expected recurrence interval (RI) (Peterson et al., 1996) is the expected time between major earthquakes on each fault. The UBC Seismic Source Type (CBSC, 2002; Cao et al., 2003) is also listed.

In summary, the Reliz-Rinconada fault zone, passing within 7.4 km of the site, is expected to generate the largest earthquake ground motion at the site. The characteristic earthquake on this fault ($M_{W(MAX)}$ = 7.5) is expected to generate estimated ground motions of up to 0.72g. Duration of strong seismic shaking from this event will be about 21 seconds. The recurrence interval for this earthquake is relatively long (RI = 1,764 years); therefore, the probability of this earthquake occurring within the project lifespan is relatively low.

Table 5: Deterministic Ground Motions

Fault	$M_{W(MAX)}$	Rupture Geometry	PGA (g)	PGA + ∂ (g)	Duration (sec)	Recurrence Interval (years)	Seismic Source Type
Reliz-Rinconada	7.5	Strike-slip	0.49	0.72	26	1764	B
San Gregorio-Hosgri	7.5	Strike-slip	0.11	0.16	26	646	B
Monterey Bay-Tularcitos	7.3	Strike-slip	0.27	0.39	21	2841	B
San Andreas (creeping segment)	6.2	Strike-slip	0.15	0.26	7	n/a	A

$M_{W(MAX)}$: Moment magnitude of maximum credible earthquake after Cao et al., 2003.
Rupture Geometry and Recurrence Interval after Peterson et al., 1996.
PGA: Mean peak horizontal ground acceleration. After Sadigh et al., 1997.
PGA + ∂: Mean peak horizontal ground acceleration plus one dispersion. After Sadigh et al., 1997.
Duration: Dobry et al., 1978
Seismic Source Type from CBSC, 2002

Probabilistic Seismic Hazard Assessments

The U.S. Geological Survey and the California Geological Survey together produced a probabilistic seismic hazards assessment for the state of California (Petersen et al., 1996; Cao et al., 2003). The study used a model that explicitly considered faults that are capable of generating moment magnitude 6.5 or greater earthquakes. The San Francisco Bay Area, Monterey Bay Area and Santa Lucia Mountains are traversed by numerous minor faults and splays, many of which may be capable of generating smaller earthquakes: to account for these seismic sources, a background magnitude of 6.5 was applied in the probabilistic model. Probabilistic ground motions based on that study for the proposed building sites are listed in Table 6.

For comparison, Table 6 also shows the results of an assessment prepared for Monterey County by Rosenberg (2001). Rosenberg (2001) incorporated geologic conditions into his probabilistic model (Figure 6), and suggested that areas underlain by granodiorite at or near the ground surface will experience lower probabilistic peak ground accelerations than areas underlain by deep alluvium or alluvial fans. Peak ground accelerations produced by the two studies are comparable for areas underlain by alluvium and alluvial fans, but differ for granodiorite areas.

Table 6: Probabilistic Ground Motions (10% probability of being exceeded in 50 years)		
Source	**PGA in Firm Rock or Granodiorite (g)**	**PGA in Alluvium and Alluvial Fans (g)**
Rosenberg, 2001	0.25	0.35
Cao et al., 2003	0.30	0.35

The ground motion intensities shown in Table 6 are the seismic shaking intensities that have only a 10% chance of being exceeded in 50 years. The "10% in 50 year" ground motion cited in Table 4 is considered appropriate for residential structures. We caution that these values are not based on a site-specific probabilistic assessment, which is normally required for critical structures such as schools and hospitals.

Landsliding Hazard

The only steep slopes on the subject property where landsliding is likely to occur are situated on the easternmost portion of Section 16 (Plate 1). These slopes are underlain by granitic rock, which is typically resistant to landsliding.

Rosenberg (2001) has mapped the entire property as a "low" landslide hazard area. We observed no evidence for previous landsliding during our site reconnaissance and aerial photo inspection of the site. However, we did observe several very steep, v-shaped drainage swales on Section 16: these swales had fan shaped deposits at their mouths that may be the site of debris flow type landslide deposits during intense rainstorms. Plate 1 depicts debris flow hazard areas at the property.

Flooding Hazard

The site is located outside the 100-year and 500-year flood zones shown on the Federal Emergency Management Agency Flood Insurance Rate Map (FEMA, 1984). Therefore, we do not consider the site to be at risk of flooding.

Rosenberg (2001) mapped a portion of the site as being underlain by flood plain deposits (Figure 4, Plate 1). These areas correspond to shallow drainage swales on the site. It is our opinion that the potential for flow exists along the axes of these swales during heavy precipitation, as would be expected for any ephemeral drainage. However, there is no hazard of innundation for areas adjacent to the channel centerline.

Liquefaction Hazard

Soil liquefaction occurs as a result of strong seismic shaking of loose, saturated sediments. It typically occurs in the youngest alluvial deposits adjacent to river banks, although it can and does occur in other environments.

Rosenberg (2001) mapped a portion of the property as being exposed to a high level of risk from liquefaction. This area of risk corresponds to the Undifferentiated Flood Plain (Qfp) deposits also mapped by Rosenberg (2001; see Figure 4). Based on our site geologic mapping, there are no areas underlain by Qfp (Plate 1), and, consequently, no areas of high liquefaction hazard. However, the alluvial fan sediments underlying the central and western portion of the site can be capable of liquefaction in areas of shallow ground water. Consequently, liquefaction hazard on the site should be evaluated by the project geotechnical engineer as part of a comprehensive project geotechnical investigation.

Soil Shrink-Swell Hazard

Structures or improvements built atop expansive soils may be subject to damage from soil shrinkage and swelling, associated with wetting and drying. A soil with a higher plasticity index (PI) is generally more prone to shrinkage or swelling in response to seasonal rainfall. The USDA (2006) provided general PI ranges for mapped soil units. At the site, soil units with elevated plasticity indexes (PI>15) include Gloria sandy loam (GhC and GhD), Placentia sandy loam (PnA and PnC), and Salinas clay loam (SbA). These soil units are restricted to flatter areas of the property.

Hazard Pertaining to Reservoir Embankment Dams

Two areas of fill are shown on Plate 1, corresponding to embankment dams for reservoirs on the property. These reservoirs store water for agricultural purposes. Failure of these dams could result in inundation of any structures located downstream.

The tentative map (Bestor Engineers, 2006) indicates that these dams and reservoirs will be removed as part of the development project. If these dams are removed, the hazards of dam failure and subsequent inundation will also be removed. If these dams are to remain, they should be evaluated for stability, including stability under seismic shaking intensities expected at the sites.

CONCLUSIONS

Based on the information gathered and analyzed, it is our opinion that the project site is geologically suitable for residential development, provided the recommendations listed in this report are properly implemented. Our recommendations include measures to reduce risks to habitable structures to ordinary levels (Appendix B).

Our recommendations are intended principally to lower the risks posed to habitable structures by geologic hazards. This report in no way implies that the subject property will not be subject to earthquake shaking, landsliding, faulting or other acts of nature. Such events could damage the property and affect the property's value or its viability in ways other than damage to habitable structures. We have not attempted to investigate or mitigate all such risks and we do not warrant the project against them. We would be happy to discuss such risks with you, at your request.

RECOMMENDATIONS

1. We recommend that the project engineers consider the findings of our seismic shaking analysis in project design. Given the potential for strong seismic shaking to occur during the design life span of the proposed retaining structures, all structures should be designed to the most current standards of the California Building Code, at a minimum.

2. A site-specific probabilistic seismic hazards assessment should be incorporated into the design of any schools, hospitals, fire or police stations, or any other critical facilities planned for the project site. An individual assessment should be performed for each site by an engineering geologist.

3. We recommend that portions of the project located within the Debris Flow Hazard Areas designated on Plate 1 incorporate design measures to mitigate this hazard. Suitable measures may include:

   a. Restricting development to outside these areas;

   b. Constructing artificial channels or diversion walls, designed to divert fluidized debris away from habitable structures; or

   c. Constructing impact walls, designed to withstand anticipated debris flow volumes and velocities.

   An engineering geologist should be retained to provide site-specific geologic design criteria for Debris Flow Hazard Areas once the final project plans are available. Diversion or retaining structures should be designed based on recommendations by a geotechnical engineer.

4. We recommend that the project geotechnical engineer prepare a quantitative assessment of liquefaction and seismically-induced settlement potential for the project as part of a comprehensive site geotechnical evaluation.

5. We recommend that all drainage from improved surfaces be captured by closed pipe or lined ditches and carried to neighborhood storm sewers or natural drainages. At no time should any concentrated discharge be allowed to spill directly onto the ground adjacent to structures or to fall directly onto steep slopes. The control of runoff is essential for erosion control and prevention of water ponding against foundations and other improvements.

6. Expansion potential of site soils should be evaluated as part of a site-specific geotechnical study. The recommendations of a geotechnical engineer for mitigating soil shrink-swell hazards should be incorporated into project design.

7. We recommend that any embankment dams on the properties be evaluated for stability by a geotechnical engineer if they are to remain in use following development of the

properties. Stability evaluations should include pseudostatic or dynamic stability analyses using peak horizontal ground motions recommended in the Seismic Shaking Hazards section of this report.

8. Should any revisions be made in the 8/7/06 Miravale III Tentative Map by Bestor Engineers, we should be provided an opportunity to review the revised plan and make supplemental recommendations, as warranted.

9. This report is issued with the understanding that it is the duty and responsibility of the owner, or of his representative or agent, to ensure that this report is provided to and brought to the attention of the architect, engineer(s) and general contractor for the project, and that all recommendations made in the report are incorporated into the plans and specifications, and that the necessary steps are taken to see that the contractor and subcontractors carry out the report's recommendations in the field.

10. We request the privilege of reviewing final project plans for conformance with our recommendations. If we are not permitted such a review, we cannot be held responsible for misinterpretation or omission of our recommendations.

11. If any unexpected variations in soil conditions, or if any unanticipated geologic conditions are encountered during construction, or if the proposed project will differ from that discussed or illustrated in this report, Nolan Associates should be notified so that supplemental recommendations can be given. Our conclusions and recommendations shall not be considered valid unless the changes are reviewed and the conclusions in this report are modified or verified in writing by a representative of Nolan Associates.

12. We recommend that home owners implement the simple safety procedures outlined by Peter Yanev in his book, *Peace of Mind in Earthquake Country*. This book contains a wealth of information regarding earthquakes, seismic design and precautions that the individual home owner can take to reduce the potential for loss of life, injury and property damage.

INVESTIGATIVE LIMITATIONS

1. The conclusions and recommendations noted in this report are based on probability and in no way imply the site will not possibly be subjected to ground failure or seismic shaking so intense that structures will be severely damaged or destroyed. The report does suggest that implementation of the recommendations contained within will reduce the risks posed by geologic hazards.

2. This report is issued with the understanding that it is the duty and responsibility of the owner or his representative or agent to ensure that the recommendations contained in this report are brought to the attention of the architect and engineer for the project, incorporated into the plans and specifications, and that the necessary steps are taken to see that the contractor and subcontractors carry out such recommendations in the field.

3. If any unexpected variations in soil conditions or if any undesirable conditions are encountered during construction or if the proposed construction will differ from that planned at the present time, Nolan Associates should be notified so that supplemental recommendations can be given.

4. The findings of this report are valid as of the present date. However, changes in the conditions of the property and its environs can occur with the passage of time, whether they be due to natural processes of the works of man. In addition, changes in applicable or appropriate standards occur whether they result from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated, wholly or partially, by changes outside our control. Therefore, the conclusions and recommendations contained in this report cannot be considered valid beyond a period of two years from the date of this report without review by a representative of this firm.

5. Our services consist of professional opinions and recommendations made in accordance with generally accepted engineering geology principles and practices. No warranty, expressed or implied, including any implied warranty of merchantability or fitness for the purpose is made or intended in connection with our services or by the proposal for consulting or other services, or by the furnishing of oral or written reports or findings.

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TECHNICAL APPENDIX T-6

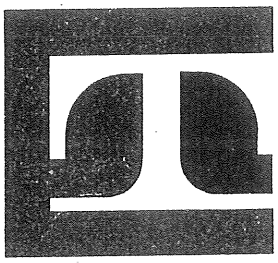
Phase I Environmental Site Assessment (D&M)
Phase I Environmental Assessment (Terratech)

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PHASE I ENVIRONMENTAL SITE ASSESSMENT
SAN VICENTE VINEYARDS
APN# 417-151-048, 049
T17S, R6E, S16
MONTEREY COUNTY, CALIFORNIA

PROJECT M2229



TERRATECH, INC.

PHASE I ENVIRONMENTAL SITE ASSESSMENT
SAN VICENTE VINEYARDS
APN# 417-151-048, 049
T17S, R6E, S16
MONTEREY COUNTY, CALIFORNIA

PROJECT M2229

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MARCH 2, 1995

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PHASE I ENVIRONMENTAL SITE ASSESSMENT
SAN VICENTE VINEYARDS
APNs 417-151-048,049
T17S, R6E, S16
MONTEREY COUNTY, CALIFORNIA

INTRODUCTION

This report summarizes the work performed and the findings, conclusions, and recommendations from Terratech's Phase I Environmental Site Assessment (ESA) of the property that consists of Township 17 South, Range 6 East, Section 16 (APNs 417-151-048 and 049), located north of Soledad, California (see Figure 1, Location Map).

Purpose

The purpose of this ESA is to provide a professional opinion on the potential current presence of recognized environmental conditions at the site, including potential impacts from known problems in the surrounding area. The term "recognized environmental conditions," as defined by ASTM Designation E 1527-94, means:

> "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property."

This ESA was performed according to the recommended guidelines established by ASTM Designation E 1527-94, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process." We understand that this assessment is associated with a potential property ownership transfer.

Limitations and Exceptions of Assessment

This report and the associated work have been provided in accordance with the principles and practices generally employed by the local environmental consulting profession. This is in lieu of all warranties, express or implied. This ESA was performed and this report has been prepared for use solely by Mr. Nader Agha in his potential purchase of the subject property. This report shall not be relied upon by or transferred to any other party, or used for any other purpose, without the express written authorization of Terratech, Inc.

This ESA is not a regulatory compliance audit or an evaluation of the efficiency of the use of any hazardous substances or petroleum products at the site. No evaluation for the presence of asbestos-containing building materials, urea-formaldehyde foam insulation, methane, radon gas, lead-based paint, lead in drinking water, or wetlands is included in our assessment.

Our findings and opinions are based on information collected from historical photographs, regulatory agency files and lists, and interviews; from results of chemical analyses performed on ten near-surface samples obtained from the site; and from site conditions at the time of our site reconnaissance on February 9, 1995. The regulatory records search did not fully cover the site corners with the conventional radii.

Note that our findings and opinions are based on information that we obtained on specific dates, through records review, site reconnaissance, and related activities. It is possible that other information exists or subsequently has become known, just as it is possible for conditions we observed to have changed after our observation. Terratech cannot warrant or guarantee that not finding indicators of hazardous substances or petroleum products means that hazardous substances or petroleum products do not exist on the site.

Any person who is aware of any recognized environmental conditions of the site or surrounding areas that are different from those described in this report should report them immediately to this office for an evaluation as part of an additional scope of work.

Note: In this report, the term "hazardous materials" includes hazardous substances and petroleum products.

Limiting Conditions and Methodology Used

The scope of work for this ESA was outlined in our January 31, 1995, proposal and authorized by receipt of a signed copy of the Agreement for Professional Services on February 2, 1995. We performed the following work:

1. Reviewed a chronology of aerial photographs covering the site and adjacent area.

2. Contracted with Environmental Risk Information & Imaging Services (ERIIS) to research the availability of historic fire insurance maps of the site. No maps were available in the ERIIS collection, for the period 1867-1990.

3. Reviewed geologic maps and literature on file in our office for information on the hydrogeologic setting of the site.

4. Contracted with ERIIS, a regulatory-list search service, to research lists of known contaminated sites and waste generators at the site and in the surrounding area (up to 1.5-mile radius from center of site). The ERIIS report is included as Appendix A.

5. Reviewed regulatory files at the King City office of the Monterey County Department of Health, Division of Environmental Health (MCDEH) concerning hazardous materials, underground storage tanks, and subsurface contamination at the site and in the surrounding area. Reviewed the regulatory file for the City of Soledad Landfill at the Castroville office of the MCDEH.

6. Obtained a copy of the site Restricted Materials Use Permit from the Monterey County Agricultural Commissioner, Pesticide Use Enforcement Unit (MCAC). A copy of the permit is presented in Appendix B.

7. Performed a site reconnaissance on February 9, 1995, of the exterior portions of the site and the interior of the barn and maintenance shop. The interior of the residence was not inspected. The reconnaissance was conducted to identify evidence of potential contamination such as current hazardous materials storage or use; unusually stained soils, slabs, and pavements; drains, sumps, drums, tanks, and electrical transformers; discarded hazardous materials containers; stressed vegetation; and low areas in which stormwater runoff may have accumulated. We also checked for evidence of water wells, septic tanks, and leach fields.

8. Performed "drive-by reconnaissances" of properties in the immediate vicinity of the site on February 9, 1995, noting facilities likely to use or store hazardous materials.

9. To inquire about past and/or present uses of the site, representatives of the property owners, Mark Mirassou and Peter Mirassou, were interviewed on February 9 and 13, 1995, respectively. Mark Mirassou responded to the questions on an ASTM Transaction Screen Process Questionnaire during the interview (Appendix C).

10. For any available information on documented cases of subsurface contamination at the site and in the surrounding area, John Ramirez of the MCDEH was contacted. Grant Miller of the MCDEH was contacted regarding the closed City of Soledad Landfill. Bob Roach of the MCAC was contacted regarding the Restricted Use Materials Permit issued to the site business. Gray Pard of the Monterey County Water Resources Agency (MCWRA) was contacted regarding water supply wells located on the site.

11. Collected ten near-surface soil samples from the site and submitted the samples to a State-certified laboratory for chemical analysis. The samples were analyzed for the presence of organochlorine pesticides by EPA test method 8080.

12. Evaluated the information collected and prepared this report summarizing our findings, conclusions, and recommendations.

FINDINGS

Site and Vicinity Description

The subject site is owned by Mirassou Sales Company. Mirassou Vineyards, dba San Vicente Vineyards, operates a wine grape vineyard on the site. The site consists of two contiguous assessor's parcels (APNs 417-151-048 and 049) that constitute one Public Land Survey section (T17S, R6E, S16) and is located approximately one mile north of the City of Soledad (see Figure 1, Location Map). The site is situated on the northeast edge of the Salinas Valley. The eastern edge of the site is located in the foothills of the Gabilan Range. The site is bounded by the Hambey cattle feed lot and the Gabilan Range foothills to the east; the Hambey cattle feed lot and residential properties to the south; San Vicente Road, agricultural properties, and residential properties to the west; and a residential and agricultural property to the north.

Approximately 450 acres of the approximately 640 acre-site is cultivated with varietal wine grapes. The remaining portion of the site is developed with a single-family residence, a barn, and maintenance shop (approximately 2 acres in the southwest corner) or is too steep for cultivation (approximately 183 acres along the eastern edge). A reservoir is located on the northeast portion of the site. On Figure 2, the area north and east of the curving road is steep and uncultivated and the area south and west of the curving road is primarily cultivated in wine grapes. A radio transmission tower is located on the knoll on the southeast portion of the site and high-tension power lines cross the extreme northeast corner of the site (see Figures 1 and 2). The site ranges in elevation from 215 feet to 601 feet above mean sea level and slopes toward the southwest (USGS, 1955).

Site History

Aerial Photographs

We examined stereoscopic aerial photographs of the site and vicinity taken in 1937, 1949, 1953, 1956, 1971, 1985, and 1989 at McHenry Library, University of California at Santa Cruz, on February 8, 1995.

The 1937 photograph showed the flatter portion of the property to be cultivated with orchards, row crops, and possibly open field crops. The orchards appeared in the center portion of the property, the open field crops or no development appeared in the northern portion, and the row crops, or possibly open field crops, appeared in the southern portion of

the property. The cultivated portion did not appear to extend as far east as it does today. At least one structure was shown in the southwest corner of the property. An area that appeared to support a water supply well was shown near the center of the southwest quadrant of the site near the location of Sample S-7 depicted on Figure 2. The surrounding properties appeared to be undeveloped or cultivated in open field crops.

The 1949 photograph showed the west portion of the orchard extending approximately 1,200 feet south. The southern portion of the site appeared cultivated in row crops and the northern portion appeared undeveloped or cultivated with open field crops. The structure complex was shown in the southwest corner of the site. High-voltage power lines appeared to almost bisect the site diagonally from the northwest to the southeast. Possible structures appeared in a small area on the adjacent property to the south near the common property boundary.

The only differences to the site noted in the 1953 and 1956 photographs when compared to the 1949 photograph were the appearance of a large, circular object inferred to be a reservoir at the location of the possible water supply well at the center of the southwest quadrant of the site (near soil Sample S-7 shown on Figure 2), and the appearance of the radio transmission tower on the southernmost knoll along the eastern edge of the site. The cattle feed lot appeared on the adjoining property to the south, near the common property boundary.

The site appeared mostly as it does today in the 1971, 1985, and 1989 photographs, except that several rows of trees segmented the cultivated area in the 1971 photograph. The circular reservoir previously depicted was absent, with no indication of a water supply well in the immediate area. The reservoir currently situated on the northeast corner of the property is depicted, as well as the high-voltage power lines crossing the extreme northeastern corner of the property. The power lines previously shown bisecting the property were absent. The feed lot appeared fully developed on the adjacent properties along portions of the south and east common property boundaries. Structure complexes appeared on adjoining properties to the south and to the north near the common property boundaries.

Historic Fire Insurance Maps

A fire insurance map search was requested for the subject area from ERIIS. ERIIS indicated there is no fire insurance coverage in their collection for the subject area, for the period 1867-1990. The ERIIS collection includes all available Sanborn and Manufactural Mutual fire insurance maps.

Historic Topographic Maps

We examined historic topographic maps of the site and vicinity produced in 1915, 1940, and 1984 at McHenry Library, University of California at Santa Cruz, on February 8, 1995. The 1915 map showed San Vicente Road and a structure on the extreme southwest corner of the property (USGS, 1915). The 1940 map showed three structures in the extreme southwest corner of the property, indicated an orchard was cultivated near the central portion of the site, and showed the high-voltage power lines bisecting the site from northwest to southeast (USGS, 1940). The 1984 map showed two structures and a water tank in the southwest corner of the property, the radio transmission tower, the reservoir on the northeast portion of the property, and the power lines crossing the northeast corner of the property.

Site History Summary

Review of historic aerial photographs and maps and discussions with representatives of property owners (detailed below) revealed the following site history:

A structure existed on the extreme southwest corner of the site from at least 1915. Between 1915 and 1937, an orchard (probably almond) was planted on the central portion of the site and maintained until around 1965. Row crops were cultivated on the southern portion of the site from 1937 or before until around 1965. Between 1915 and 1940, two more structures were constructed at the southwest corner of the site. Between 1937 and 1940, high-voltage power lines and support poles were installed bisecting the site trending northwest-southeast. Between 1949 and 1953, a large, circular reservoir was installed near the center of the southwest quadrant of the site and the radio transmission tower was installed on the southernmost knoll along the eastern edge of the site.

In 1962 or 1963, Mirassou Sales Company purchased the site from the Lawrence family, now deceased. Around 1965, the orchards, row crops, and open field crops were replaced with wine grape vines. Between 1956 and 1971, the large, circular reservoir was removed and an earthen dam was constructed at the northeast corner of the site in the foothills to create a reservoir, and the high-voltage power lines were moved northeast to cross only the extreme northeast corner of the property. Around 1970, a water supply well located near the former large water reservoir was capped and overplanted with vines.

Hydrogeologic Setting

The Soledad area is located in the Salinas River Valley, a northwesterly trending valley bordered on the southwest by the Sierra de Salinas and Santa Lucia Range and on the northeast by the Gabilan Range. Surface drainage in the vicinity of the subject property is southwest toward the Salinas River, which is located approximately 2 miles south of the

subject site. The Salinas River originates near Santa Margarita, flows northwest about 120 miles, and discharges into the Pacific Ocean at Monterey Bay.

The Monterey County Flood Control and Water Conservation District identifies the subject site as situated in the Salinas Valley Ground Water Basin. The Salinas Valley is separated into four hydrologically linked ground water areas, the Pressure Area, East Side Area, Forebay Area and Upper Valley Area. The Soledad area is situated in the Forebay Area. The Forebay Area lies between the Pressure Area to the north and the Upper Valley to the south. Recharge to the Forebay Area is from the Upper Valley Area, irrigation return flow, precipitation and recharge from the Arroyo Seco and Salinas River and their tributaries. Throughout the Forebay and Upper Valley Areas no significant aquicludes exist, and the aquifer(s) in the Soledad area are unconfined [Boyle Engineering Corporation, 1986]. Depth to first-encountered ground water in the Soledad area is between 80 feet and 100 feet below ground surface, and the ground water generally flows northwest [Monterey County Flood Control & Water Conservation District, 1981].

The flatter portion of the site has been mapped as being underlain by Quaternary older alluvium, and the steeper portion of the site has been mapped as underlain by Mesozoic granitics [Dibblee, 1972].

Regulatory Records Review

An ERIIS Site Assessment Report was prepared for the site on February 7, 1995, and is included in this ESA as Appendix A. Additionally, available regulatory agency files on sites with known fuel storage tanks, hazardous materials storage, and subsurface contamination were reviewed and/or discussed with agency representatives to assess the potential for environmental impacts to the site. The results of the ERIIS report, file reviews, and discussions are summarized below.

ERIIS Site Assessment Report

The ERIIS report presents the results of a search of eleven databases that list addresses of sites with known underground or above-ground storage tanks; active and inactive landfills; oil and gas wells; hazardous waste storage, generation, treatment and/or disposal; and subsurface contamination within 0.25 to 1.5 mile radius from the center of the site. No "plottable" sites were identified in the ERIIS report within the requested radii. Fifty "unplottable" sites were identified in the greater Soledad area, however, only two unplottable sites, the City of Soledad Sanitary Landfill and Braga Ranch, are located within the associated radii from the subject site.

Monterey County Department of Health,
Division of Environmental Health

The MCDEH regulates, within the County of Monterey, underground and above-ground storage tanks, the storage of hazardous materials, the performance of hazardous materials inspections, solid waste facilities, and limited subsurface contamination investigations. The files for the subject site and all adjacent sites were requested for review at the King City office of the MCDEH. The hazardous materials files that were available were reviewed at the MCDEH on February 6, 1995, and are summarized below.

NAME: Mirassou Vineyards/San Vicente Vineyards
ADDRESS: San Vicente Road
ERIIS ID: N/A
APPROXIMATE DISTANCE FROM SUBJECT SITE: Subject site.
SUMMARY: Holds a current permit to store hazardous materials. No records of any inspections were found in the file. Operate a 1,000-gallon, above-ground diesel tank. Stores up to 150 gallons of motor oil, 200 gallons of waste motor oil, and 200 gallons of propane at the site. The diesel tank is located just east of the maintenance shop, the propane tank is located east of the diesel tank, the motor oil is stored in the shop, and the waste motor oil is stored in the shed, adjacent to the shop on the west. A Hazardous Materials Registration/Hazardous Waste Fact Sheet signed May 21, 1987, by Frances Cavalli, Vineyard Manager, indicates the operation of a 600-gallon, underground diesel tank. A Registration/Fact Sheet signed by Peter Mirassou on December 21, 1988, indicated the presence of two, 600-gallon, above-ground diesel tanks. A hand-drawn site plan indicated the presence of the active well east of the barn and the abandoned well near the center of the southwest quadrant of the site.

NAME: Armand Kunde Slaughterhouse
ADDRESS: End of West Street, Soledad
ERIIS ID: N/A
APPROXIMATE DISTANCE FROM SUBJECT SITE: Adjoins subject site to south.
SUMMARY: On February 7, 1990, two 10,000-gallon, underground fuel storage tanks were removed. Chemical analysis performed on soil samples retrieved at the time of the tank removals did not reveal any fuel compounds.

NAME: S. Braga & Sons Ranch
ADDRESS: Highway 101 North, Soledad
ERIIS ID: Unplottable site
APPROXIMATE DISTANCE FROM SUBJECT SITE: 1700 feet west.
SUMMARY: Holds a current permit to store hazardous materials. Four underground gasoline tanks and two underground diesel tanks are located at the site. No records of any violations were found in the file.

NAME: Tom Hambey & Son Ranch
ADDRESS: 34277 Bryant Canyon Road, Soledad
ERIIS ID: Unplottable site
APPROXIMATE DISTANCE FROM SUBJECT SITE: Adjoins subject site to south and east.
SUMMARY: Holds a current permit to store hazardous materials. Two underground fuel tanks are located approximately 500 feet south of the southeast corner of the subject site. No records of any violations were found in the file.

NAME: Rancho de Vino
ADDRESS: 32300 San Vicente Road, Soledad
ERIIS ID: N/A
APPROXIMATE DISTANCE FROM SUBJECT SITE: Across San Vicente Road to the west.
SUMMARY: Holds a current permit to store hazardous materials, including operation of a 500-gallon diesel tank. The file did not indicate if the tank was above-ground or underground. No records of any inspections were found in the file.

The file for the City of Soledad Landfill was reviewed at the Castroville office of the MCDEH on February 6, 1995. The landfill is located approximately 1,000 feet northwest of the site. Disposal operations at the landfill commenced in 1964 and included the disposal of approximately 100 tons per week of municipal wastes, brush, and other vegetative material (Emcon Associates, 1977). A subsurface investigation, consisting of the installation of fourteen exploratory trenches, was performed in 1977. The investigation determined that the entire disposal site is underlain by non-waterbearing, coarse-grained granitic bedrock and the, "absence of ground water, the low annual rainfall, and the operation of the disposal site to ensure control of surface water (will) preclude the development of significant quantities of leachate at the site, and will ensure that the landfill development will not degrade the surrounding environment" (Emcon, 1977).

A letter dated August 9, 1978, from Walter Wong of the MCDEH to Larry Bagley, City of Soledad Manager, stated that all standards for the closure of the Soledad Disposal site had been met. A letter dated June 11, 1981, from the State Solid Waste Management Board to Earl Morrison, City of Soledad Manager, indicated that an April 28, 1981, evaluation was performed at the landfill facility and stated, "The site is not in compliance with the surface water criterion because it has not been properly maintained to prevent erosion from cutting into in-place refuse, and to prevent water from ponding on site." Between two and four inspections per year were performed by MCDEH representatives from 1991 until 1994. The only violation noted during this time period was an unsecured gate.

Monterey County Agricultural Commissioner, Pesticide Use Enforcement Unit

The MCAC issues Restricted Materials permits to farm businesses in Monterey County that store and use pesticides. Conditions of the permit include completing a chemical use and storage training program and passing a written exam. The MCAC conducts random pesticide use monitoring and pest control records inspections of permitted facilities. A copy of the Restricted Materials permit for the San Vicente Vineyards was requested and received from the MCAC on February 27, 1995, and is presented in Appendix B. No records of any inspections were included in the permit copy.

Site Reconnaissance

We performed a site reconnaissance on February 9, 1995, accompanied by Mark Mirassou. All relatively flat portions of the site were cultivated in grapes, except for the southwest corner (residence, barn, and shop) and access roads. The steep portions of the site were fenced and undeveloped. Mr. Mirassou stated that the steep portions are leased for cattle grazing. There were no cattle present at the time of our reconnaissance. Two intermittent drainages were observed on the site. One drainage enters the site at the east boundary near the southeast corner (see sample location S-1 on Figure 2) and the other drainage enters the site at the north-central site boundary (see sample location S-5 on Figure 2). The drainage entering the site at the north site boundary was flowing at the time of our reconnaissance. Additionally, Mr. Mirassou indicated another area where surface water collects, near the location of Sample S-2 (Figure 2). Water was noted ponded on the ground surface in this area during our reconnaissance.

The residence, barn, and maintenance shop are located in the southwest corner of the site. The residence was not inspected during our reconnaissance. The barn was constructed of wood and had an earthen floor. A harvesting machine was stored in the barn and obscured most of the barn floor.
A 1,000-gallon, above-ground diesel tank supported by a cement, bermed area was observed against the exterior eastern wall of the maintenance shop. No evidence of spills were noted in or around the bermed area.

The maintenance shop was constructed of wood and had a cement floor. Three drums of motor oil and transmission fluid, equipped with manual pumps, were stored in the shop in a concrete bermed area. The pumps were underlain by a gently sloping cement-lined trench. No evidence of spills was noted in the bermed area or the trench. A covered pit for accessing the underside of machinery was observed in the floor of the shop. However, a large piece of machinery was parked over the pit, prohibiting our inspection.

An open-air shed with an earthen floor was attached to the west side of the maintenance shop. Four drums for waste oil storage were noted inside a cement secondary containment. No evidence of spills were observed in the secondary containment. A small oil-type stain was noted on the earth floor of the shed.

Two water supply wells were noted on the site. One well is located in the extreme southwest corner of the site and supplies water to the residence and one well is located approximately 670 feet east of the west site boundary and 100 feet north of the south site boundary. No evidence of a well near the location of Sample S-7 (see Figure 1) was observed.

Mr. Mirassou stated that there are two septic systems on the site. One system serves the residence and one the shop complex. Mr. Mirassou did not know the location of the residential system and stated the shop system is located just west of the shed and shop.

An open-top, 55-gallon drum containing trash was observed south of the shop. The soil beneath the drum appeared discolored and to have supported a fire at one time. Mr. Mirassou guessed that trash was previously burned in the drum.

Mr. Mirassou stated that all agricultural chemicals are currently stored and mixed in a fenced and protected area near the location of Sample S-9 (see Figure 2). No chemicals were present at the time of our reconnaissance. Directly south of the storage area we observed an empty, open-top, 55-gallon drum. The soil beneath the drum appeared discolored and to have supported a fire at one time. Mr. Mirassou stated that empty pesticide bags are occasionally burned in the drum. Sample S-9 was collected approximately two feet south of the drum.

A burn area is located on a steeper portion of the site, southwest of the reservoir (see Figure 2). Mr. Mirassou stated grape vine stakes and eucalyptus tree stumps have been burned in this area.

A radio transmission tower is located on the southeastern most knoll on the site (see Figure 2). The tower is connected by electrical wires to a locked, unlabelled shed, and to several telephone poles. An oil-type substance appeared to have emanated from one of the telephone poles and stained the surrounding surface soil.

An oil stain was noted on a fence separating the site with the residential development to the south. The stain did not appear to impact the underlying soil on the north side of the fence. Animal corrals and sheds were observed on the adjoining property to the north, along the joint property line. Several 55-gallon drums were observed just north of the corrals and sheds.

No stained areas were observed (in unobstructed areas) on the site, other than the areas mentioned above. No indications of the existence of water supply or monitoring wells, underground storage tanks, or storage or disposal of hazardous materials, (other those than discussed above) were visible (in unobstructed areas) on the site.

Interviews

Representatives of the current property owners were interviewed regarding the history of the site. Additionally, regulatory agency representatives were contacted regarding water supply wells, underground storage tanks, hazardous materials storage, and subsurface contamination in the site vicinity to assess the potential for environmental impacts to the site.

Current Property Owner

Mark Mirassou, a representative of Mirassou Sales Company and Vineyard Manager, was interviewed in person February 9, 1995. Mark Mirassou responded to the ASTM questionnaire presented in Appendix C. Mark Mirassou stated the site is owned by Mirassou Sales Company, a partnership consisting of Peter Mirassou, his father, and Jim Daniel. Mark Mirassou thought Mirassou Sales Company purchased the site from the Thompson family around 1963 or 1965. Mark Mirassou recalled that orchards were cultivated on the site at the time of the property transfer, then row crops and open field crops were cultivated for a few years. He thought the grape vines were planted in 1965 or 1966.

Mark Mirassou knew about the existence of an abandoned well near the location of sample S-7 (Figure 2), but thought the well was sealed in some manner. The only storage tanks on-site are a water storage tank by the residential well, the above-ground diesel tank east of the shop, and the above-ground propane tank east of the diesel tank. He stated that, to his knowledge, no underground fuel tanks have ever existed at the site.

Mark Mirassou stated that all chemicals are stored and mixed in the fenced and protected enclosure near Sample location S-9 (Figure 2). He indicated that grape stakes are burned at an area southwest of the reservoir (see Figure 2) and that empty pesticide bags are occasionally burned in the drum south of the fenced storage enclosure.

Peter Mirassou, a partner of Mirassou Sales Company, was interviewed by telephone February 13, 1995. Peter Mirassou stated he purchased the site in 1962 or 1963 from the Lawrence family, now deceased. He confirmed Mark Mirassou's explanation of the cultivation history of the site, adding the orchards were almond orchards. Peter Mirassou stated the radio transmission tower is leased to Pacific Bell and Eden Communications. Peter Mirassou indicated the abandoned well was capped with a cement plug around 1970.

Regulatory Agency Representatives

John Ramirez of the MCDEH was interviewed by telephone February 2, 1995, and in person on February 6, 1995. Mr. Ramirez stated the only facilities with hazardous materials files in the vicinity of the site are some neighboring farms, the Kunde Slaughterhouse, and the closed City of Soledad Landfill. Mr. Ramirez indicated the farms store fuel in above-ground and underground storage tanks, but he could not recall any problems. Underground fuel tanks were removed from the Kunde Slaughterhouse site, but no contamination was detected in the soil samples taken at the time of the tank removals. Mr. Ramirez did not have any information on the landfill, but referred us to speak with Grant Miller of the MCDEH Solid Waste Division.

Grant Miller of the MCDEH Solid Waste Division was interviewed in person February 6, 1995. Mr. Miller did not know any details regarding the City of Soledad Landfill, other than it was closed. Mr. Miller retrieved the MCDEH file on the landfill for our review.

Bob Roach of the MCAC was interviewed by telephone February 6, 1995. Mr. Roach stated that no inspections have been performed by the MCAC at Mirassou Vineyards (dba San Vicente Vineyards) and did not recall any chemical spills or other environmental issue occurring at the Vineyards. Mr. Roach supplied us with a copy of the Mirassou Vineyards 1994 Restricted Materials Permit (Appendix B).

County With Resource Agency?

Gray Pard of the Monterey Water Management District was contacted February 2, 1995, regarding the presence of water supply wells at the site. Ms. Pard stated that three water supply wells are registered to the site; one abandoned well, one possibly abandoned well, and one active well. Ms. Park stated that the abandoned wells were probably not destroyed.

Soil Sample Collection and Analysis

On February 9, 1995, ten near-surface soil samples (S-1 - S-10) were collected from depths of 1.5 feet at the locations shown on Figure 2. Samples S-1 and S-5 were obtained from locations in the intermittent drainages; Sample S-2 was collected in an area where surface water collects; Samples S-4, S-6, and S-8 were collected from areas previously cultivated in orchards; Sample S-7 was obtained from near the abandoned well and the previous location of the circular reservoir; Sample S-9 was obtained near the agricultural chemical storage and mixing area and near the chemical bag burn area, and Samples S-3 and S-10 were collected where row crops and/or open field crops were previously cultivated. All Samples S-1 through S-10 were obtained from areas currently cultivated in wine grapes. We were not able to obtain samples from the southwestern cultivated portion of the site, which was recently sprayed with herbicides.

The target sampling depths were reached by using a clean hand auger. A slide hammer was then advanced to the appropriate depth, and soil was driven into 6-inch-long by 2-inch-diameter brass liners encased in a core barrel attached to the end of the slide hammer. To prevent potential cross-contamination, the hand auger, brass liners, and core barrel were cleaned prior to and between each boring in a non-phosphate detergent solution. Immediately upon retrieval of the core barrel, the brass liners encasing the soil samples were removed form the core barrel and sealed with aluminum foil, plastic end caps, and masking tape. The samples were labelled with project number, date, sampling location, and depth; sealed in individual Ziploc bags; and placed in a refrigerated container.

The ten soil samples were transported to a State-certified laboratory (Inchcape Testing Services Anametrix Laboratories of San Jose, California) under appropriate chain-of-custody documentation. The samples were analyzed for the presence of organochlorine pesticides by EPA Test Method 8080.

Results of the chemical analyses revealed the following concentrations of analytes detected in the soil samples: 66 parts per billion (ppb) 4,4'-DDE in Sample S-1; 25 ppb 4,4'-DDE in Sample S-8; and 13 ppb dieldrin and 13 ppb 4,4'-DDE in Sample S-10. No analytes were detected in Samples S-2 through S-7 or in S-9. DDE is a breakdown compound of DDT, both of which are environmentally persistent.

CONCLUSIONS

We have performed a Phase I ESA for the subject site in conformance with the scope and limitations of ASTM Designation E 1527-94. Any exceptions to, or deletions from, this practice are described in the Limitations and Exceptions of Assessment section of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the subject site except for the following:

1. The agricultural chemicals dieldrin and/or 4,4'-DDE were detected in three of the ten near-surface soil samples collected. The concentrations of the compounds detected are well below their respective State hazardous waste levels of 8,000 ppb for dieldrin and 1,000 ppb for combined DDE, DDD, and DDT compounds (CCR, Title 22, 66699). The concentrations detected do not suggest levels in excess of typical background levels for agricultural properties in the area.

2. A relatively large area of discolored surface soil is located in the burn area (southwest of the reservoir) where grape stakes are burned. Grape stakes are composed of wood treated with preservatives such as copper, chromium, arsenic, and/or creosote. The potential exists that the wood-treating chemicals have impacted the soil in the burn area.

3. A secondarily-contained above-ground fuel tank is located east of the shop building. If failure of both the fuel tank and its secondary containment occurs, the underlying soil may be impacted.

4. A 1987 document found in the MCDEH hazardous materials file for the site indicates the operation of a 500-gallon, underground diesel tank, however, Mark Mirassou (Vineyard Manager), does not believe an underground fuel tank ever existed at the site. If an underground fuel tank has existed at the site, the tank or associated piping may have leaked and impacted the underlying soil and ground water.

5. A harvesting machine obscured the earthen barn floor and machinery was parked over the maintenance pit in the maintenance shop at the time of our reconnaissance. The floor of the maintenance pit is likely stained by oil. If the pit floor is earthen or if the flooring material is cracked, the soil beneath the pit floor may be impacted by oil contamination. Oil-stained soil was observed on the floor of the shed, adjacent to the shop.

6. A septic system serves the shop complex. If hazardous materials were introduced to the shop drain system, the soil surrounding the leach field may be impacted.

7. One abandoned water supply well and two active water supply wells are located on the site. Improperly constructed water wells can act as conduits for contaminants at or near the surface to migrate to underlying aquifers.

8. A feed lot is located on the adjacent property south and east of the site, along the common property boundary. Large-scale animal operations can elevate the concentrations of nitrates, chlorides, and other chemicals in the underlying ground water. If the ground water gradient direction is to the northwest and the feed lot has impacted the underlying ground water, the potential exists for the impacted ground water to have migrated beneath the subject site.

9. Two underground fuel tanks are located approximately 500 feet south of the southeast corner of the site at the Hambey Ranch. A possible underground fuel tank is operated at Rancho de Vino, located west of San Vicente Road, west of the site. No records of failure of these tanks were found in the MCDEH files. However, if these tanks have leaked significant quantities of product and impacted the underlying ground water, and if the ground water flow direction is from the tank locations to the site, the potential exists for the impacted ground water to migrate beneath the site.

Based on our research, we have formed the following additional opinion:

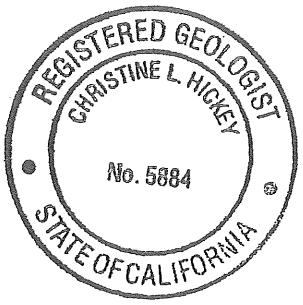
> The closed City of Soledad Landfill is located 1,000 feet from the subject site, probably in either a downgradient or crossgradient direction. Therefore, any environmental impairment at the landfill should not affect the subject site.

Report prepared by:

TERRATECH, INC.

Christine L. Hickey
RG 5884
REA 5668





REFERENCES

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U.S. Geological Survey, 1955, 7.5-Minute Topographic Quadrangle, Soledad, California, photorevised 1984, scale 1:24,000.

AERIAL PHOTOGRAPHS

DATE	FLOWN FOR	FLOWN BY	SCALE	ROLL AND FRAME
11/08/37	USDA AAA	Fairchild	1:20,000	13-ABG 4-82,43
08/01/49	USDA	Park Aerial	1:20,000	ABG-11F-175,176
04/18/53	USGS	Unknown	1:23,600	GS-YG 2-42,43
05/15/56	USDA ASCS	Aero Service	1:20,000	ABG-9R-150,151
05/15/71	USDA ASCS	Western	1:20,000	ABG-6MM-194,195
04/03/85	Unknown	WAC Corp	1:31,680	WAC-85CA 10-11,12
06/21/89	USGS NAPP	USDA ASCS	1:40,000	NAPP 1894-58, 1891-75

NADER AGHA
P.O. Box 3016
Monterey, CA 93942
(408) 646-9030

March 6, 1995

RON BANE

General Manager
Terra Tech, Inc.
12 Thomas Owens Way
Monterey, CA 93940

Dear Sir:

Recently I submitted on offer to purchase a piece of property in the County of Monterey. One of the conditions of purchase is the commission of a soil test report performed by a licensed soil engineer or expert which would demonstrate whether or not contamination exits on the subject property.

Over the past twenty-five years, my requests for such reports have been made to the firm of Myron Jacobs in Watsonville. Their findings were precise and accurate, and I was always 100% satisfied with their work. Mr. Jacobs, unfortunately, is now deceased, and your firm was recommended to me by my long-time engineer, Carl Hooper of Bestor Engineers.

To review the scenario: I was contacted by your representative, Christine L. Hickey. I made it very clear to her that the purpose in engaging your services is to give me a precise finding and answer as to whether or not there is toxic contamination on the subject property. I also indicated to her that time is of the essence as the results were needed in order to cure the condition to go ahead or not with the purchase of the property, and the time period allowed is very short.

Christine gave me a bid of $4,700.00 which I accepted. As she requested, I paid $2,500.00 in advance. I stressed to her the importance of determining what, if any, contamination in existence in order that I may make an intelligent, informed decision (i.e., not a "guess", an "assumption" or a "supposition") on whether or not to purchase the property. I supplied Christine with all pertinent information she requested.

A few days later, a person with an accent called me, identifying herself as one of your employees. She asked me for the address of the subject property, even though Carl Hooper and I had given Christine a map showing the property and directions to it. I did not understand why she would want this information again.

She insisted she must be given the address. When pressed for a reason, she claimed she must have the address so she could send a letter and report to the owner. I told her that the owners of the property did not live on the property, but that they lived in San Jose. She was not interested. She insisted that she must have the address of the property so she could send a letter or report to them at the property! I told her that I was the one who had requested the report and who was paying for it, and that any letters or reports should be sent to me. Even though I told her repeatedly that I do not have a street number for the property, she stubbornly, unprofessionally insisted upon having something I do not have. The lunacy of that conversation finally caused me to abruptly terminate the conversation.

Shortly after that I received a call from Christine asking me if I need to expedite the report. I said, "Yes". She said she would require an additional $1,000.00 to expedite the report by two to three days. I told her that the additional cost was too great and that I must decline her offer.

On Friday, March 3, 1995, I received your report. I paid your courier the remaining balance of $2,200.00 for a total of $4,700.00 without having seen the work product, because your courier insisted on receiving the check before handing over the sealed envelope. (This was never done by Myron Jacobs' office.)

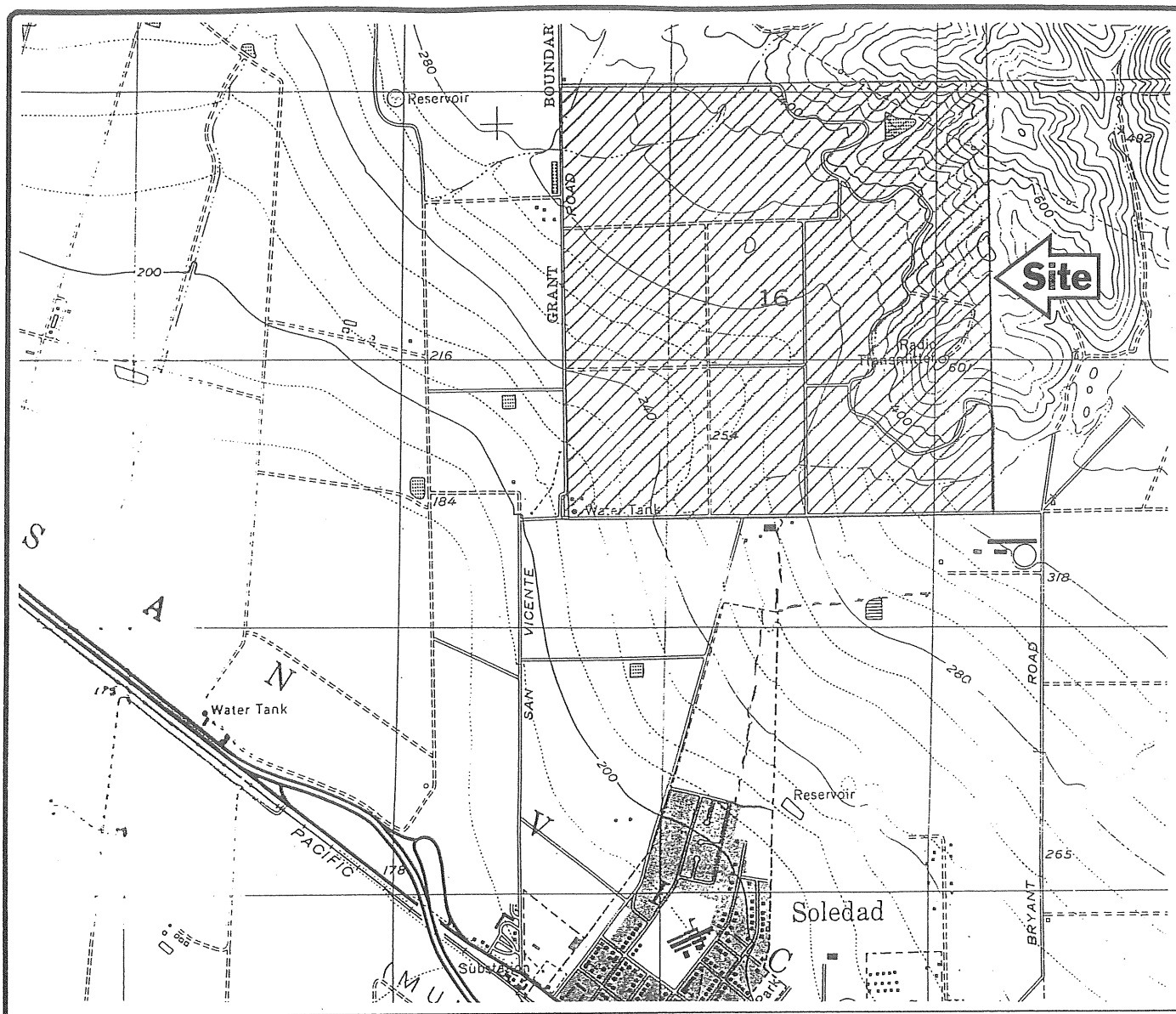
After reading the report and going over it with Carl Hooper and others, the unanimous verdict is that this is not what was requested. It is totally unsatisfactory for the purpose intended. The work product is of poor quality, ambiguous, and of no use to me in determining whether or not I should purchase this property.

Your firm has wasted very precious time and given a piece of work which is pure supposition. It is not what I ordered and paid for. Therefore, I have found it necessary to place a "stop payment" on the second check I issued to your firm, and I hereby demand that you immediately refund the initial $2,500.00 advance I paid you. Your work product will be return to you, and I will seek the services of a competent firm. I reserve the right to compensation for any damages which may have been caused by your firm's incompetent report in this precious time frame.

Sincerely,

NADER AGHA

NA:mm



MAP REFERENCE: USGS 7.5-Minute Topographic Quadrangle, Soledad, California, 1955, photorevised 1984.

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0 2,000

SCALE: 1" = 2,000'

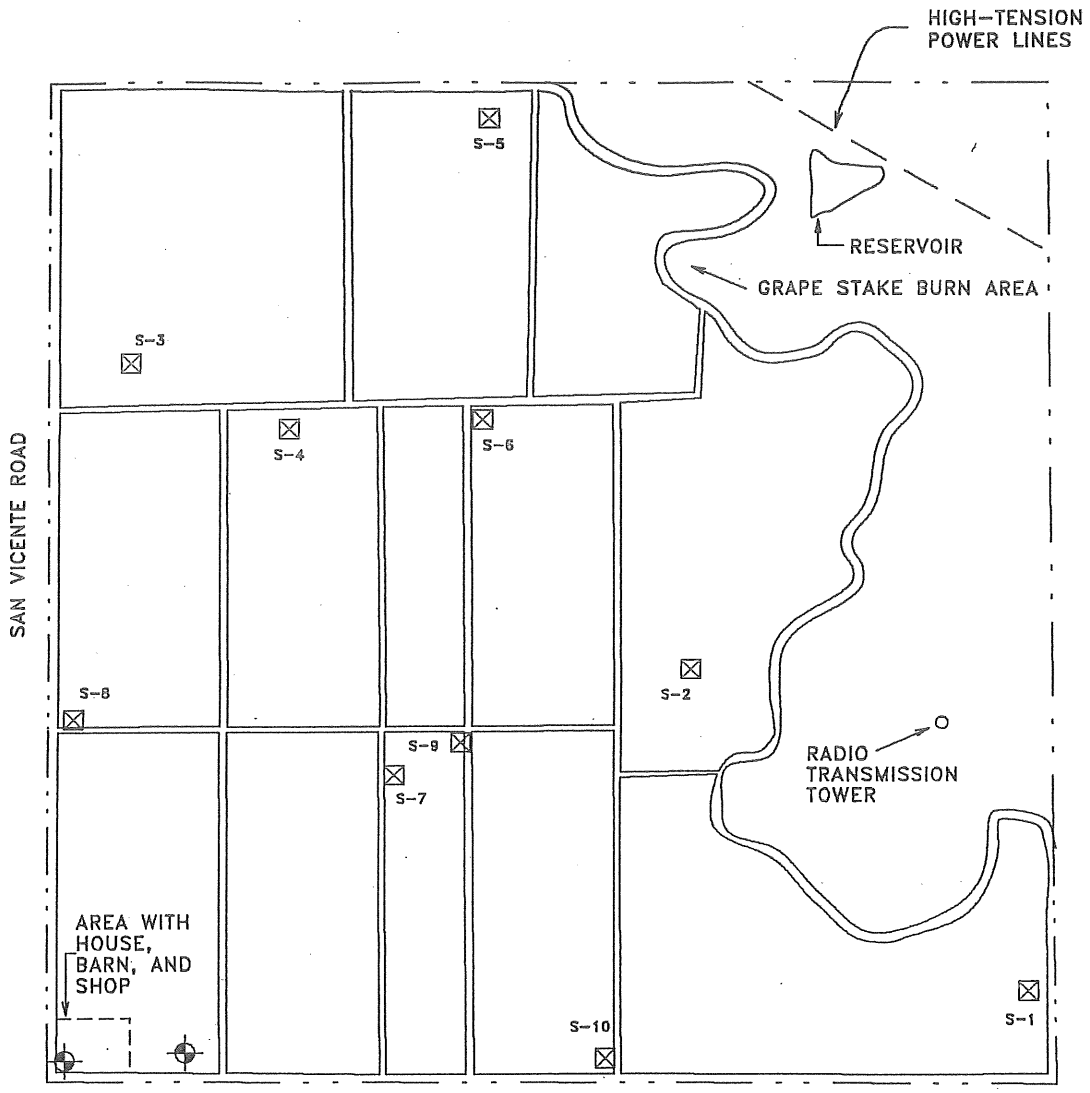
MARCH 1995

TERRATECH

LOCATION MAP

SAN VICENTE VINEYARDS
MONTEREY COUNTY, CALIFORNIA

FIGURE 1
PROJECT M2229



EXPLANATION

- WATER SUPPLY WELL LOCATION
- SOIL SAMPLE LOCATION
- PROPERTY LINE
- UNIMPROVED ROAD

N

SCALE: 1" = 1,000'

MARCH 1995

TERRATECH

SITE PLAN

SAN VICENTE VINEYARDS
MONTEREY COUNTY, CALIFORNIA

FIGURE 2

PROJECT M2229

PHASE I ENVIRONMENTAL SITE ASSESSMENT
(including update of 1995 Terratech ESA)
MIRAVALE III PROJECT SITE
MONTEREY COUNTY, CALIFORNIA
APNS 417-151-082, -083, -084 & -085; AND
257-081-005, -026, -027 & -032

PROJECT 4071

Prepared For:

CITY OF SOLEDAD
C/O DENISE DUFFY & ASSOCIATES, INC.
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SEPTEMBER 7, 2006

D&M CONSULTING ENGINEERS, INC.
Geotechnical/Environmental/Materials Testing
A URS CORPORATION COMPANY

September 7, 2006
Project 4071

Denise Duffy
DENISE DUFFY & ASSOCIATES, INC.
947 Cass Street, Suite 5
Monterey, California 93940

SUBJECT: Phase I Environmental Site Assessment
Miravale III Subdivision Project – Martines Property
Monterey County APNs 257-081-005, -026, -027 and -032
(plus Update for 1995 Terratech Project M2229 ESA;
APNs 417-151-082, -083, -084 and -085)

Dear Ms. Duffy:

In accordance with our authorization, this Phase I Environmental Site Assessment (ESA) was prepared for the subject Site referenced above. This report summarizes our findings and conclusions, along with the limitations of our assessment. Particularly in light of the proposed residential use, the Site's long history of agricultural activities constituents a 'recognized environmental condition' that needs to be further evaluated. Specific discussions on the recognized environmental conditions that warrant Phase II investigation are presented in the *Opinions* and *Conclusions* sections of this report.

This ESA was prepared by DMCE under the professional supervision of the Civil Engineer whose signature and seal appear below. I declare that, to the best of my professional knowledge and belief, I meet the definition of "Environmental Professional" as defined in §312.10 of 40 CFR 312. I have the specific qualifications based on education, training and experience to assess a property of the nature, history and setting of the subject Site. I have developed and performed the "all appropriate inquiries" in conformance with the standards and practices set forth in 40 CFR Part 312.

If you have any questions, please call our Monterey office at (831) 372-3716.

Report Prepared by,

D&M CONSULTING ENGINEERS, INC.
A URS CORPORATION COMPANY

E. R. Lautenbach

Eric Lautenbach, CE 42437
Project Environmental Engineer



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Appendix F – Site Reconnaissance Photographs and Checklist
Appendix G – Completed Interview Forms (including Mark Mirassou fax)

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1.0 INTRODUCTION

1.1 Purpose

The purpose of this Phase I Environmental Site Assessment (ESA) is to provide a professional opinion on the potential current presence of recognized environmental conditions at the Site, including potential impacts from known concerns in the surrounding area. The term "recognized environmental conditions," as defined by ASTM Designation E 1527-05 is discussed more fully in Section 9.0.

This ESA was performed according to the (1) recommended guidelines established by ASTM Designation E 1527-05, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process," and (2) U.S. Environmental Protection Agency's "Standards and Practices For All Appropriate Inquiries" (40 CFR Part 312).

For the purpose of this report, hazardous substances and petroleum products are jointly referred to as "hazardous materials."

1.2 Detailed Scope-of-Services

The scope of work for this ESA was outlined in DMCE's Proposal of August 23, 2006. We performed the following work:

- Reviewed Terratech's March 1995 Phase I ESA for the San Vicente Vineyards portion of the Site. A copy of this report, which includes some limited soil sampling and testing ('Phase II' work), is reproduced herein as Appendix A.

- Reviewed a total of eight electronic 'pdf' files originating from First American Title, as forwarded to us by Bestor Engineers, Inc., the project Civil Engineering and Surveying consultant. We also reviewed Bestor's 'pdf' files of the site survey. Printed copies of these documents are included in Appendix B.

- Contracted with EDR to prepare a Radius Map report, summarizing a regulatory database search of known underground storage tanks (USTs); landfills; hazardous waste generation or treatment, storage and disposal facilities; and subsurface contamination in the surrounding area up to within 1 mile of the Site. The EDR report is included as Appendix C. We also searched for, and reviewed, readily available online records regarding the adjacent landfill facility listed in the EDR report.

- Requested and reviewed available Monterey County Division of Environmental Health (MCDEH) hazardous materials files on the subject Site. Copies of pertinent records are included in Appendix D.

- Requested and reviewed available Monterey County Agricultural Commission (MCAC) pesticide use records for the subject Site. A printed version of the electronic spreadsheet information provided is included in Appendix D.

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- Requested available Monterey County Building Department (MCBD) records on the subject Site. As of September 6, 2006 these files were not yet available for review.

- Requested available Monterey County Water Resources Agency (MCWRA) records on the subject Site and reviewed the map that was provided. A copy of this map is included in Appendix D.

- Reviewed a California Division of Oil, Gas and Geothermal Resources (CDOGGR) map available online with locations of known drilled oil and gas wells in this area of the state. A copy of the pertinent portion of the map is included in Appendix D.

- Reviewed geologic references for information on the physical and hydrogeologic settings of the Site. This review included the site-specific reports provided by Denise Duffy & Associates (Nolan, 1995 and Tharp, 1995).

- Researched Site history by (a) reviewing a chronology of seven aerial photographs covering the Site and adjacent area available from EDR and online; (b) reviewing five historic topographic maps available from EDR; (c) contracting with EDR to research the availability of fire insurance maps of the Site and vicinity; and (d) reviewing local street directories available for the Site at the Monterey County Public Library. Copies of pertinent portions of these documents are presented in Appendix E.

- Performed an interior and exterior Site reconnaissance for obvious evidence of potential contamination such as current hazardous materials storage or use; unusually stained soils, slabs, and pavements; drains, sumps, drums, tanks, and electrical transformers; stressed vegetation; and discarded hazardous materials containers. Photographs we took at the Site and our Site reconnaissance checklist are included in Appendix F.

- Provided Nader Agha, the ownership point-person for the Site, an interview form to complete and return to us. We also interviewed site operation managers Norm Braga (for the western farm area) and Mark Mirassou (for the eastern vineyard area) during our reconnaissance. Copies of the completed interview forms for these three 'key personnel' are included in Appendix F. Mr. Mirassou's information also includes a 7-page fax of additional information he provided. We conducted brief phone interviews with Sandra Tauriac, the area hazardous materials inspector of the MCDEH, Ted Terrasas of MCDEH's solid waste group, and Victor Martinez, the former owner of the parcels west of San Vicente Road.

- Evaluated the information collected and prepared this report summarizing our findings, opinions and conclusions.

1.3 Significant Assumptions

No significant assumptions other than those described in the next section apply to this ESA.

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1.4 Limitations and Exceptions

This ESA and associated work were performed in a manner consistent with the standards of care and skill ordinarily exercised by members of the profession practicing under similar conditions in the geographic vicinity at the time the services were performed. This is in lieu of all warranties, or guarantees, express or implied.

The ESA is limited to evaluating environmental concerns associated with the potential presence of hazardous materials in conjunction with developing the referenced subject Site with primarily a residential land use. The ESA is not a regulatory compliance audit. No evaluation for the presence of asbestos-containing building materials, urea-formaldehyde foam insulation, lead-based paint, or other hazardous building materials; methane, radon gas or naturally occurring asbestos; lead in drinking water; wetlands; cultural and historic resources; industrial hygiene and health and safety; ecological resources or endangered species; indoor air quality; biological agents; mold or fungi; or high-voltage power lines is included in our assessment.

Our findings and opinions are partially based on information (e.g., regulatory agency files, lists, and databases) available from public sources on specific dates; this information is changing continually and is frequently incomplete. Unless we have actual knowledge to the contrary, information obtained from interviews or provided to us by the Client or others has been assumed to be correct and complete. DMCE does not assume any liability for information that has been misrepresented to us or for items not visible, accessible or present on the Site at the time of the Site reconnaissance.

DMCE cannot warrant or guarantee that not finding indicators of specific hazardous materials means that these hazardous materials do not exist on the Site. There is no investigation which is thorough enough to preclude the presence of materials on the Site which presently, or in the future, may be considered hazardous. Therefore, DMCE cannot offer a certification that the property is clear of environmental liability. DMCE will assume no responsibility or liability whatsoever for any claim, loss of property value, damage, or injury which results from pre-existing hazardous materials being encountered or present on the subject Site, or from the discovery of such hazardous materials.

Because regulatory evaluation criteria are constantly changing, concentrations of contaminants present and considered to be acceptable may, in the future, become subject to different regulatory standards and require remediation. For example, where records indicate that prior remedial work or tank removals have occurred, there is a risk that the work may not have been performed correctly or completely. In these cases, if the regulatory agency has approved the closure of the tank or other work done, we have assumed that the work was done correctly and completely.

Opinions and judgments expressed herein, which are partially based on our understanding and interpretation of current regulatory standards, should not be construed as legal opinions.

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1.5 Special Terms and Conditions

The terms and conditions for this ESA are included in our Proposal of August 23, 2006, including its associated Agreement. No other special terms and conditions apply.

1.6 User Reliance

This report has been prepared for use solely by the City of Soledad and Denise Duffy & Associates in reviewing the proposed Miravale III mixed-use development project for the subject Site. This report shall not be relied upon by or transferred to any other party, or used for any other purpose, without the express written authorization of DMCE.

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2.0 SITE DESCRIPTION

2.1 Location and Legal Description

The subject Site is located on both sides of San Vicente Road, just outside the current northern limits of Soledad, California (see Figure 1, Topographic Vicinity Map). The western, Martines Property portion of the Site, consists of the following four Monterey County Assessor's Parcel Numbers (APNs) 257-081-005, -026, -027 and -032 (see Figure 2, Parcel Map Book 257, Page 08). The eastern, San Vicente Vineyards portion of the Site (aka Section 16), consists of the following four additional Monterey County APNs 417-151-082, -083, -084 and -085 (see Figure 3, Parcel Map Book 417, Page 15). The entire Site is approximately 920 acres in size.

2.2 Site and Vicinity General Characteristics

The subject, agriculturally-oriented Site is located at the northern edge of relatively new residential subdivisions. These subdivisions largely consist of single-family homes, with associated schools and parkland/play-fields. To the west and north is similar agricultural/grazing land to that on-site, and to the east are the foothills of the Gabilan Range (see Figure 1). There are no commercial or industrial facilities nearby. The Site elevation ranges from 180 feet to 740 feet above mean sea level (msl), and slopes downward generally to the southwest. There are no streams in the immediate area but there are a number of man-made, earthen reservoirs holding irrigation water.

2.3 Current Site Use

The western, Martines Property portion of the Site, is currently used for row crops. The eastern, San Vicente Vineyards (now Mark Anthony Vineyards) portion of the Site, has two vineyard areas, plus an intervening fallow row crop area, and some rangeland. The few trees that are on-site are limited to the two residence areas, other either side of the " ⌐┘ " bend in San Vicente Road.

2.4 Site Improvements

Just north of the " ⌐┘ " bend of San Vicente Road on Parcel 5 there is a residence and adjoining farm equipment storage areas. There are also two earthen reservoirs on this western, Martines Property portion of the Site, one near the north-center end of Parcel 5 and the other at the southeast corner of Parcel 26.

There is a farm residence (now abandoned) and associated features in the southwest corner of Section 16 (i.e., barn, maintenance shop, storage yards, etc.), a chemical storage shed near the center of this property, an irrigation reservoir in the northeast corner, two large water tanks in the hills near the eastern boundary, and a radio transmission tower on the southeastern knoll. A few towers for high-tension power lines are also on-site, on both portions.

More details concerning site improvements are described in Section 5.3.

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2.5 Current Adjoining Property Uses

Along the south side of Section 16, and to the east of the southern tip of Parcel 5, are relatively new single-family homes. South of Parcel 5 and along the entire west side of the Martines Property is row crop land use. Adjacent to the northeast corner of Parcel 32, surrounded by the Site, is a relatively small property (Parcel 23 on Figure 2) that contains a number of older residences and associated barns and outbuildings. This developed (eastern) half of Parcel 23 also contains a number of trees and vehicles. To the north of the Site as a whole there are several ranch-type properties (as opposed to farmland) with scattered homes and corrals, and rangeland. To the east is mostly hills and rangeland.

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3.0 USER-PROVIDED INFORMATION

The ASTM Practice suggests the ESA 'User' provide documents to the ESA preparer. This section describes the specific documents provided to us by Denise Duffy & Associates, and other entities associated with the Miravale III project. Pertinent portions of these documents are included as Appendix B.

3.1 Title Records

On August 24, 2006 Jim Wurz of Bestor Engineers provided DMCE with eight electronic 'pdf' files of the various title records associated the subject, 8-parcel Site. According to these records, which are presented in printed form in Appendix B, the current owning entities are HMBY, L.P. and ANDALUCIA, LTD.

The title records list a number of leasee grants to private individuals and numerous easement grants for utilities, irrigation-related facilities, and incidental purposes. DMCE did not see any environmental liens, or any other pertinent notations concerning the subject Site that are material to this ESA.

Bestor also provided DMCE with a set of 11 electronic 'pdf' files containing their set of plan sheets for the project's Vested Tentative Map. As requested, our sheets of the actual Site (#3 through #11, see Appendix B) were provided without the proposed development overlay in order to better view current features. No items of obvious environmental concern were noted on the sheets.

3.2 Environmental Liens or Activity and Use Limitations

Mr. Nader Agha, the ownership contact for the Site and 'applicant' for the Miravale III project, stated he has no knowledge of environmental liens associated with the Site, past environmental issues regarding the Site, or any use limitations affecting the Site. Part of EDR's package service includes a lien check; they found none (see Appendix C).

3.3 Specialized Knowledge

Mr. Agha also stated he does not have any specialized knowledge of the subject Site and surrounding areas that is material to potential recognized environmental conditions in connection with the subject Site.

3.4 Valuation Reduction for Environmental Issues

Mr. Agha stated that the valuation of the Site is not reduced due to environmental issues.

3.5 Owner, Site Manager and Occupant Information

The ownership representative of the Site is Nader Agha. Norman Braga of Braga Ranch grows the row crops on the western, Martines Property portion. Mark Mirassou of Mark Anthony Vineyards, manages the eastern 'Section 16' portion.

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3.6 Reason for Performing ESA

Denise Duffy Associates indicated that the ESA is needed as part of gaining City approval for annexing and developing the subject Site.

3.7 Other

Denise Duffy Associates provided DMCE with a preliminary geologic hazards report prepared by Nolan Associates (Nolan, 1995) and a preliminary soil and foundation investigation report prepared by Donald M Tharp & Associates (Tharp, 1995). As with Terratech's ESA, these technical reports cover the Section 16 portion of the Site, but not the western, Martines Property portion.

Denise Duffy Associates also provided DMCE with a CD containing electronic copies of the City of Soledad's current General Plan (2005), the EIR for this General Plan, and the 1999 Draft EIR for the prior phase of the Miravale project (Hambey Property).

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4.0 RECORDS REVIEW

4.1 Regulatory Records

4.1.1 Standard Environmental Record Sources

A Radius Map with GeoCheck report was prepared for the Site by EDR on August 23, 2006, in accordance with the ASTM and AAI recommended guidelines, and is included in this ESA as Appendix C. The EDR report presents the results of a search of federal, State and local databases, along with a description of each database. The addresses of properties of known USTs; landfills; hazardous waste generation or treatment, storage and disposal facilities; and subsurface contamination in the surrounding area up to within 1 mile of the Site are listed and, in most cases, mapped.

The subject Site is not listed on any of the numerous databases accessed by EDR.

The goal of reviewing the database report is to identify facilities that have known and documented environmental aspects that may negatively impact the subject Site. DMCE's criteria for considering a listed facility to be a potential concern include the following:

- The facility is listed on one of the databases of reported hazardous materials releases (Federal NPL, Federal Proposed NPL, Federal Delisted NPL, Federal NPL Liens, Federal DOD, Federal CORRACTS, Federal CERCLIS, Federal CONSENT, Federal ROD, Brownfields, State AWP, State Calsites, State Cortese, State LUST, State BEP, State Deed Restrictions, State VCP and State Toxic Pits, etc.); is located potentially upgradient of the subject Site; and is not listed in the database as "closed" or "no further action" (including NFRAP).

- The facility is listed as a solid waste landfill and located potentially upgradient of the subject Site (not including transfer stations).

- The facility adjoins the subject Site and is listed as a Federal RCRA large-quantity hazardous waste generator, a Federal CERCLIS NFRAP facility, a State UST or AST operator, a State cleaner facility, a State deed restriction facility, a State NFE, or a Coal Gas facility.

Below is a summary of the only identified facility that, using the criteria discussed above, qualified to be of potential concern, including the EDR map reference number, facility name, direction and distance from subject Site, type, and status (if available). Note that the local groundwater gradient direction has been documented as toward the northwest (Boyle, 1986).

Map ID 2 (and inaccurately mapped ID 8), **Soledad Sanitary Landfill**, lies immediately north of the western Martines Property portion of the Site. The facility is listed in the databases of two California agencies – the Waste Management Unit Database System (WMUDS) compiled by the State Water Resources Control Board; and the Solid Waste Information System (SWIS, aka SWF/LF) compiled by the State Integrated Waste Management Board.

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The latter database has much more recent updating (June 2006 versus April 2000), but for this particular facility the plotting is more accurate on the WMUDS. There is essentially no specific information from either database about this closed landfill, although the WMUDS lists the 'Prime Waste' as being non-hazardous.

Page 9 of the Terratech ESA in Appendix A contains a summary of readily available information on this facility as of 1995. The facility was deemed to have a low potential for generating 'significant' quantities of leachate, but did need longterm maintenance to prevent erosion and keep water from ponding on-site. There was no information about analytical testing of soil or groundwater. Subsequent Sections 4.1.2 and 6.3 in this report provide discussions of additional limited information DMCE was able to obtain recently concerning this facility.

Because of the rural nature of the area, there are a number of unmapped 'orphan' listings in the EDR report. These listings contain insufficient information to be able to be plotted by the company's software system. DMCE reviewed the summary and eliminated most of the listings based on our knowledge of the area and supplemental research conducted through online sources such as the state GeoTracker site (see Section 4.1.2 below). Three listings merited printing of their full EDR information, similar to what the Radius Map report provides for the mapped/numbered listings – 'Tom Hambey & Son', 'Slaughter House' and 'Braga Ranch'. These print-outs are inserted after page 16 of the Radius Map report in Appendix C. However, none of the extra three listings appear to be of potential concern to the subject Site.

4.1.2 Additional Environmental Record Sources

In an attempt to obtain additional information on pertinent environmental concerns for this area, including the closed Soledad Landfill, contaminant releases and groundwater quality, we visited California's GeoTracker web site (http://geotracker.swrcb.ca.gov) and searched for Soledad listings. There were 43 'records' for Soledad, mostly concerning water supply wells. The Soledad Landfill record lists the case as 'open' (at the state Regional Water Quality Control Board) but there are no details about conditions. The eight UST and LUFT fuel tank records do not pertain to nearby properties, and all but one of the LUFT sites is 'closed.'

Two of the well records appeared pertinent and were reviewed – 'Highway 101 North Soledad; 101_San Vincente (sic) Rd' and 'San Vincente (sic) Road WS; 32300 San Vincente (sic) Rd'. The location of the former well is unclear and there was no groundwater testing data. The latter is apparently a supply well on Parcel 23, and the record does contain a limited amount of analytical data. An April 1987 sample was tested for a broad suite of common solvents, fuel constituents and pesticides and found to not contain any detectable amounts. The nitrate concentration (as NO3) in a July 2002 sample was 40 mg/L.

Copies of these GeoTracker records are included in Appendix D.

4.1.3 County Health Department Records

On August 31, 2006, we reviewed MCDEH hazardous materials records for the subject Site. We requested records for 32935 and 32945 San Vicente Road, plus any additional addresses between 32000 and 34000. The only file MCDEH staff said they had was for 32945, 'Mirassou

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Vineyards – San Vicente Ranch', FA 0810797. They apparently do not still have a file for 32300 San Vicente (Rancho de Vino), which was discussed in the 1995 Terratech ESA.

According to this MCDEH file, the vineyard facility was designated a closed site as of April 2004. However, there was a Chemical Inventory printed 8/29/06 that lists four propane tanks (greatest volume 499 gallons), two 'Diesel – Fuel Oil' tanks (10,000 and 1,000 gallon), two 'Gasoline – All Types' tanks (10,000 gallons each), 'Oil – Bulk Motor Oil' in 55-gallon drum(s), and 'Waste Oil' also in 55-gallon drum(s). There were several Hazardous Materials Inventory Certificate Forms in the file, the most recent of which was dated February 14, 2003. On a couple, the box for underground storage tank(s) is checked, but there is no confirmation documents that this facility actually has (or had) such a tank. There were also several Permit to Operate certificates in the file, the most recent of which was valid from 07/01/03 to 06/30/04. There was a Business Response Plan dated January 1, 2003. There was also a 'Site Investigation Work Plan, ...' prepared by consultant Century West Environmental, dated May 12, 1995, but no subsequent report.

We saw no notations concerning spills or releases, and no violation notices. Copies we made of the available records are included in Appendix D.

4.1.4 Agricultural Commissioner's Office Records

On August 24, 2006 we submitted a request to the County Agricultural Commissioner's office for public records on the eight parcels constituting the subject Site. On August 31, 2006 we received an email from Nathan Desjarlais with three Excel files attached, containing the pesticide use records for 2004, 2005 and 2006. The raw spreadsheets were formatted for printing to show all the information for each permit and year (see Appendix D). MCAC only maintains the most recent three years of data.

All the Section 16 information is listed under Permit #27S051A, issued to San Vicente Vineyards. MCAC had records for 2004 and 2005, but not for this year. By far the most heavily applied chemicals are the sulfur-based fungicides (Wilbur-Ellis and Red-Top Dusting Sulfur, and Microthiol Disperss). Other fungicides used include Pristine, Champ Formula 2, Kocide 2000 and Rally 40W. In the weed control/herbicide category, the most heavily used appear to be Roundup and Gramoxone Max (paraquat). The last main category of chemicals applied is the 'spreader' surfactant-types, such as Latron B-1956, In-Place and R-11.

All the 'West of San Vicente' information is listed under Permit #27S272X, issued to ASA Farms. MCAC had records for this organic farming operation for 2005 and 2006, but not for 2004. By far the most listed chemical is Sonata, a non-hazardous bio-fungicide; however, the volumes applied are relatively small. ASA also uses very small amounts of the Entrust insecticide, and apparently one application of Miller Nu-Film P spreader.

4.1.5 Building Department Records

We visited the County Building Department in Salinas on August 31, 2006 and submitted a file review request for any available records on the subject eight parcels, provided addresses as well APNs. We subsequently followed up with Cathryn Cohen, who handles these requests. As of September 6, 2006 the files were not yet available for review, but apparently are pending.

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4.1.5 Water Resources Agency Records

After a prior phone conversation, we met briefly with German Criollo of the MCWRA on August 31, 2006 to request available well records for the Site. We provided Mr. Criollo with a topographic map showing the Site boundaries (similar to Figure 1). He indicated that records were often incomplete and that providing any specific information beyond the mapped location (e.g., well log, etc.) would require a release form signed by the property owner. The release form was forwarded to Mr. Agha, but as of September 6 has not been returned.

On September 5 Mr. Criollo emailed us a map showing the three wells their GIS records indicate as falling on the subject Site – one near the southwest corner of Section 16, one at the yellow house just north of the " ⌐ " bend of San Vicente Road, and the third at the southern boundary of Parcel 5. A copy of the MCWRA-provided map is included in Appendix D. The well on intervening Parcel 23 (32300 San Vicente), the inactive domestic well on Section 16 noted in our site recon, and the 'capped' Section 16 well mentioned in the 1995 Terratech ESA are all not shown on this MCWRA map.

4.1.6 California Division of Oil, Gas, and Geothermal Resources Records

We reviewed the CDOGGR Regional Wildcat Map (Map #W3-8) for the Soledad area to check for oil or gas wells drilled on or near the Site. No wells are indicated anywhere around Soledad. A copy of the pertinent portion of the map is included in Appendix D.

4.2 Physical Setting

The Site is located on the Soledad, California, 7½-minute topographic quadrangle (U.S. Geological Survey, 1955, photorevised 1984), on the northeastern side of the Salinas River Valley. This northwestern trending valley is bordered on the southwest by the Sierra de Salinas and Santa Lucia Range and on the northeast (essentially abutting the Site) by the Gabilan Range. These mountain ranges are part of the Coast Ranges Province and reflect the northwest-southeast orientation of central California geologic structure (Nolan, 1995). Elevations on the Site range from about 180 feet in the southwestern portion of the Site to about 740 in the northeast corner. Except for the steep northeastern-eastern portion of the Site, the surface gradients are slight, averaging less than 10% (Tharp, 1995).

There are no streams on-site or nearby and runoff occurs seasonally via a combination of natural and manmade drainage courses. The main southern drainage trends down to the southwestern corner of Section 16 and across Parcel 5. The main northern drainage (a confluence of two canyon drainages) trends down through Parcel 26. Manmade berms and depressions have been created to catch some of this overland flow for subsequent cattle watering or irrigation use. The Salinas River lies about two miles southwest of the Site.

In 1995 Tharp advanced 15 geotechnical borings on the Section 16 portion of the Site, exploring to a maximum depth of ~51 feet. The investigation identified two primary subsurface profiles, confirming the geologic mapping of Dibblee (1972) and Nolan (1995). The eastern 'foothill' portion of the Site contains a thin (if any) cover of colluvium and slope wash over granitic bedrock. This bedrock is generally weathered in its upper 3 to 4 feet.

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The rest of Section 16 is termed as having a 'valley floor' profile, which in our opinion would be what would also be expected for the Martines Property portion of the Site, west of San Vicente Road. The valley floor profile is alluvial, unconsolidated soil that Tharp characterizes as predominantly sand with "...varying proportions of silt and clay". An infiltration rate of 1.5 inches per hour is mentioned as a preliminary design value.

Part of EDR's package of 'GeoCheck' information (at the back of their Radius Map report in Appendix C) includes a plot of local surface soils as identified by the U.S. Department of Agriculture (SSURGO). According to this source, the Site's soil are a combination of Chualar loam and Arroyo Seco gravelly-sandy loam. Both are considered well draining soils but the Arroyo Seco has a listed minimum infiltration rate of 2 inches per hour while the Chualar minimum is only 0.2 inches per hour.

What Tharp characterizes as perched groundwater was encountered in two of their borings – at 16 feet in B-1 (southwest corner of Section 16) and at 30 feet in B-10 (near the center of Section 16). Groundwater levels are expected to vary both seasonally and in response to multi-year patterns in rainfall. Local influences from unlined reservoirs and pumping wells are also expected. The Soledad area is situated in the 'Forebay Area' of the Salinas Valley Ground Water Basin. Recharge of this unconfined groundwater occurs through a combination of inflow from the 'Upper Valley Area', irrigation return flow, precipitation, and infiltration from streams and rivers. The prevailing gradient direction is toward the northwest (Boyle, 1986 and MCFCWCD, 1981).

4.3 Site Historical Use Information

Copies of pertinent portions of historical research documents that were reviewed are included as Appendix E.

4.3.1 Aerial Photographs

We reviewed photocopies of five aerial photographs of the Site and vicinity provided by EDR. The photographs were taken in 1956, 1971, 1981, 1987 and 1998. We also reviewed two aerial photographs available online; one taken in 1994, and one taken sometime between 2003 and 2006.

In the 1956 photo, most of the flatter portions of the Site on both sides of San Vicente Road appear to be cultivated, except for the northern third east of San Vicente Road. This area, plus the steeper portion along the eastern side of the Site, appear undeveloped. Row crops are generally in the southern portion of the Site east of San Vicente, as well as throughout the land west of San Vicente. An orchard is in the central portion of the Site east of San Vicente.

Apparent structures in the 1956 photo east of San Vicente Road include a radio transmitter tower on the southern knoll along the eastern edge of the Site; a circular reservoir west of the transmitter in the middle of row crops; and two or more buildings at the southwest corner of this eastern portion. Visible structures west of San Vicente Road include one or two buildings along a drainage northwest of the Martinez Parcel (on APN 257-081-26); a small square reservoir south of the Martinez Parcel (on APN 257-081-05); and a circular reservoir plus one

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or two buildings just north of the "┌┘" bend in San Vicente Road. Elevated electrical transmission lines appear to almost diagonally bisect the portion of the Site east of San Vicente Road, trending in a northwest-southeast direction.

In the 1971 photo, the Section 16 orchards have been replaced with row crops. Row crops are also cultivated on the previously undeveloped northern land east of San Vicente Road. The circular reservoir west of the radio tower is gone, as well as the bisecting electrical transmission lines. The existing reservoir in the northeast corner of the Site is present, along with the existing electrical transmission lines that cross the northeast corner of the Site. No other significant changes to the Site are visible.

Changes in the 1981 photo include the absence of the circular reservoir north of the "┌┘" bend in San Vicente Road, with a new square reservoir to the northwest; the absence of the small square reservoir south of the Martinez Parcel; the presence of a rectangular reservoir at the southeast corner of Parcel 26; and the absence of the buildings on Parcel 26.

The 1987 photo is blurry, however, no obvious changes are noted. No changes are noted in the 1994 and 2003-2006 photos, except that two large circular tanks and a new unpaved road appear in the latter photo at the southeast corner of the Site, east of San Vicente Road.

4.3.2 Topographic Maps

We reviewed five historic topographic maps of the Site and vicinity available through EDR. The maps are dated 1915, 1940, 1947, 1955 and 1984. We checked with UC Berkeley's on-line collection of historical topographic maps and no additional years were available.

On the 1915 map San Vicente appears to be an unpaved road and the only on-site feature is a single building (house presumably) in the southwest corner of Section 16. On the 1940 and 1947 maps (which appear to be identical except in scale), there are now three structures in this southwest corner, plus three buildings on the west side of San Vicente – a pair near the south end of Parcel 5 (which may be off-site) and the third to the north, off a westward driveway/lane, probably on Parcel 26. A high-voltage line runs across Section 16 from southeast-northwest and another line appears to cut across the top part of the "┌┘" bend in San Vicente Road (still unpaved). An orchard stipple area is located in the west-central portion of Section 16, but the balance of the Site has no land use designation.

On the 1955 map San Vicente has been paved and there are several dirt roads shown on Section 16, plus one westward one on Parcel 5. There is only one structure shown in the southwest corner of Section 16, but a Water Tank dot and note have been added. There are also a circular reservoir, a radio transmitter, and more extensive orchard stippling shown; but the high-voltage line is not. Across San Vicente just north of the "┌┘" bend there are now four structures, plus a circular reservoir in addition to the short run of power line. Off the westward driveway/lane mentioned above across Parcel 26 there are now three structures, plus a water tank at the end. The structure closest to the road may actually lie off-site, on Parcel 23 (Martinez).

The 1984 photorevised version of the 1955 map shows a second structure in the southwest corner of Section 16, but the circular reservoir is gone. The high-voltage cuts across the northeast corner of the Site and now there is a triangular reservoir shown in a canyon in that

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area. On the west side of San Vicente the only structure north of the " ⌐┘ " bend is where the current yellow house is; the short run of power line is still shown. The circular reservoir is gone but there is now a square one at the north end of Parcel 5 and a rectangular one at the southeast corner of Parcel 26. There are now four structures on what is most likely the intervening Martinez Parcel 23, but nothing is shown along (or at the end of) the westward drive/lane in this area.

4.3.3 Fire Insurance Maps

We contracted with EDR to research the availability of Sanborn fire insurance maps of the Site and vicinity. No maps were available for this rural area (see documentation page in Appendix E).

4.3.4 Local Street Directories

We reviewed available local street directories, at approximately 5-year intervals, at the Monterey County Public Library in Seaside on September 6, 2006. We reviewed Haines Criss Cross Directories for Monterey County, California, for the years 1973, 1978, 1983, 1988, 1993, 1999 and 2003. The library does not have Polk city directories. San Vicente Road was only listed in the 1999 and 2003 directories, not in the earlier ones. Copies of these two pages are included in Appendix E. There is no listing for either 32935 or 32945 and the only non-residential listing is San Vincente (sic) Ranch.

4.4 Adjoining Property Historical Use Information

4.4.1 Aerial Photographs

In the 1956 photo, the properties to the north and east of the Site are undeveloped. The properties to the south are cultivated in row crops. A farm or ranch complex is present along the southern property line (possibly the Kunde slaughterhouse), near the southeast corner of the Site. A building and coral complex is further southeast (likely the feed lot). The properties west of the Site area also cultivated in row crops, with a farm/ranch complex further west.

Changes to the adjoining properties in the 1971 photo include a building along the northern Site boundary, east of San Vicente Road; disturbance of the ground on the property to the north, west of San Vicente Road (the City of Soledad landfill/quarry?); and expansion of the feed lot complex (Hambey Ranch) to adjoin the southern Site boundary.

In the 1981 photo, a building is located along the western Site boundary. No obvious significant changes are noted to adjoining properties in the 1987 photo. Only a small portion of the City property north of the Site is visible in the 1981 and 1987 photos.

In the 1994 photo, a residential subdivision is under construction along the southern Site boundary, at the location of the former farm/ranch complex, west of the slaughterhouse. The City property to the north appears as if the ground has been stabilized and there is no activity. In the 1998 photo, another structure is located along the northern Site boundary.

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In the 2003-2006 photo, the farm/ranch complexes west of the Site have merged and the residential subdivision south of the Site has expanded. The buildings are still present on the slaughterhouse property on the south; however, the corrals are not present.

4.4.2 Topographic Maps

On the 1915 map, the only nearby feature is a structure east of Section 16, off of Bryant Road; the developed area of Soledad just constitutes a few blocks. On the 1940 and 1947 maps two additional structures join the one noted for 1915. Development has spread at Soledad, with a few unpaved lanes heading northward but none approach the Site. By 1955 a couple of these lanes/roads have reached the southern boundary of Section 16 and the land these serve has a couple structures and a few reservoirs. Otherwise, the area is still largely open. On the 1984 photorevision the Kunde Slaughterhouse and Hambey Ranch complexes are shown south of Section 16, and the nearby roadways are more definitive. Otherwise, there is nothing of pertinent note.

4.4.3 Fire Insurance Maps

No Sanborn fire insurance maps were available for the area from EDR.

4.4.4 Local Street Directories

As discussed in Section 4.3.4 above, San Vicente Road was only included in the 1999 and 2003 directories, of the series we reviewed. There are a number of individuals (residents), plus San Vincente (sic) Ranch, listed for the 32300 address, which is the Parcel 23 (Martinez) labor camp complex. There are also listings for the offsite residences/ranches to the north (31341 and 31463) and, in the 2003 directory, for the newer residential development to the south (3-digit addresses). None of this information constitutes pertinent concerns for the subject ESA.

4.5 Commonly Known or Reasonably Ascertainable Information

In 1995 as part of its 'Phase I' ESA, Terratech conducted a limited amount of soil sampling and testing on the Section 16 portion of the current Site. The entire data is included in the report in Appendix A and the findings are discussed in Section 8.0 of this new ESA.

Besides Terratech's investigative information from 1995, it was determined that no other sources other than the "standard sources" as described above within this Section 4.0 needed to be reviewed to obtain "commonly known and reasonably ascertainable information." Neither Mark Mirassou nor Nader Agha was aware of any results or report stemming from the May 1995 Work Plan prepared by CWE, so apparently that work was never actually performed.

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5.0 SITE RECONNAISSANCE

5.1 Methodology and Limiting Conditions

We performed our formal Site reconnaissance on August 31, 2006. We were accompanied by Mark Mirassou for the eastern 'Section 16' portion. We met with Norm Braga prior to touring the western 'Martines Property' portion on our own. Copies of photographs taken during the visits and our completed reconnaissance checklist are included in Appendix F.

We conducted the reconnaissance by visually observing the Site and structures. The majority of the Site was observed by driving on accessible Site roads, and was viewed from San Vicente Road that crosses the Site. The shop complex east of San Vicente Road was walked.

Inaccessible areas east of San Vicente Road included the eastern portion of the shop, although we were above to view a portion of it through a crack in the door; the vacant house; and the southern portion of the field "chemical shed". Additionally, we did not have permission to enter the residential grounds of the yellow house, west of San Vicente Road.

5.2 General Site Setting

The Site is located in an agricultural area on the northeast edge of the Salinas Valley, bordered on the south by a relatively new residential subdivision. The eastern edge of the Site is located in the foothills of the Gabilan Range.

5.3 Observations - East of San Vicente Road

Approximately 160 acres are planted in wine grapes. The remaining portions are either fallow (approximately 310 acres) or too steep for cultivation (along the eastern edge). A reservoir is located at the northeast portion of the area, and electrical transmission lines cross the Site just northeast of the reservoir. A radio transmission tower is located on the knoll at the southeastern portion of the area. Two, 1,000,000-gallon City-owned water tanks are located southeast of the radio tower; the associated water supply comes from off-site. The flatter portions of the Site slope down to the southwest.

One domestic water supply well (inactive) and an irrigation supply well are located at the southwest corner of this area. Pole-mounted transformers are located at the southwest and northeast ends of the area.

A burn area was noted at the southeast corner of "Area C," delineated on the "San Vicente Ranch Map" (see Appendix G). Grape stakes constructed of preserved wood were burned in this area. Also, piles of vineyard wire were stored in this area. No evidence of recent burning was noted in the grape stake burn area identified in the 1995 Terratech ESA.

A small sheet metal chemical storage shed is located in the field area, at the intersection of Areas F, G, N and P. A few empty buckets were stored in and around the shed. The shed had a wood floor. Mr. Mirassou indicated that various agricultural chemicals are mixed in this area.

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Structures at the southwest corner of the area include a shop and adjoining bathroom and wash rack; a barn; and a vacant house with two small vacant sheds to the rear.

An approximately 1,000-gallon diesel AST is located in a concrete-block bermed area on the east side of the shop. No spills were noted in or around the bermed area. An approximately 500-gallon gasoline AST was located southeast of this. This AST was placed on the bare ground with no secondary containment, surrounded by bollards. No staining was observed.

A concrete pad on the west side of the shop serves as a wash rack. Mr. Mirassou indicated that the wash rack has not been used for a while, but was previously used to wash harvesters. He added that there is a drain in the center of the pad that has always been clogged. This drain was obscured by sediment at the time of our visit. No staining was evident in the area of the wash rack.

A thin layer of soil on top of degraded plastic sheeting was noted on the south side of the wash rack. Mr. Mirassou indicated that this soil is a remnant of stockpiled soil from 1995, generated from scraping soil from the floor of the barn or shop.

Along the north side of the shop were several 55-gallon drums on pallets. Mr. Mirassou stated the drums contained paving oil. Smaller oil containers, plus old paint cans were noted in this area. No significant staining was noted.

Inside the west side of the shop was a concrete block bermed area that contained one 55-gallon drum of oil, plus smaller oil containers. The earthen floor on this side of the shop appeared somewhat oily. Drip pans for oil leaks were placed under some equipment in the shop. The east side of the shop was locked; however, Mr. Mirassou stated that the floor is concrete. A maintenance pit is also located in the locked area, with a dirt floor. We were able to view a small portion of this locked side through a crack in the door. A vehicle and miscellaneous equipment were observed.

In the barn, the earthen floor also appeared somewhat oily. A separate, newer chemical storage area is located in the barn. This area has a wood floor. Some bags and boxes of agricultural chemicals were stored. No signs of spillage were noted.

No evidence of USTs was noted. Also, no evidence of hazardous materials storage was noted around the house or in the sheds to the rear of the house.

5.4 Observations - West of San Vicente Road

The majority of the land is cultivated in leafy vegetables. The land slopes down toward the southwest. The adjoining properties to the east and north of the southern portion are 5 to 10 feet higher; Norman Braga, the lessee, indicated that soil was excavated from this area to construct a nearby freeway overpass.

An approximately 10,000-gallon diesel AST is located along the southern property line. The AST is not secondarily contained. No signs of spillage were noted. An irrigation well is located east of the AST. Oil stains on a concrete pad were noted near the well head.

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An occupied house is located northwest of the " ⌐ " bend in San Vicente Road. We did not have permission to enter the grounds of this residence. Farm equipment, what appeared to be a supply well, and small piles of soil were located east of this house.

A square reservoir is located near the center of the area, and a rectangular reservoir is located alongside San Vicente at the southeast corner of Parcel 26.

No signs of USTs were noted.

5.5 Adjoining Property Observations

The hills adjoining the property on the east and northeast are undeveloped. To the north, east of San Vicente Road, are a couple of houses, plus corrals, stables, vehicles and sheds. To the north, west of San Vicente Road, is a large depression partially filled with concrete rubble.

To the west is agricultural land, plus a ranch/home complex (occupied by Mr. Braga). To the south is agricultural land, a residential subdivision and an abandoned feed lot.

Near the center of the Site, on the west side of San Vicente Road, is a small parcel that is not part of the Site. This Parcel 23 (Martinez) is developed with a labor camp, containing several small homes and other various buildings.

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6.0 INTERVIEWS

6.1 Owner Representative

The ownership representative of the Site, Nader Agha, was provided our interview form to complete. Mr. Agha has been affiliated with the 'Section 16' portion of the Site since 1995 and the 'Martines Property' portion for three years. The Mirassou's were the prior owners of the Section 16 portion and Victor Martinez owned the western portion.

Current and previous uses of the Site is/were grape and row crop agriculture; adjoining properties are/were row crop and hills. In response the various questions regarding hazardous materials use and storage (including fill dirt, pits/pond/lagoons, septic waste, heating/cooling, waste water, floor drains, hydraulic equipment, transformers, ACBMs, monitoring wells, liens/lawsuits, outstanding environmental studies, and construction drawings/ALTA survey), Mr. Agha answered 'No' or 'None'. Surface water runoff is characterized as 'natural'. Potable water supply is believed to be provided by the City (however, both on-site residences have domestic wells). There are groundwater wells on the Site; they have 'no contaminants'.

A copy of Mr. Agha's completed interview form is included as Appendix G.

We also spoke by telephone briefly with Victor Martinez, former owner of the property west of San Vicente Road, on September 6, 2006. Mr. Martinez stated he owned the property for about 10 years, and operated a vineyard. Pesticides that were allowed by local and State regulations were applied. No chemicals were stored or used at the yellow house. He stated that he installed the diesel AST along the southern boundary. He has no knowledge of any spills or leaks of any chemicals, including diesel from this AST.

Mr. Martinez was aware of two wells; the irrigation well along the southern boundary, and the domestic well for the yellow house. The domestic well is located east of the house, closer to San Vicente Road.

6.2 Occupant Representatives

On August 31, 2006, we interviewed Mark Mirassou, owner of the business managing the vineyards east of San Vicente Road (Section 16), and Norm Braga of Braga Ranch, the business growing leafy vegetables west of San Vicente Road (the 'Martines Property' portion).

Mr. Mirassou has been affiliated with the Site on and off for the past 30 years. His family purchased the east portion of the Site in the 1960s, then sold it to Nader Agha in 1995. His father leased the land to grow wine grapes until last year, when Mark took over the lease. Ray Garcia also cultivated row crops until last year, when water issues forced him to vacate.

Mr. Mirassou indicated the Site has always been agricultural and has never been used for industrial purposes. On adjoining properties there is a labor camp to the west, and a slaughterhouse and feed lot were located to the south.

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Chemicals used currently (and in the past) primarily are pesticides and fertilizers, automotive fuels, and equipment maintenance oils. Mr. Mirassou only orders as many pesticides as he will immediately use, to avoid significant storage. He recalled a time when he was a child when a DDT-type pesticide was sprayed on Area G, due to the presence of nematodes. Appended to his interview form is a 7-page fax presenting more specifics about recent agricultural chemicals at the vineyard.

Mr. Mirassou stated that diesel and gasoline are both stored in ASTs, and to the best of his knowledge USTs have never been located on the Site. The wash rack west of the shop formerly was used to wash harvesters, but is not currently used. There is a clogged drain in the middle of the wash rack pad.

He is unaware of any past spills or leaks of hazardous materials. There is some oily soil inside the shop and barn. Some of this soil was scraped away in 1995 and stockpiled next to the wash rack.

Mr. Mirassou recalled that the pole-mounted transformers near the well on the south boundary blew about 4 years ago. PG&E conducted a cleanup that may have involved soil excavation.

Mr. Mirassou stated that a septic tank for the vacant house is located on the west side. He is not sure, but thinks the shop is on its own septic system. There are only two wells on the property, one irrigation and one domestic, both located at the southwest corner.

Mr. Braga stated that Braga Ranch has leased the land west of San Vicente Road for the past 1 to 2 years, to organically cultivate leafy vegetables. The prior owner was Victor Martinez. The area was an abandoned vineyard when Braga Ranch took occupancy. Refuse and debris, such as old motors, were dumped alongside San Vicente Road.

He does not believe the land was ever used for industrial purposes. Adjoining properties include the labor camp and agricultural fields. The Dole plant is further east. The City owns the property to the north, and operated a gravel pit and landfill.

Mr. Braga states that since they organically grow their product, they do not store or use chemicals of any kind. He described the diesel AST along the southern boundary. He is not aware of any spills or leaks of hazardous materials.

Mr. Braga thought that the yellow house had a septic tank. Several ASTs are located at this yellow house, but Mr. Braga does not think they are currently used. Mr. Braga stated there is only one irrigation well on this portion of the Site.

6.3 Regulatory Agency Representatives

We spoke with Sandra Tauriac of the MCDEH by phone on September 1, 2006, asking about any local hazardous materials incidents in the area. Ms. Tauriac stated that she was not aware of any problems in the area we described. She was familiar with the San Vicente Vineyard facility but indicated that specific information would be available in the vineyard's file in their office. The facility had no significant violations that she could recall and she believed it only

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had ASTs, no underground ones. Ms. Tauric referred us to Ted Terrasas for inquiries about any information County Health had for the closed Soledad Landfill.

On September 6, 2006, after leaving a couple earlier messages, we spoke Mr. Terrasas. He stated that he is not aware of any recent activities concerning this landfill, certainly not since 1995. Mr. Terrasas said he would pull the files to formally verify this representation and promised to contact us if anything of note was there.

In the course of acquiring information from the MCAC and MCWRA we spoke briefly with Nathan Desjarlais and German Criollo, respectively. Neither had any personal, site-specific knowledge beyond what was in their agencies' records.

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7.0 ADDITIONAL SERVICES

No additional services beyond what is described elsewhere in this report were performed.

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8.0 FINDINGS

Besides a few scattered rural/farm residences (with the structures on Parcel 26 now gone), the Site has seen a long history (at least 90 years) of agricultural use including orchards, vineyards and row crops. Associated with the agricultural activities there have been a few areas where storage, staging, and maintenance-type activities have been concentrated, as well as two grape stake burning areas. We found no records of specific or significant violations of regulatory policies. However, the basic nature of these activities involves the handling and application of hazards chemicals. Commonly used agricultural chemicals of the past were chlorine or metal based and tend to persist in near-surface soils.

In recent years the western portion of the property is being used as an organic farm for leafy vegetables and limited quantities of benign products are applied. Vineyard operations continue on the eastern portion, inherently involving applications of sulfur and other fungicides, plus weed control herbicides. Nothing was noted that appeared to be outside of 'normal practice' expectations and newer agricultural chemicals tend to be much less persistent in soil and the environment in general.

The 1995 environmental work performed by Terratech included the testing of 10 near-surface soil samples from the Section 16 portion of the Site. Sampling locations were selected to provide an indication of conditions at a variety of site areas – i.e., within intermittent drainages, where surface water collects, where prior orchards were located, where row crops and/or open field crops were grown, where a 'capped' well was (and presumably still is) located, and where agricultural chemicals were stored/mixed. Due to fresh herbicide spraying, the southwestern portion of Section 16 was not accessible for sampling. Testing was limited to the 'Priority Pollutant' suite of chlorinated pesticides; plus PCBs, which are chemically similar.

Seven of the 10 soil samples exhibited no detectable analytes. The other three samples were found to only contain trace amounts of DDE (a breakdown product of DDT), plus a trace of dieldrin in one of the three. The maximum concentrations were 0.066 mg/kg and 0.013 mg/kg, respectively. The certified analytical reports and other more detailed discussions are included in the Terratech report in Appendix A. For relative comparison, the currently applied screening levels (CHHSLs) for these chemicals in a residential land use are 1.6 mg/kg for DDE and 0.035 for dieldrin (Cal EPA, 2005).

In this immediate area there are no known or listed releases of contaminants to the ground (soil or groundwater). A single testing event in 1987 on groundwater from a supply well at intervening Parcel 23 (Martinez Property) showed no suspicion of a regional groundwater contamination problem. Nitrate may be high but that is common for the whole valley.

The closed landfill adjacent to the north side of Parcel 26 is a 'listed' facility, but we found no records of analytical environmental investigations having been performed, just a general exploratory investigation in 1977 concerning potential leachate volume generation and various assessments of cover maintenance. We believe the landfill is unlined. As presented in Section 4.2, soils of the area are considered fairly permeable and the groundwater is unconfined. The subject well noted above that was tested in 1987 is over 2000 feet from the landfill, and probably in a cross-gradient relative position.

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9.0 OPINIONS

This section summarizes our opinions regarding whether any of the various findings discussed previously in this report constitute a "recognized environmental condition."

A "recognized environmental condition," as defined by ASTM Designation E 1527-05, means:

> "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis* are not recognized environmental conditions."

The following is a list of this Site's recognized environmental conditions (RECs) that warrant Phase II investigative study prior to commencing new development. These items are in addition to the standard 'closure' processes of removing all hazardous materials, their containers (including any underground tanks, if present) and affiliated equipment, and the standard pre-demolition survey of all structures for hazardous building materials such as asbestos.

- Pesticide and metal residuals from longtime agricultural use on most of the Site*;
- Specific areas where agricultural chemicals were stored, and especially mixed;
- Specific areas where burning of grape stakes has occurred;
- Lead-based paint and pesticide residues around structures (both current & former);
- Soil staining in areas such as the various earthen building floors;
- Soil beneath the maintenance pit in the vineyard shop;
- Soil beneath the pole-mounted transformers that apparently blew;
- Infiltration of possible contaminants at the wash rack drain and shop leachfield; and
- Possible impacts from the closed landfill adjacent to north end of Parcel 26.

*According to MCDEH staff, the evaluation of historic agricultural land for proposed residential use should follow the most recent California Department of Toxic Substances Control (DTSC) guidance for school sites (Cal EPA, 2002). The general sampling frequency listed in this guidance is one per acre. However, since the Site has an aggregate size in excess of 100 acres, DTSC (and/or MCDEH) would have to be consulted for an acceptable site-specific sampling frequency of presumably less intensity. The Section 16 portion will need additional such general testing and the Martines Property portion will need a full program.

Except for the last two bulleted RECs, the list above concerns near-surface soil (i.e., with 2-3 feet of the ground surface). For the wash rack drain, shop leachfield and landfill a somewhat deeper sampling regime is appropriate, perhaps incorporating a soil gas sampling component

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(at least for the landfill area). At this time, DMCE does not believe groundwater sampling and testing is a needed part of the Phase II work. We understand that potable water for the new development will be of municipal supply.

According to MCDEH staff, any detected concentrations of contaminants will need to be compared to California Human Health Screening Levels (CHHSLs) as an initial evaluation of possible remedial needs. Since the project involves a mixed development, there should be regulatory-acceptable options for on-site management of soil, if any does not meet criteria set forth for residential or school land use.

Besides the above items relating to possible site contamination matters, all of the Site's wells that are not planned for future use should be properly destroyed.

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10.0 CONCLUSIONS

We have performed a Phase I ESA for the Miravale III Site in conformance with the scope and limitations of ASTM Practice E 1527 and AAI standards. Any exceptions to, or deletions from, this practice are described in the Introduction (1.0) and Deviations (11.0) sections of this report.

Further work (i.e., Phase II investigation) is needed to determine whether any of the recognized environmental conditions listed in Section 9.0 are such that remedial actions will be necessary as part of the transition in land use. Based on the findings of this ESA, the preliminary environmental soil testing conducted in 1995, and the similar developments that have already occurred nearby (Soledad, 1999), it is not expected that this Site has significant environmental contamination problems.

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11.0 DEVIATIONS

Due to the short time period allotted to perform this ESA, there are a few (relatively minor) outstanding inquires that may yet yield additional pertinent information of note. If so, those findings and comments will be documented in an addendum letter. Otherwise, there were no known deviations from the ASTM and AAI standards of practice in preparing this ESA.

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12.0 REFERENCES

12.1 Aerial Photographs

Aerial photograph copies of the subject area were provided by EDR. The copies were all printed at a scale of 1:9,996 and included a photo taken in 1956 by Aero; one taken in 1971 by Western; one taken in 1981 by WSA; and photos taken in 1987 and 1998 by the USGS.

The 1994 online aerial photograph was reviewed at:
http://terraserver.homeadvisor.msn.com/image.aspx?T=1&S=12&Z=10&X=812&Y=5043&W=3&qs=%7csoledad%7cca%7c

The 2003-2006 online aerial photograph is from Google Earth Plus, version 4.0 1693 (beta)

12.2 Other References

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U.S. Geological Survey, 1915, 15-minute topographic map of the Soledad Quadrangle, California: scale 1:62,500.

U.S. Geological Survey, 1940, 15-minute topographic map of the Soledad Quadrangle, California: scale 1:62,500.

U.S. Geological Survey, 1947, 15-minute topographic map of the Soledad Quadrangle, California: scale 1:50,000 (same as 1940 version, just slightly enlarged?).

U.S. Geological Survey, 1955, 7½-minute topographic map of the Soledad Quadrangle, California: scale 1:24,000.

U.S. Geological Survey, 1984, 7½-minute topographic map of the Soledad Quadrangle, California: scale 1:24,000 (photorevised from 1955).

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13.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

This section includes qualification statements of the environmental professionals responsible for conducting the subject ESA and preparing this report.

Eric R. Lautenbach, PE, Project Environmental Engineer
California Registered Civil Engineer, No. 42437
Postgraduate, Environmental Courses – University of California Extension, American Society of Civil Engineers, Battelle, International Network for Environmental Training, etc.
M.S., Civil Engineering (Water Resources/Geotechnical), San Diego State University
B.S., Civil Engineering (Top Honors in Graduating Civil Engineering Class), Drexel University

Mr. Lautenbach is an engineer with over 25 years of soil and groundwater related experience, including 22 years of environmental experience. After working in Southern California and Nevada, Mr. Lautenbach joined Terratech, Inc. (now known as DMCE and part of URS Corporation) in 1983 and began performing a wide range of duties on environmental projects at agricultural, commercial and industrial sites. From 1987 until 2000, he managed the environmental department in Terratech's San Jose office and participated in company-wide management. Mr. Lautenbach also provided project management, report preparation and liaison with regulatory agencies for the department's more challenging assignments. Projects primarily concerned soil, storm water and/or groundwater contamination, with the impacts originating from a wide variety of chemical sources (fuels, solvents, pesticides, etc.). The work tasks included Phase I and Phase II environmental Site assessments, remedial investigation/feasibility study work, monitoring, facility closures, corrective action plans, technical specifications, and remedial action plans.

Since 2000, Mr. Lautenbach has served as a contract/hourly environmental consultant, largely working on DMCE projects. He provides technical expertise, review and project management for a wide variety of subsurface contamination projects; with particular emphasis on innovative, cost-effective approaches to remediation.

Specific project experience includes the following:

Licensed project engineer for over 30 sites transitioning from agricultural-oriented land use to residential or school use. A couple of the larger sites have included a 135-acre tract outside of Salinas that was under strawberry cultivation and a 125-acre, multi-parcel site in Morgan Hill for a new high school. Research on past site activities and known concerns was conducted, plus a thorough site inspection. Then Phase II investigative plans were developed, which were approved by the local environmental agency (City HazMat group or County Health Dept) for most of the residential sites, and by the state Department of Toxic Substances Control for all the school sites. A few sites were self-directed. Field/orchard areas were studied by grid sampling typically; specific items of concern were checked by targeted sampling.

Some sites have shown no impacts of concern. Most of the ones that have sheds and storage/staging areas, or farm building complexes, have required removal of hot-spot soils and/or fuel tanks. Specific contaminants have included arsenic, lead, chlordane, DDT, dieldrin and toxaphene, plus petroleum products. One 15-acre site required site-wide treatment to reduce pesticides (primarily dieldrin) to acceptable levels. Some sites have involved on-site

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soil management to control long-term risks; and some have required site-specific human health risk assessments.

Licensed project engineer for over 40 sites that needed definition of the extent of soil and/or groundwater contamination as part of either a release response or a redevelopment process. Contaminants included petroleum fuels and oils, chlorinated solvents, pesticides, heavy metals (arsenic, chromium, lead and zinc), PCBs and polynuclear aromatics (PNAs). Supervision of technical staff in exploration and well siting decisions, performance of slug testing, contouring of groundwater gradients and contaminant concentrations. Estimation of migration pathways and rates based on contaminants' physical/chemical properties, retardation coefficients from the literature and site aquifer characteristics.

Definition of the lateral extent of MtBE groundwater impacts has largely been achieved through the use of transects of continuously sampled Geoprobe-type holes. An increasing amount of characterization work includes assessing the vapor intrusion risk. Mr. Lautenbach has developed numerous soil gas sampling programs and at one residential site he employed flux chamber sampling. Conservative crawl-space ventilation measures were designed for school buildings at one site located above a MtBE plume. Current work includes design of a sub-slab venting system to mitigate hazards from PCE.

Licensed project engineer for over 30 sites evaluating soil remediation approaches and costs for wide variety of contaminants, then supervising the implementation of the selected technique(s). Locations of excavations have ranged from open yards to inside buildings where structural support was provided by temporary underpinning. Large diameter augers were successfully employed at one site. Soil remediation has ranged from aeration, landfarming and enhanced bioremediation to offsite thermal treatment and recycling in a low temperature asphalt batching process. Experience also includes vapor extraction systems for in-place soil remediation.

Licensed project engineer for designing, installing and optimizing the operation of groundwater cleanup systems involving both petroleum fuels and chlorinated solvents. Some sites have involved free-product recovery. Specific responsibilities included siting and construction detailing of extraction wells and injection wells/trenches, calculating expected capture zones, regulatory permitting, supervision of construction, evaluation of operational results, and regulatory reporting. Also has experience designing and implementing aquifer aerating systems (sparging, iSOC and peroxide/nutrient solutions), ozone injection and dual-phase (vapor and groundwater) high-vacuum extraction, to expedite fuel cleanup.

Third-party technical reviewer for several landowners and developers where contaminant investigations and clean-ups were being performed by responsible parties. One of the most extensive such projects involved historic discharges of resins and petroleum-based solvents by a large chemical company that formerly owned the Site, discharges of TCE and heavy metals by one of their tenants who made circuit boards, PCB spills from an earlier power substation, and paint thinner and fuel migrating onto the Site from two upgradient dischargers.

Licensed engineer providing technical assistance in over a dozen subsurface contamination cases involving litigation. Contaminants have primarily been petroleum fuels but also have included chlorinated solvents, lead and PNAs. Litigation has primarily concerned recovery of cleanup costs by a recent purchaser from historic dischargers, or forcing a discharger to

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perform the cleanup, and/or defining responsibilities for multiple discharges. Several cases have resulted in depositions.

Project manager and engineer for Solid Waste Assessment Test (SWAT) projects at two inactive landfills. Each project involved installation of several groundwater monitoring wells, preparation of cross-sections, full-scan water quality testing over multiple monitoring events, statistical assessment of groundwater quality data with respect to impact from landfill leachate, evaluation of aquifer properties through slug testing, and groundwater gradient determinations.

Project Engineer for variety of storm water pollution prevention assignments including site inspections, regulatory compliance plans, monitoring, annual reporting, and best management practice recommendations. Also evaluated oil and debris removal performance of equipment in municipal storm sewer system discharging to Monterey Bay National Marine Sanctuary.

Technical oversight and licensed engineering review of approximately a dozen water supply and nitrate balance projects for proposed residences and one expanding industrial facility; primarily in Monterey County, but also in San Benito and Santa Clara Counties. Water supply portion of work involved defining sub-basins, reviewing information on hydrogeology and well performance, estimating current and future water use and recharge, and calculating water balances. Nitrate balance portion involved research on existing groundwater concentrations, calculations on present and future loadings to the subsurface environment, estimation of the nitrate content of deep percolation water and comparisons to regulatory criteria.

Christine L.H. Mead, PG, REA II, Senior Geologist
(subconsultant with Toxichem Management Systems)
California Professional Geologist No. 5884
California Registered Environmental Assessor I, No. 5668
California Registered Environmental Assessor II, No. 20077
B.S. Earth Sciences, University of California at Santa Cruz

A geologist with over 18 years of experience, Christine Mead has a strong background in soil and groundwater contamination investigations, characterization, remediation and monitoring projects; Phase I and II environmental Site assessments; and preliminary endangerment assessments. Beginning in 1988 at Beta Associates, Inc., and continuing at Terratech, Inc. (now DMCE/URS Corporation) from 1994 until 2001, her emphasis has been on management of environmental projects. From 1996 to 2001, Ms. Mead managed the environmental department in DMCE's/URS' Monterey office, in addition to her project management duties. Beginning in December 2001, Ms. Mead moved over to Toxichem where she continues to develop and manage environmental assessment and remediation projects.

The following summarizes Ms. Mead's project experience:

Performance or technical review of over 250 Phase I and/or Phase II Environmental Site Assessments. Sites include proposed schools, a Superfund laser manufacturing facility; facilities within former Fort Ord; Pebble Beach Company gasoline stations, golf courses and golf maintenance facilities; a city block, with histories of auto dismantling and coal gasification plant waste disposal; a former truck stop which had received previous regulatory fuel leak closure; a former electrical transformer manufacturer; a gasoline station impacted by a 1920s

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catastrophic oil fire; an 1,850-acre hunt club with former above-ground oil distribution pipelines on existing pipeline easements; a slaughterhouse converted to a city landfill; three airports previously occupied by the US Navy; and a farm equipment maintenance facility on Union Pacific Railroad property with a history of above-ground bulk fuel storage.

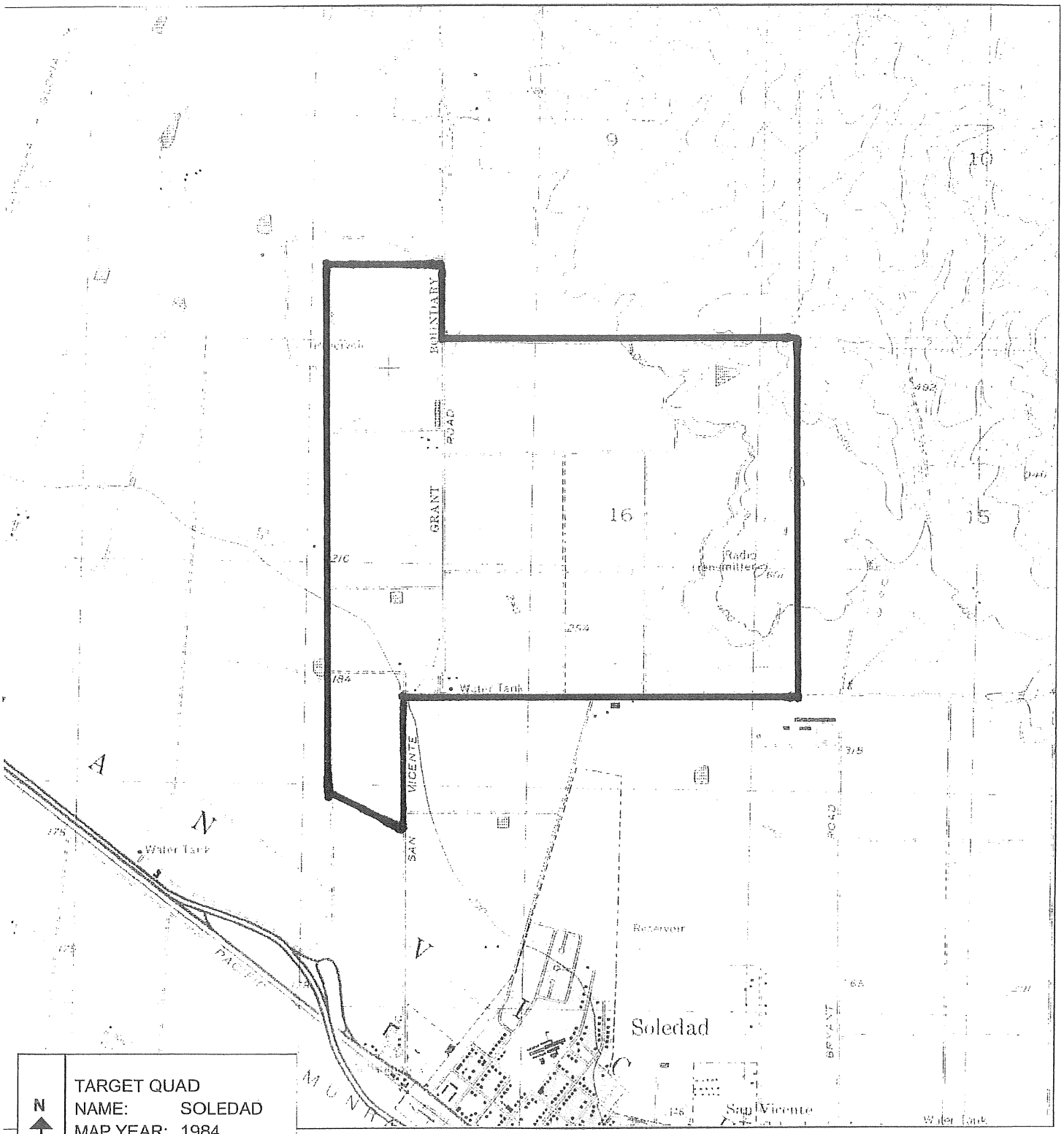
Licensed Class II Registered Environmental Assessor (REA), technical reviewer and key contributor to nine Phase I Environmental Site Assessments for proposed K-12 school sites, plus licensed Class II REA and technical reviewer of 12 additional K-12 school site ESAs. School sites were located in Los Angeles Unified School District, Morgan Hill Unified School District, Gilroy Unified School District, Pajaro Valley Unified School District and Gonzales Unified School District. Developed uses of some sites dated back to the 1800s. The environmental Site assessments were submitted to the California EPA's Department of Toxic Substances Control (DTSC) and/or California Department of Education.

Performed preliminary endangerment assessments and was licensed Class II REA for five proposed K-12 school sites and was licensed Class II REA for another proposed K-12 school site. The preliminary endangerment assessments were performed in coordination with the School Property Evaluation and Cleanup Division of the California DTSC. The sites were previously used for agriculture, including dairy farming and/or fruit drying; lumber yards; or residential purposes. Three of the projects involved entirely new schools, two involved a renovation of an existing facility and one involved acquisition of eight adjoining parcels to allow expansion.

One historically agricultural property was found to contain trace residuals of chlorinated pesticides and elevated lead not severe enough to warrant any remedial measures. The other historically agricultural site was found to contain two hot-spot areas of DDT-contaminated surface soils. The soils were removed to the satisfaction of the DTSC and the County Health Department and the site was cleared for school construction. At one of the facility renovation projects, unacceptably elevated arsenic was found in near-surface soil. High lead was found in soil on all of the eight parcels to be acquired, plus a hot-spot of polynuclear aromatic hydrocarbons was identified on one. Ms. Mead prepared a Removal Action Workplan for remediation of the impacted soil, supervised the removal of 2,400 tons of impacted soil and conducted air monitoring.

Managed or provided technical review for over 70 fuel leak projects in California. Sites include a service station contributing to a commingled gasoline groundwater plume that migrated within 10 feet of a river in Monterey County; a maintenance yard where MtBE- and DCA-impacted groundwater was present in an active domestic water well in Santa Cruz County; and gasoline stations in San Benito County where MTBE and/or benzene have impacted the drinking water aquifer. Work phases performed for the fuel leak projects include Site conceptual model development, design and implementation of three-dimensional characterization investigations, some using expedited assessment methods; risk-based corrective action assessments; remedial feasibility studies; remedial feasibility testing; aquifer testing; soil and groundwater remediation; groundwater monitoring; and negotiating case closures.

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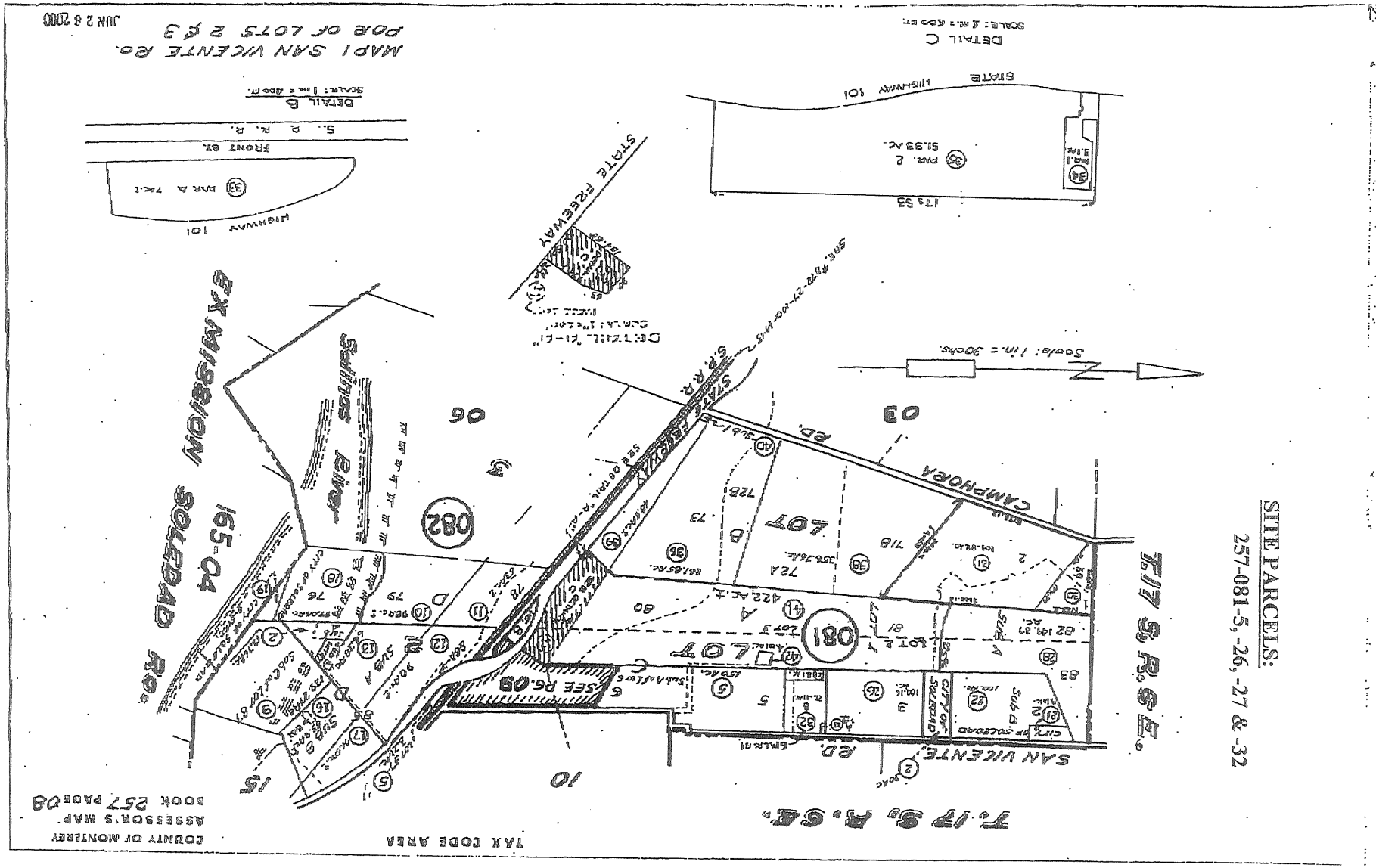
SEPTEMBER 2006

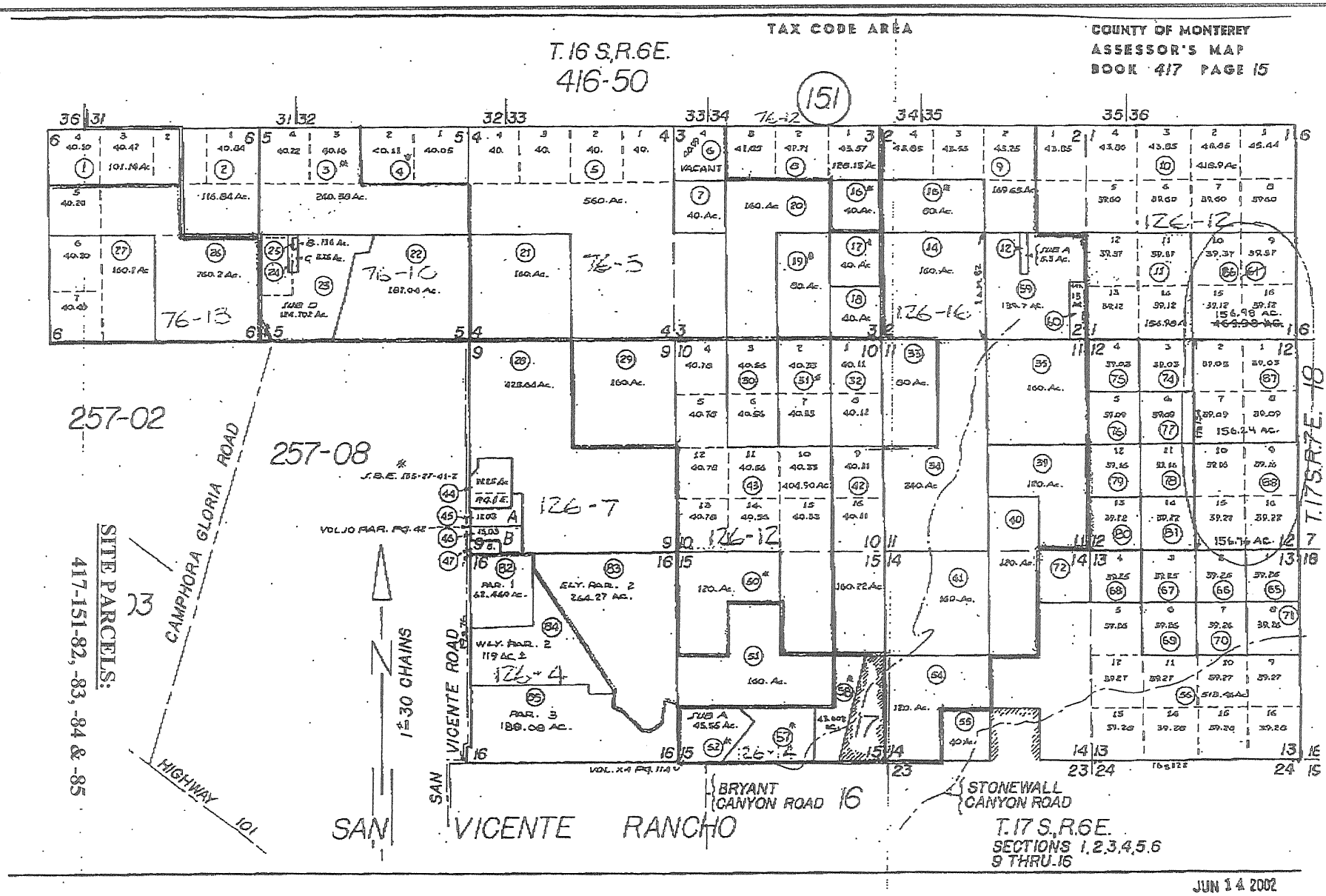
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A URS CORPORATION COMPANY

TOPOGRAPHIC VICINITY MAP
MIRAVALE III SITE
SOLEDAD, MONTEREY COUNTY, CALIFORNIA

FIGURE
1

PROJECT
4071


SITE PARCELS:
257-081-5, -26, -27 & -32
Monterey, CA . 2005-2006 • 257-01
SEPTEMBER 2006
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PARCEL MAP, WESTERN PORTION (BOOK 257, PAGE 08)
MIRAVALE III SITE
SOLEDAD, MONTEREY COUNTY, CALIFORNIA
FIGURE
2
PROJECT
4071



SEPTEMBER 2006

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PARCEL MAP, EASTERN PORTION (BOOK 417, PAGE 15)

MIRAVALE III SITE

SOLEDAD, MONTEREY COUNTY, CALIFORNIA

FIGURE
3

PROJECT
4071

TECHNICAL APPENDIX T-7

Environmental Noise Assessment (Illingworth & Rodkin)

MIRAVALE III SPECIFIC PLAN
ENVIRONMENTAL NOISE ASSESSMENT
SOLEDAD, CALIFORNIA

March 14, 2007

♦ ♦ ♦

Prepared for:

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Prepared by:

Michael S. Thill

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Job No.: 06-161

INTRODUCTION

This report summarizes the environmental noise assessment of the Miravale III Specific Plan Project proposed in Soledad, California. The project would develop an approximate 900-acre site with 1,470 single-family homes, 2,730 multi-family homes, senior housing, a hotel, retail uses, schools, and a golf course. This assessment presents the fundamentals of environmental noise, provides a discussion of policies and standards applicable to the project, and presents the results of noise measurements made in the project vicinity. An evaluation of the potential significance of impacts resulting from the project is made and mitigation measures are presented to reduce the effects of potentially significant noise impacts that would result from the implementation of the Specific Plan.

FUNDAMENTALS OF ENVIRONMENTAL NOISE

Noise is defined as unwanted sound. Airborne sound is a rapid fluctuation of air pressure above and below atmospheric pressure. Sound levels are usually measured and expressed in decibels (dB) with 0 dB corresponding roughly to the threshold of hearing. Decibels and other technical terms are defined in Table 1.

Most of the sounds that we hear in the environment do not consist of a single frequency, but rather a broad band of frequencies, with each frequency differing in sound level. The intensities of each frequency add together to generate a sound. The method commonly used to quantify environmental sounds consists of evaluating all of the frequencies of a sound in accordance with a weighting that reflects the facts that human hearing is less sensitive at low frequencies and extreme high frequencies than in the frequency mid-range. This is called "A" weighting, and the decibel level so measured is called the A-weighted sound level (dBA). In practice, the level of a sound source is conveniently measured using a sound level meter that includes an electrical filter corresponding to the A-weighting curve. Typical A-weighted levels measured in the environment and in industry are shown in Table 2 for different types of noise.

Although the A-weighted noise level may adequately indicate the level of environmental noise at any instant in time, community noise levels vary continuously. Most environmental noise includes a conglomeration of noise from distant sources which create a relatively steady background noise in which no particular source is identifiable. To describe the time-varying character of environmental noise, the statistical noise descriptors, L_{01}, L_{10}, L_{50}, and L_{90}, are commonly used. They are the A-weighted noise levels equaled or exceeded during 1%, 10%, 50%, and 90% of a stated time period. A single number descriptor called the L_{eq} is also widely used. The L_{eq} is the average A-weighted noise level during a stated period of time.

In determining the daily level of environmental noise, it is important to account for the difference in response of people to daytime and nighttime noises. During the nighttime, exterior background noises are generally lower than the daytime levels. However, most household noise also decreases at night and exterior noise becomes very noticeable. Further, most people sleep at night and are very sensitive to noise intrusion. To account for human sensitivity to nighttime noise levels, a descriptor, DNL (day/night average sound level), was developed. The DNL divides the 24-hour day into the daytime of 7:00 AM to 10:00 PM and the nighttime of 10:00 PM to 7:00 AM. The nighttime noise level is weighted 10 dB higher than the daytime noise level. The Community Noise Equivalent Level (CNEL) is another 24-hour average which includes both an evening and nighttime weighting.

Table 1 Definitions of Acoustical Terms Used in this Report

Term	Definitions
Decibel, dB	A unit describing, the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in micro Pascals (or 20 micro Newtons per square meter), where 1 Pascal is the pressure resulting from a force of 1 Newton exerted over an area of 1 square meter. The sound pressure level is expressed in decibels as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e.g., 20 micro Pascals). Sound pressure level is the quantity that is directly measured by a sound level meter.
Frequency, Hz	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sound are below 20 Hz and Ultrasonic sounds are above 20,000 Hz.
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Equivalent Noise Level, Leq	The average A-weighted noise level during the measurement period.
L_{max}, L_{min}	The maximum and minimum A-weighted noise level during the measurement period.
L_{01}, L_{10}, L_{50}, L_{90}	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.
Day/Night Noise Level, L_{dn} or DNL	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 pm and 7:00 am.
Community Noise Equivalent Level, CNEL	The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels in the evening from 7:00 pm to 10:00 pm and after addition of 10 decibels to sound levels measured in the night between 10:00 pm and 7:00 am.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

Table 2 Typical Noise Levels in the Environment

Common Outdoor Noise Source	Noise Level (dBA)	Common Indoor Noise Source
	120 dBA	
Jet fly-over at 300 meters		Rock concert
	110 dBA	
Pile driver at 20 meters	100 dBA	
		Night club with live music
	90 dBA	
Large truck pass by at 15 meters		
	80 dBA	Noisy restaurant
		Garbage disposal at 1 meter
Gas lawn mower at 30 meters	70 dBA	Vacuum cleaner at 3 meters
Commercial/Urban area daytime		Normal speech at 1 meter
Suburban expressway at 90 meters	60 dBA	
Suburban daytime		Active office environment
	50 dBA	
Urban area nighttime		Quiet office environment
	40 dBA	
Suburban nighttime		
Quiet rural areas	30 dBA	Library
		Quiet bedroom at night
Wilderness area	20 dBA	
Most quiet remote areas	10 dBA	Quiet recording studio
Threshold of human hearing	0 dBA	Threshold of human hearing

REGULATORY BACKGROUND

The State of California and the City of Soledad establish guidelines, regulations, and policies designed to limit noise exposure at noise sensitive land uses. Appendix G of the State CEQA Guidelines, the California Building Code, the City of Soledad Noise Element of the General Plan, and the City of Soledad Municipal Code present the following applicable criteria:

State CEQA Guidelines. The California Environmental Quality Act (CEQA) contains guidelines to evaluate the significance of effects of environmental noise attributable to a proposed project. CEQA asks whether the project would result in:

- Exposure of persons to or generation of noise levels in excess of standards established in the local General Plan or Noise Ordinance, or applicable standards of other agencies?

- Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Section 1208 of the 2001 California Building Code. New multi-family housing in the State of California is subject to the environmental noise limits set forth in Appendix Chapter 1208A.8.2 of the California Building Code. The noise limit is a maximum interior noise level of 45 dBA CNEL. Where exterior noise levels exceed 60 dBA CNEL, a report must be submitted with the building plans describing the noise control measures that have been incorporated into the design of the project to meet the noise limit.

City of Soledad General Plan. The City of Soledad's primary noise goal is to, "…preserve the quiet and rural setting of the City and protect citizens from exposure to excessive levels of noise." The City establishes policies and programs in the Noise Element to support the City's noise goal. General Plan supporting policy N-1 states that the City shall not allow development of new noise-sensitive land uses where noise levels exceed acceptable standards (shown in Table 3) unless effective noise mitigation measures have been incorporated into the development design. Policy N-2 states that the City shall require preparation of an acoustical analysis as part of the environmental review process for nonresidential land uses that are likely to generate noise levels exceeding acceptable levels at adjacent or nearby existing or planned noise-sensitive uses, so that noise mitigation may be included in the project design. Policy N-3 requires new residential development to comply with State Noise Insulation Standards. Policy N-4 states that new commercial and industrial development shall incorporate design elements to minimize the noise impact when residential neighborhoods are nearby. Policy N-5 states that the emphasis of mitigation measures shall be placed on site planning and project design, and the use of noise barriers shall be considered as a means of achieving the noise standards only after all other practical design related mitigation measures have been integrated into the project.

Table 3 Interior and Exterior Noise Standards

Land Use Categories		Energy Average CNEL	
Categories	Uses	Interior[1]	Exterior[2]
Residential	Single Family, Duplex, Multi Family	45[3]	65
	Mobile Home	---	65[4]
Commercial, Industrial and Institutional	Motel, Hotel, Transient Lodging	45	65[5]
	Commercial Retail, Bank, Restaurant	55	---
	Office Building, Research and Development, Professional Office, Government Office	50	---
	Amphitheater, Concert Hall, Auditorium, Meeting Hall	45	---
	Gymnasium	50	---
	Sports Club	55	---
	Manufacturing, Warehousing, Wholesale, Utilities	65	---
	Movie Theaters	45	---
Institutional	Hospitals, Schools	45	65
	Church, Library	45	---
Open Space	Parks	---	65

Notes:
1. Indoor environment excluding bathrooms, closets and corridors.
2. Outdoor environment limited to private yards of single family residences, multi-family private patio or balcony served by a means of exit from inside, mobile home parks, hospital patio, park picnic area, school playground, hotel/motel recreation area.
3. Noise level requirements with closed windows. Mechanical ventilation system or other means of natural ventilation shall be provided per Chapter 12 Section 1205 of the Uniform Building Code.
4. Exterior noise level should be such that interior level will not exceed 45 CNEL.
5. Except areas affected by aircraft noise.

City of Soledad Zoning Code

Section 17.38.240, of the City's Zoning Code establishes noise performance standards for noise generating uses to limit noise at sensitive land uses. The noise limit for residential uses is 55 dBA in any octave band at the residential property line. Corrections to these limits are applied depending on the character of the noise, the duration of noise, and the timing of noise.

EXISTING NOISE ENVIRONMENT

The project planning area is located at the northernmost portion of the City of Soledad between approximately San Vincente Road in the west to Orchard Lane in the east. Farmland borders the project site to the west, north, and east. Single-family residential uses border the planning area to the south. A

site visit and noise monitoring survey was performed in September 2006 to establish existing noise conditions in the project vicinity. The ambient noise environment in the project vicinity results primarily from local and distant vehicular traffic. Intermittent sources of environmental noise include railroad trains along the Union Pacific Railroad and agricultural related activities. The noise monitoring survey included three long-term noise measurements to quantify the daily trend in noise levels along roadways serving the site and four short-term noise measurements to identify specific noise sources and associated noise levels at representative locations in adjoining neighborhoods. Noise measurement locations are shown on Figure 1.

The daily trend in noise levels along San Vincente Road was measured at Site LT-1 from September 6 to 7, 2006. Noise measurement location LT-1 was approximately 20 feet from the center of San Vincente Road near Saavedra Street. Noise levels at this location resulted primarily from local vehicular traffic. During periods of the noise measurement, wind noise also contributed to the measured levels. Daytime hourly average noise levels typically ranged from 62 to 73 dBA L_{eq}. At night, hourly average noise levels ranged from 52 to 70 dBA L_{eq}. The day-night average noise level calculated based on the data gathered at LT-1 was 71 dBA CNEL. The daily trend in noise levels at location LT-1 is shown on Figure 2.

A second long-term noise measurement position (LT-2) was selected at the north end of West Street to quantify noise levels near existing residential receivers. Noise levels at this location resulted primarily from local neighborhood activities and periods of wind. Daytime hourly average noise levels at Site LT-2 typically ranged from 50 to 55 dBA L_{eq} excluding atypical high noise level events occurring close to the sound level meter. Hourly average noise levels were relatively low at night ranging from about 33 to 47 dBA L_{eq}. The day-night average noise level calculated based on the data gathered at LT-2 was 61 dBA CNEL. The daily trend in noise levels at location LT-2 is shown on Figure 3. The estimated CNEL at this location, excluding periods of wind and the atypical noise events occurring near the sound level meter is approximately 53 to 55 dBA CNEL.

A third long-term noise measurement was made approximately 25 feet from the center of West Street near Sundew Street. Noise levels at this location resulted primarily from local vehicular traffic. Daytime hourly average noise levels at Site LT-3 typically ranged from 61 to 70 dBA L_{eq} and from 49 to 67 dBA L_{eq} at night. The day-night average noise level calculated based on the data gathered at LT-3 was 69 dBA CNEL. The measured noise levels at location LT-3 are shown on Figure 3.

Four short-term noise measurements were made to complete the noise monitoring survey. These measurements were made near noise sensitive receptors that could be affected by increased traffic resulting from the proposed project. The results of the short-term noise measurements are summarized in Table 4.

Table 4 Summary of Short-Term Noise Measurement Data (dBA)

Noise Measurement Location		Date	L_{eq}	$L_{(1)}$	$L_{(10)}$	$L_{(50)}$	$L_{(90)}$	CNEL
ST1	North end of Orchard Lane near Terraza Street.	9/6/2006	51	60	55	48	44	53-55
ST2	45 feet from the center of Orchard Lane near Las Flores Street.	9/6/2006	58	69	61	52	47	61
ST3	North end of West Street.	9/6/2006	48	57	51	45	41	53-55
ST4	65 feet from the center of West Street near Sundew Street.	9/7/2006	60	70	64	55	50	65

Figure 1 Noise Measurement Locations



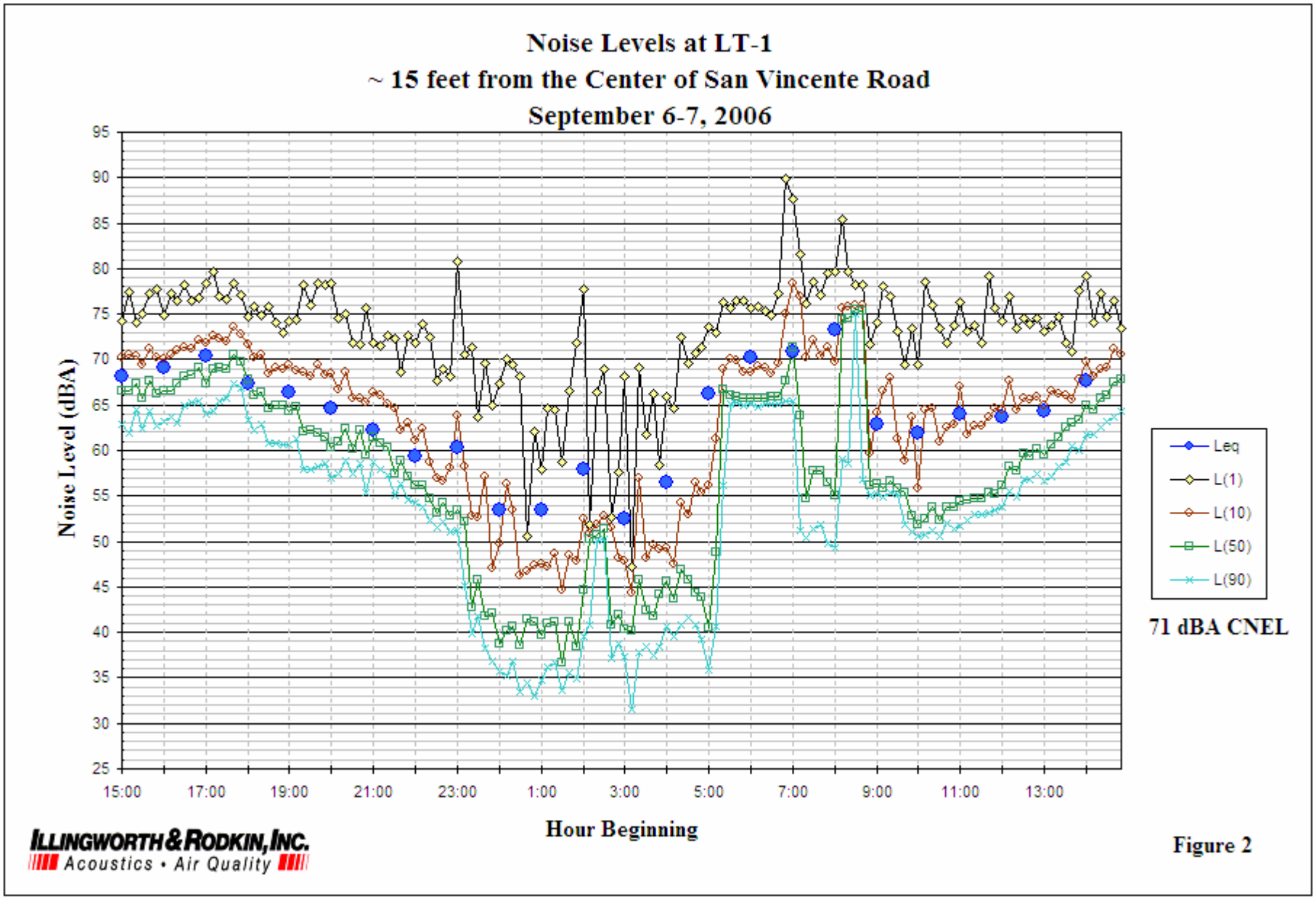
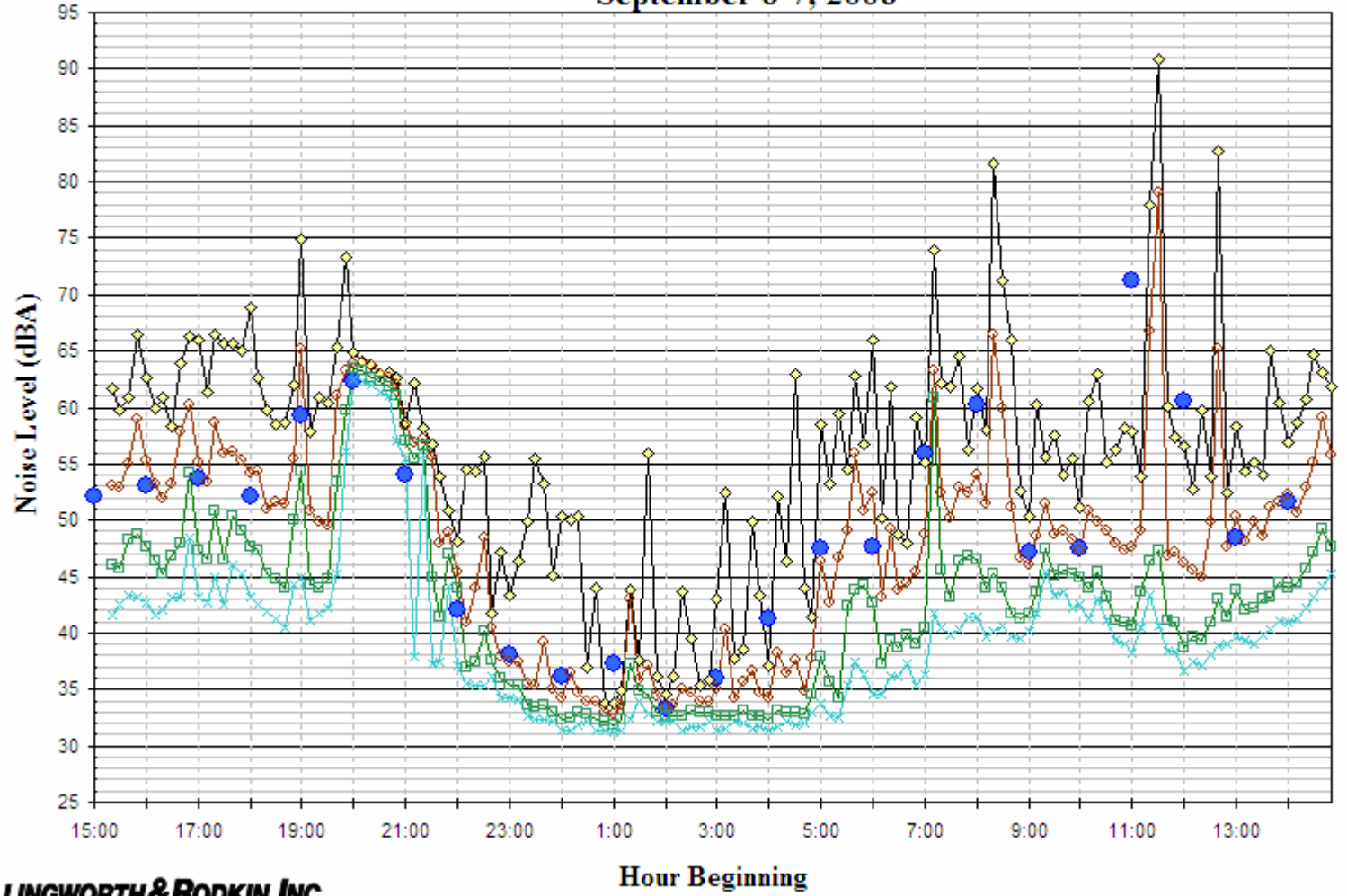

Noise Levels at LT-1
~ 15 feet from the Center of San Vincente Road
September 6-7, 2006
Noise Level (dBA)
95
90
85
80
75
70
65
60
55
50
45
40
35
30
25
15:00
17:00
19:00
21:00
23:00
1:00
3:00
5:00
7:00
9:00
11:00
13:00
Hour Beginning
Leq
L(1)
L(10)
L(50)
L(90)
71 dBA CNEL
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Figure 2

Noise Levels at LT-2
North End of West Street
September 6-7, 2006

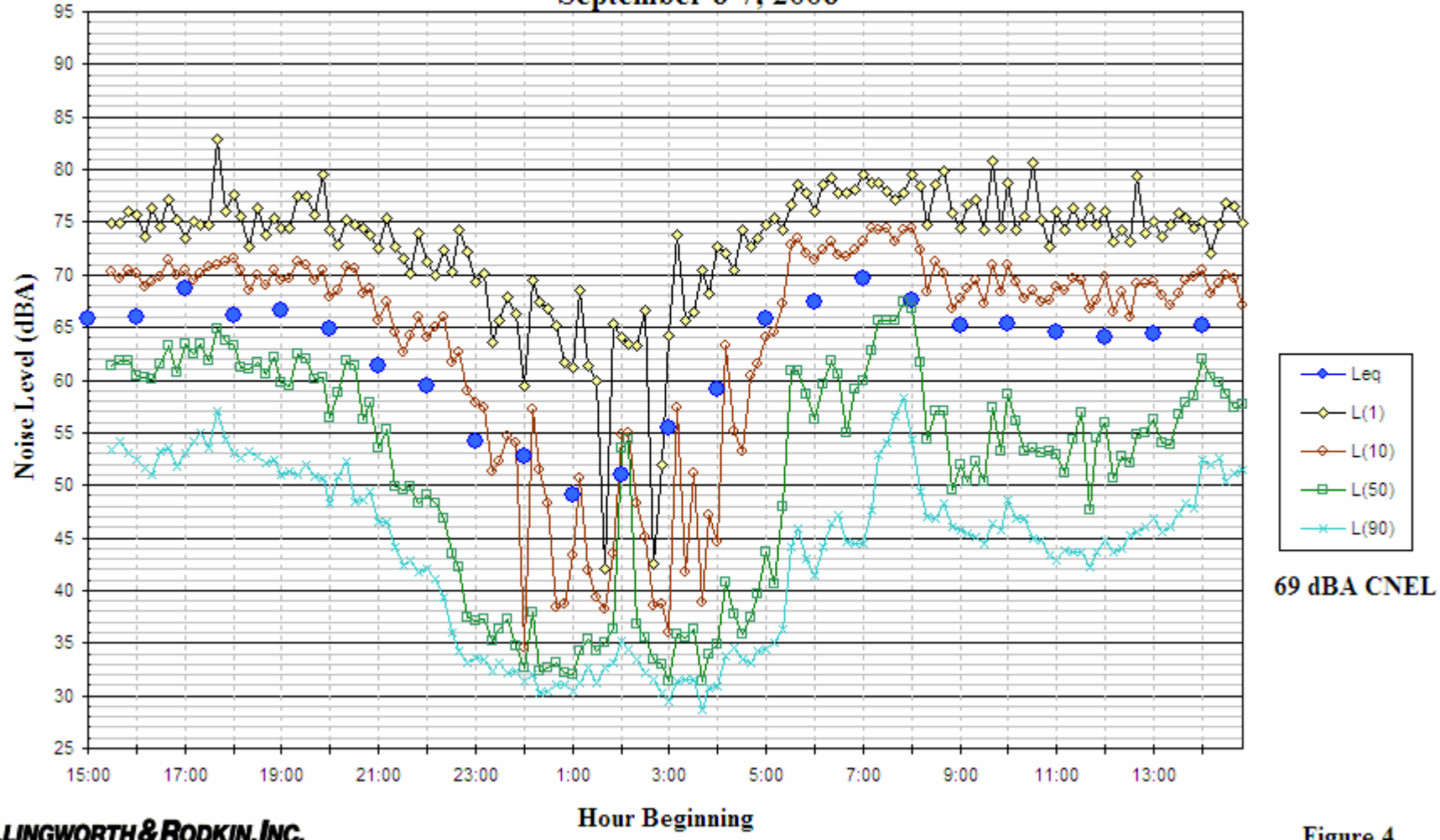


61 dBA CNEL

ILLINGWORTH & RODKIN, INC.
Acoustics • Air Quality

Figure 3

Noise Levels at LT-3
~25 feet from the Center of West Street Near Sundew Street
September 6-7, 2006



69 dBA CNEL

ILLINGWORTH & RODKIN, INC.
Acoustics • Air Quality

Figure 4

NOISE IMPACTS AND MITIGATION MEASURES

Significance Criteria

Appendix G of the CEQA Guidelines states that a project would normally be considered to have a significant impact if noise levels conflict with adopted environmental standards or plans, if persons are exposed to excessive groundborne vibration, if noise generated by the project would substantially increase existing noise levels at sensitive receivers on a permanent or temporary basis, or if persons would be located within two miles of a public airport or private airstrip and exposed to excessive noise levels. CEQA checklist questions regarding groundborne vibration and aircraft noise are not applicable in this assessment. The primary noise issues concerning this project are noise and land use compatibility of the proposed residential land uses and the potential for permanent or temporary noise level increases in the project vicinity that would occur with the project. Significance criteria used in the noise impact assessment include the following:

- A significant impact would be identified if noise-sensitive receivers proposed by the project would be exposed to noise levels exceeding the City's established guidelines for noise and land use compatibility. Exterior average noise levels are limited to 65 dBA CNEL or less, and interior average noise levels are limited to 45 dBA CNEL or less.

- According to CEQA, a significant noise impact would result if noise levels increase substantially at existing noise-sensitive land uses (e.g., residences) as a result of the implementation of the Specific Plan. A "substantial increase" is defined as 3 dBA CNEL or greater at noise-sensitive land uses where noise levels would exceed 65 dBA CNEL, or 5 dBA CNEL or greater where the noise level would remain below 65 dBA CNEL.

- A significant noise impact would be identified if noise generated by the project would exceed the Municipal Code noise limits at existing or planned residential receivers.

- Significant noise impacts would result from construction if noise levels interfere with speech, sleep, or normal residential activities for a period exceeding one construction season. Construction-related hourly average noise levels received at noise-sensitive land uses exceeding 60 dBA $L_{eq(hr)}$, and at least 5 dBA above the ambient, would be considered significant if the noise-generating construction affected the noise environment at a sensitive receiver for more than 12 months.

Impact 1: **Noise and Land Use Compatibility.** Future residential uses developed at the project site would be exposed to exterior noise levels greater than 65 dBA CNEL, which exceeds the noise and land use compatibility standards presented in the City of Soledad's General Plan. Interior noise levels would be expected to exceed 45 dBA CNEL without the incorporation of noise insulation features into the project's design. **This is a potentially significant impact.**

Exterior Noise

Noise-sensitive land uses proposed within the Miravale III Specific Plan area nearest US 101 and arterial and collector roadways would be exposed to exterior noise levels greater than 65 dBA CNEL, which exceeds the City of Soledad's noise and land use compatibility guidelines for exterior noise. Noise levels

in excess of 60 dBA CNEL would require additional noise analyses, per the noise insulation standards contained in the California Building Code, for multi-family residential land uses proposed as part of the project.

A traffic noise model was used to calculate noise contour distances for area roadways based on build-out traffic volumes and preliminary design information for arterial and collector roadways. Vehicle-mix and speed assumptions were input into the traffic noise model to create a credible worst-case projection of noise levels within the planning area. These projections do not account for shielding provided by proposed structures or variations in topography relative to area roadways. The noise contour distances presented in Table 5 indicate where further detailed noise analyses would be required during project level review.

US 101 would affect the noise environment at the southernmost portion of the plan area. US 101 would be expected to generate noise levels exceeding 65 dBA CNEL within approximately 1,300 feet of the roadway centerline and 60 dBA CNEL within approximately 2,900 feet of the roadway centerline. Multi-family residential land uses including a hotel would be located in a noise environment less than 65 dBA CNEL. Exterior noise levels would be compatible with the proposed uses. However, these uses would be located within the future 60 dBA CNEL noise contour generated by US 101, which would trigger additional analysis of interior noise levels.

Roadways within the plan area that would generate noise levels greater than 65 dBA CNEL include San Vincente Road, West Street, and Orchard Lane. Exterior noise levels would exceed 65 dBA CNEL within 90 feet of the center of San Vincente Road and West Street, and within 50 feet of the center of Orchard Lane. Where exterior noise levels exceed the City's noise level goal of 65 dBA CNEL, mitigation is required to provide a compatible exterior noise environment.

Table 5 Future Noise Contour Distances (Feet from road center)

ROADWAY	SEGMENT	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
US 101	Camphora-Gloria Road to North Soledad	620	1330	2860
San Vincente Road	North of Project Entrance	--[1]	90	200
West Street	North of Project Entrance	--	90	200
Orchard Lane	North of Project Entrance	--	50	100

Interior Noise

US 101, San Vincente Road, West Street, and Orchard Lane would generate Community Noise Equivalent Levels greater than 60 dBA CNEL. Exterior noise levels would exceed 60 dBA CNEL within approximately 2,900 feet of the center of US 101, 200 feet of the center of San Vincente Road and West Street, and within 100 feet of the center of Orchard Lane. In buildings of typical construction, with the windows partially open, interior noise levels are approximately 15 dBA lower than exterior noise levels.

1 Data not reported within 50 feet of roadway center.

With the windows closed, standard residential construction typically provides 20 to 25 decibels of exterior to interior noise reduction.

In exterior noise environments of 60 dBA CNEL or less, standard construction methods are normally sufficient to reduce noise levels within residential units to 45 dBA CNEL. Where exterior noise levels range from 60 to 65 dBA CNEL, the inclusion of adequate forced air mechanical ventilation is often the method selected to reduce interior noise levels to acceptable levels by closing the windows to control noise. Where noise levels exceed 65 dBA CNEL, forced-air mechanical ventilation systems and sound-rated construction methods are normally required. Such methods or materials may include a combination of smaller window and door sizes as a percentage of the total building façade facing the noise source, sound-rated windows and doors, sound rated exterior wall assemblies, and mechanical ventilation so windows may be kept closed at the occupants discretion. Attaining the necessary noise reduction from exterior to interior spaces is readily achievable with proper wall construction techniques, the selections of proper windows and doors, and the incorporation of forced-air mechanical ventilation systems to allow occupants to control noise by closing the windows.

Mitigation Measures:

The following mitigation measures would reduce the potentially significant impacts to a less-than-significant level:

- Maintain a sufficient buffer distance between transportation noise sources and future sensitive land uses, or alternatively, construct noise barriers or create acoustically shielded outdoor use areas utilizing buildings to achieve noise exposures of 65 dBA CNEL or less. The specific determination of necessary mitigation measures shall occur during project level environmental review and design. Results of the analysis shall be submitted to the City prior to issuance of a building permit.

- Retain a qualified Acoustical Specialist to prepare for City review and approval a detailed acoustical analysis of interior noise reduction requirements and specifications for all projects proposed within the 60 dBA CNEL contours of area roadways, in accordance with State and City standards. Interior noise levels must be maintained at or below 45 dBA CNEL. Building sound insulation requirements shall include forced air mechanical ventilation in noise environments exceeding 60 dBA CNEL. Special building construction techniques (e.g., sound-rated windows and building facade treatments) may be required where exterior noise levels exceed 65 dBA CNEL. These treatments include, but are not limited to, sound rated windows and doors, sound rated exterior wall assemblies, and acoustical caulking. The specific determination of required treatments shall be made on a unit-by-unit basis during project design. Results of the analysis, including the description of the necessary noise control treatments, shall be submitted to the City along with the building plans prior to issuance of a building permit.

Impact 2: **Generation of Excessive Noise Levels.**
Noise-generating uses within the Miravale III Specific Plan could generate noise levels in excess of the Municipal Code noise limits. **This is a potentially significant noise impact.**

Commercial land uses, recreation areas, parks, educational facilities, and police and fire sub-stations are located throughout the plan area and are adjoined by existing or proposed noise-sensitive uses. Noise and land use compatibility conflicts between noise-generating uses and noise-sensitive uses could occur if project-level noise analyses are not made prior to project approvals.

Commercial Uses

The project would develop approximately 275,000 square feet of retail commercial space which could contain noise sources such as loading docks, heating, ventilation, and cooling equipment, other mechanical equipment such as emergency back-up generators and trash compactors, parking lots, etc. Noise sources such as loading docks would be expected to generate noise levels of about 50 to 60 dBA L_{eq} at 150 feet depending on the number of trucks accessing the loading dock and frequency of other extraneous noise sources associated with receiving areas (e.g., forklifts, etc.). Heating, ventilation, and cooling equipment could generate noise levels in the range of 50 dBA to 70 dBA L_{eq} at 150 feet depending on the number, type, and size of the proposed equipment. Trash compactors typically generate maximum noise levels of 40 to 50 dBA at 150 feet, depending on the power rating and enclosure characteristics. Noise associated with the use of parking lots would include vehicular circulation, loud engines, car alarms, squealing tires, door slams, and human voices. The maximum sound (L_{max}) of a passing car at 15 mph typically ranges from 43 dBA to 53 dBA at 150 feet. The noise generated during an engine start is similar. Door slams create lower noise levels. Hourly average noise level resulting from all of these noise-generating activities in a busy parking lot could range from 35 dBA to 45 dBA L_{eq} at a distance of 150 feet from the parking area. Noise levels in excess of the limits presented in the City's Zoning Code could be generated by such uses depending upon the configuration of the final land use plan at parcels designated for commercial development.

Educational Facilities and Parks

The Miravale III Specific Plan includes the development of two elementary schools, one middle school, several parks and other recreation areas in areas adjacent to existing and proposed residential land uses. Schools would generate noise when students arrive and depart as well as when outdoor activity areas are used.

Active parks, ball fields, or sports complexes could also be a potentially significant source of community noise. Participants and spectators would generate noise while using parks and recreation areas proposed as part of the Miravale III Specific Plan. Recreation areas may include lighting and, therefore, could be expected to generate noise in the late evening hours. Maximum noise levels from such uses can exceed 80 dBA L_{max} at a distance of approximately 150 feet. For normal active park events such as soccer games, baseball games, dog parks, etc., average noise levels of about 55 to 60 dBA L_{eq} could be expected at a distance of 150 feet from the center of activities. Noise levels generated by these parks could exceed the noise levels established in the City's Zoning Code at the residential property line, thereby requiring further study.

Passive public parks could contain one or more of the following amenities that are part of most neighborhood parks: tot lot/playground, open turf area, picnic tables with barbeques, pathways, etc. It is not anticipated, given the activities outlined above, that noise from passive parks would cause any adverse noise impacts upon either existing or future noise sensitive receptors in the area.

Police /Fire Sub-Station

The proposed project includes the construction of a police/fire sub-station station at the northwest corner of West Street and J Street. Noise-generating activities associated with the operation of a police station are normally limited to parking and vehicle circulation and mechanical equipment such as emergency generators. Police vehicles may also be tested and maintained on-site. Noise-generating activities

associated with the operation of a fire station include sirens sounding as vehicles leave the station, the testing of engines, horns, and sirens during the morning check, weekly testing of the emergency generator, and in some instances, training exercises. Noise measurements conducted at fire stations during the morning equipment checkout indicate that maximum noise levels at a distance of 50 feet from an activity can reach 80 to 85 dBA L_{max}. Typically, such activities are within the range of vehicular traffic noise when stations are located adjacent to major streets. Noise generated by the proposed police/fire sub-station could exceed City standards at proposed residential land uses in the vicinity, thereby requiring further study.

Mitigation Measure:

The following mitigation measure would reduce the potentially significant impact to a less-than-significant level:

- Non-residential development shall comply with the noise standards established in the Zoning Code at existing or planned residential properties in the vicinity. Site planning can effectively mitigate noise impacts; such as by not locating loading docks near residences. Equipment screens, fan silencers, and engine mufflers shall be used to mitigate noise from mechanical equipment. Noise barriers shall be used to control noise from parking and vehicle circulation. For recreational uses, proposed development must consider impacts upon the adjacent residential development in terms of the location of active sports areas, their orientation on the site, whether or not lights are included, and speech amplification systems. The proper application of these measures individually or together would mitigate this potentially significant impact to a less-than-significant level.

Impact 3: **Project-Generated Traffic Noise.** Traffic volume increases along roadway serving the project site will result with the development of the project area, and will generate an increase in traffic noise. In some locations, there would be a substantial permanent increase in environmental noise. **This is a potentially significant impact.**

The *Miravale III Mixed-Use Development Draft Transportation Impact Analysis*, prepared by Hexagon Transportation Consultants, Inc., was reviewed to calculate the relative change in traffic noise levels resulting from project-generated traffic. Table 6 shows the roadway links that are calculated to experience a substantial noise increase as a result of the project. Roadway segments experiencing a traffic noise level increase less than 3 dBA CNEL were excluded from further analysis, because the noise level increase would not be substantial.

Table 6 Traffic Noise Level Increases Above Existing Levels Resulting from Project

		CNEL Noise Levels (dBA) at 75 feet from Roadway Center			
Roadway	**Segment**	**Existing**	**Background**	**Project**	**Project Increase**
San Vincente Road	Gabilan Dr. to Project Entrance	57	57	64	+7
West Street	Market St. to Gabilan Dr.	60	60	65	+5
West Street	Gabilan Dr. to Project Entrance	59	59	66	+7
Main Street	Market St. to Gabilan Dr.	57	57	63	+6

Traffic noise levels would be substantially increased at noise-sensitive residential receivers along San Vincente Road, north of Gabilan Drive, along West Street, north of Market Street, and along Main Street between Market Street and Gabilan Drive. Exterior noise levels would exceed 65 dBA CNEL at a distance of 75 feet from the roadway center along West Street north of Gabilan Drive. Noise levels along the remaining roadway segments would be 65 dBA CNEL or less and would be considered acceptable for residential development.

Mitigation Measures:

Noise reduction methods include the following:

- Paving streets with "quieter" pavement types such as Open-Grade Rubberized Asphaltic Concrete would reduce noise levels by 2 to 3 dBA depending on the existing pavement type, traffic speed, traffic volumes, and other factors.

- New or larger noise barriers could reduce noise levels by 5 dBA CNEL. Final design of such barriers, including an assessment of their feasibility and reasonableness, should be completed during project level review.

- Installing traffic calming measures to slow traffic could provide qualitative improvement by smoothing out the rise and fall in noise levels caused by speeding vehicles.

- Sound insulation treatments to the buildings, such as sound rated windows and doors, could reduce noise levels in interior spaces.

Mitigation Discussion:

A combination of mitigation measures such as the repaving of area roadways, the replacement or construction of noise barriers, traffic calming, and sound insulation could be implemented to reduce the effects of project generated traffic noise. These mitigation measures could be implemented along identified segments of San Vincente Road, West Street, and Main Street where noise levels would be substantially increased with the project.

Case studies have shown that the replacement of dense grade asphalt (standard type) with open-grade or rubberized asphalt can reduce traffic noise levels along residential-type streets by 2 to 3 dBA. A possible noise reduction of 2 dBA would be expected using conservative engineering assumptions. Table 7 shows the expected project noise level increases assuming the replacement of existing pavement with open-grade or rubberized asphalt. Project-generated traffic noise increases along West Street, between Market Street and Gabilan Drive could be mitigated to a less than significant level as the mitigated traffic noise increase would be 3 dBA CNEL and the resulting noise level would be less than 65 dBA CNEL. To be a permanent mitigation, subsequent repaving would also have to be “quieter” pavements.

Table 7 Traffic Noise Level Increases Assuming Repavement of Affected Roadways with "Quieter" Pavement

Roadway	Segment	Noise Level Increase after Mitigation (dBA, CNEL)
San Vincente Road	Gabilan Dr. to Project Entrance	+5
West Street	Market St. to Gabilan Dr.	+3
West Street	Gabilan Dr. to Project Entrance	+5
Main Street	Market St. to Gabilan Dr.	+4

Existing residential receivers located along West Street and Main Street either front the roadway (private outdoor use areas are located behind the homes) or have outdoor use areas adjacent to the roadway that may or may not be shielded by fences or noise barriers. Noise barriers would not be feasible at single-family residential receivers that front these roadways due to access requirements. In situations where private outdoor use areas are located adjacent to the roadway, new or larger noise barriers could be constructed to provide the additional necessary noise attenuation in private use areas. Typically, increasing the height of an existing barrier results in about 1 dBA of attenuation per 1 foot of additional barrier height. The design of such noise barriers would require additional analysis. Traffic calming could also be implemented to reduce noise levels expected with the project. Each 5 mph reduction in average speed provides approximately 1 dBA of noise reduction on an average basis (L_{eq}/CNEL). Traffic calming measures that regulate speed improve the noise environment by smoothing out noise levels.

Newer residential land uses constructed in the vicinity of San Vincente Road have existing noise barriers that would provide additional shielding in rear yard areas. Exterior noise levels, although substantially increased over existing conditions, would be less than 65 dBA CNEL in the rear yards of these homes. It is likely that these recently constructed residences were planned and constructed recognizing the future development at Miravale III. Existing noise barriers in older developments may also be sufficient to reduce exterior noise levels in rear yard areas to 65 dBA CNEL or less.

Residences could also be provided with sound insulation treatments if further study finds that interior noise levels within the affected residential units would exceed 45 dBA CNEL assuming future plus project traffic conditions. Treatments to the homes may include the replacement of existing windows and doors with sound-rated windows and doors and the provision of a suitable form of forced-air mechanical ventilation to allow the occupants the option of controlling noise to by closing the windows. The specific treatments for each affected residential unit would be identified on a case-by-case basis.

Significance After Mitigation:

Each of these mitigation measures involves other non-acoustical considerations. Other engineering issues may dictate continued use of dense grade asphalt. Noise barriers and sound insulation treatments must be done on private property necessitating agreements with each property owner. Therefore, it may not be reasonable or feasible to reduce project-generated traffic noise at all affected receivers. The impact would be considered significant and unavoidable.

Impact 4: **Construction Noise.** Existing and proposed noise-sensitive land uses would be exposed to construction noise levels in excess of the significance thresholds for a period of more than one construction season. **This is a significant and unavoidable impact.**

Future construction within the plan area would generate noise, and would temporarily increase noise levels at adjacent land uses. The build out of the Specific Plan would affect the noise environment at existing single-family residential neighborhoods bordering the site to the south. Construction noise would also affect the noise environment of noise-sensitive land uses developed during the first phases of the project as later phases are developed.

Noise impacts resulting from construction depend on the noise generated by various pieces of construction equipment, the timing and duration of noise generating activities, and the distance between construction noise sources and noise sensitive receptors. Construction noise impacts primarily occur when construction activities occur during noise-sensitive times of the day (early morning, evening, or nighttime hours), the construction occurs in areas immediately adjoining noise sensitive land uses, or when construction noise lasts over extended periods of time. Where noise from construction activities exceeds 60 dBA L_{eq} and exceeds the ambient noise environment by at least 5 dBA L_{eq} at noise-sensitive uses in the project vicinity for a duration of one year or more, the impact would be considered significant.

Construction activities generate considerable amounts of noise. Construction-related noise levels are normally highest during the demolition phase and during the construction of project infrastructure. The demolition and infrastructure phases of construction require heavy equipment that generates the highest noise levels. Typical hourly average construction generated noise levels are about 81 dBA to 88 dBA measured at a distance of 50 feet from the center of the site during busy construction periods (e.g., earth moving equipment, impact tools, etc.). The highest maximum noise levels generated by project construction would typically range from about 90 to 98 dBA at a distance of 50 feet from the noise source. Construction-related noise levels are normally less during building framing, finishing, and landscaping phases. There would be variations in construction noise levels on a day-to-day basis depending on the specific activities occurring at the site.

Construction noises are disturbances that are necessary for the construction or repair of buildings and structures in urban areas. Reasonable regulation of the hours of construction, as well as regulation of the arrival and operation of heavy equipment and the delivery of construction materials, are necessary to protect the health and safety of persons, promote the general welfare of the community, and maintain the quality of life. Limiting the hours when construction can occur to daytime hours is often a simple method to reduce the potential for noise impacts. In areas immediately adjacent to construction, controls such as constructing temporary noise barriers and utilizing “quiet” construction equipment can also reduce the potential for noise impacts.

The build out of the plan area would increase the ambient noise environment at existing homes bordering the project site, as well as residential units built within the plan area during the earlier construction phases. Construction noise levels are anticipated to exceed 60 dBA L_{eq} and the ambient by 5 dBA or more over extended periods of time. It is conceivable that the phasing of projects would be such that a particular receiver or group of receivers would be subject to construction noise levels in excess of 60 dBA L_{eq} and the ambient by 5 dBA for durations exceeding one year. The construction of projects implemented by the Miravale III Specific Plan would result in a significant temporary noise level increase at neighboring noise-sensitive properties.

Mitigation Measures:

The following available controls should be included in the project to reduce construction noise levels as low as practical.

- Noise-generating activities at the construction site or in areas adjacent to the construction site associated with the project in any way should be restricted to the hours of 7:00 a.m. to 7:00 p.m., Monday through Friday, and 8:00 a.m. to 6:00 p.m. on Saturdays. No construction activities should occur Sundays or holidays.

- Equip all internal combustion engine driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.

- Locate stationary noise generating equipment (e.g., portable concrete crusher) as far as possible from sensitive receptors.

- Utilize "quiet" air compressors and other stationery noise sources where technology exists.

- The contractor shall prepare a detailed construction plan identifying the schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with the adjacent noise sensitive facilities so that construction activities can be scheduled to minimize noise disturbance.

- Designate a "disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and will require that reasonable measures warranted to correct the problem be implemented. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule.

Although the above measures would reduce noise generated by the construction of the project, the impact would remain significant and unavoidable as a result of the extended period of time that receivers would be exposed to construction noise.

Impact 5: **Cumulative Traffic Noise.** Traffic noise levels will increase with the development of the project area and other planned developments in Soledad. In some locations, these increases would be substantial, and the project would contribute to the overall cumulative noise impact. **This is a potentially significant impact.**

The project would contribute at least 1 decibel to the cumulative noise level increase expected throughout Soledad and would be “cumulatively considerable”. Table 8 summarizes the roadway segments where the project would contribute a measurable increase and cumulative noise level increases resulting from the project and other planned developments would be substantial.

Table 8 Cumulative Traffic Noise Level Increases Above Existing Levels

Roadway	Segment	Cumulative Noise Level Increase (dBA, CNEL)
San Vincente Road	Market St. to Gabilan Dr.	+9
	Gabilan Dr. to Project Entrance	+10
West Street	Market St. to Gabilan Dr.	+6
	Gabilan Dr. to Project Entrance	+8
Main Street	Market St. to Gabilan Dr.	+7
Gabilan Dr.	San Vincente Rd. to West St.	+9
	West St. to Andalucia Dr.	+5
	East of Andalucia Dr,	+5
Andalucia Dr.	Metz Rd. to Gabilan Dr.	+4

Mitigation Measures:

See mitigation presented for Impact 3 and mitigation feasibility discussion.

Significance After Mitigation:

Similar to Impact 3, it may not be reasonable or feasible to reduce cumulative traffic noise levels at all affected receivers. Measures available to reduce the cumulative noise level increases would not likely be reasonable or feasible in all areas, therefore, the impact would be considered significant and unavoidable.

TECHNICAL APPENDIX T-8

Transportation Impact Analysis (Hexagon)

Miravale Phase III Mixed-Use Development

Transportation Impact Analysis

Prepared for:

The City of Soledad

Prepared by:



HEXAGON TRANSPORTATION CONSULTANTS, INC.

August 15, 2007

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Executive Summary

This report presents the results of the traffic impact analysis conducted for the Miravale Phase III Mixed-Use development Specific Plan in Soledad, California. The project site is located in the northern outskirts of the city generally between San Vicente Road and Orchard Lane. The project as proposed will consist of 1,470 single-family homes, 2,230 multi-family units, 500 senior housing units, 120 hotel rooms, and up to 275,000 s.f. of supporting retail. A golf course, schools, and parks will also be part of the 920-acre site. The land uses of the project site are consistent with the City of Soledad General Plan that calls for major residential development in areas east and north of city limits. The project site incorporates the identified specific plan expansion areas of San Vicente West, Mirassou, and the Northwest area. A specific plan is required of all development within the identified expansion areas. The Specific Plan includes project zoning and development standards and design guidelines that implement the Specific Plan vision and land use provisions and the General Plan's goals, policies, and standards relating to Miravale Phase III. Access to the site will be provided via extensions of San Vicente Road, West Street, and Orchard Lane. Future access also will be provided by the extension of Miravale Road to Camphora/Gloria Road and the Orchard Lane extensions north and west of the project, eventually connecting via other planned routes to Camphora/Gloria Road when other development is completed.

This study was conducted for the purpose of identifying the potential traffic impacts related to the proposed development. The impacts of the project were evaluated following the standards and methodologies set forth by the City of Soledad. The traffic analysis is based on peak-hour levels of service for unsignalized intersections. The traffic analysis also includes an evaluation of peak-hour signal warrant and roadway and freeway level of service analysis.

Project Trip Generation

The magnitude of traffic added to the roadway system by a particular development is estimated by multiplying the applicable trip generation rates to the size of the development. The trip generation rates published in the Institute of Transportation Engineers (ITE) manual entitled *Trip Generation*, seventh edition, 2003, were used for this analysis. On the basis of these rates, it is estimated that the project would generate 34,856 daily trips, with 2,451 trips occurring during the AM peak hour and 3,143 occurring during the PM peak hour. Using the specified inbound/outbound splits, the project would produce 619

inbound trips and 1,833 outbound trips during the AM peak hour and 1,969 inbound and 1,174 outbound trips during the PM peak hour.

The trip generation estimates do not include estimates for the proposed schools, parks, and golf course. Trip estimates for the proposed residential uses of the project account for trips made to schools and other types of complimentary land uses. Therefore, it is assumed that trips to the schools, parks, and golf course would originate from within the project area and the proposed residential units.

Similarly, the trip estimates for residential land uses of the project were reduced to account for internalization, or interaction, between the proposed retail and residential land uses. The project is proposing up to 275,000 s.f. of retail space. A portion of the retail space will be located centrally within the project area and proposed residential units. The remaining retail space will be located in the southeastern portion of the project site along San Vicente Road. The retail land uses are intended to be neighborhood-serving retail, not major retail establishments. As such, it is assumed that the majority of trips generated by the retail space will originate from within the project area. The residential uses of the project were reduced by a magnitude equal to 90% of the estimated trips for the centrally located retail space and 50% of the retail space located in the southeastern portion of the site. The difference in reduction percentages for the retail is due to the expectation that the southeastern retail space will attract some trips from outside the project area since it is located near existing neighborhoods and other land uses. While nearly all trips to the centrally located retail would originate from surrounding neighborhoods within the project area.

Project Impacts

Intersection Impacts

Results of the intersection level of service analysis show that11 of the 21 study intersections would be impacted by the project according to applicable level of service standards. Two additional intersections would meet signal warrants with the addition of project traffic. Each of the proposed mitigation measures is presented below:

Several of the identified impacts involve significant physical improvements to not only intersection configurations, but also roadway widening. In some cases, the improvements identified below will be undesirable due to the need for right-of-way acquisition and/or create inconsistency with the City's General Plan. The evaluation of necessary mitigation measures revealed that several of the project impacts could be mitigated with the construction of an extension of Gabilan Drive that will provide an alternate route to US 101. The City's General Plan calls for the extension of Gabilan Drive to US 101 as a four-lane divided arterial. The Gabilan Drive extension will provide for a more direct route to the project area and alleviate identified impacts at several intersections. Therefore, it is recommended that rather than the project implementing undesirable roadway widening, that it instead contribute its fair-share towards the construction costs of the extension of Gabilan Drive to US 101 and widening of San Vicente Road from the project south to the Gabilan Drive extension.

(1) Moranda Road and US 101 NB Ramps - The necessary improvement to mitigate the project impact at this intersection will consist of the signalization of the intersection and the addition of a second northbound left-turn lane, Moranda Road to northbound US 101. The implementation of these improvements will require that the northbound US 101 on-ramp be widened to receive the two lanes.

With the construction of the Gabilan Drive extension to US 101, the improvements described above would not be necessary. Instead, improvements associated with the Gabilan Drive extension would be made at the intersection to serve the new movements created by the extension. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101. The volume of vehicles bound for northbound US 101 indicate the need for the reconfiguration/reconstruction of the US 101 interchange at Moranda Road/Front Street to provide more efficient access to the project site and north Soledad in general.

(2) Moranda Road and Front Street - The improvement necessary to mitigate the project impact at this intersection will consist of the addition of a second northbound through lane and eastbound free-right-turn lane. The implementation of this improvement will require that northbound Front Street be widened to two lanes. The roadway segment analysis also indicates the need for widening of Front Street between Moranda Road and San Vicente Road.

With the construction of the Gabilan Drive extension to US 101, the improvements described above would not be necessary. Instead, improvements associated with the Gabilan Drive extension would be made at the intersection. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(3) San Vicente Road and Front Street - The improvement necessary to mitigate the project impact at this intersection will consist of the addition of two eastbound left-turn lanes and southbound free-right-turn lane. The implementation of this improvement will require that northbound Front Street be widened to two lanes and northbound San Vicente Road be widened to three lanes. The improvements described above will require a significant amount of right-of-way acquisition and will not blend well with surrounding land uses.

With the construction of the Gabilan Drive extension to US 101, the improvements described above would not be necessary. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(4) West Street and Front Street - The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection with protected left-turn phasing on Front Street.

(5) Main Street and Front Street - The necessary improvements consist of the signalization of the intersection with protected left-turn phasing along Front Street.

With the construction of the Gabilan Drive extension to US 101, the signalization of this intersection would not be necessary. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(7) Front Street and Nestles Road - The necessary improvements consist of the addition of a second eastbound left-turn lane in combination with improvements proposed to mitigate project impacts at the intersection of Oak Street and Front Street.

(9) Front Street and US 101 SB Ramps - The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection and addition of a second lane on the off-ramp. The improvement will require the widening of southbound Front Street to two lanes. The volume of vehicles exiting southbound US 101 at Front Street indicate the need for widening of Front Street, between US 101 and Moranda Road, to two lanes southbound and/or reconfiguration/reconstruction of the US 101 interchange at Moranda Road/Front Street to provide more efficient access to the project site and

north Soledad in general.

(11) San Vicente Road and Market Street - The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection and widening of San Vicente Road to accommodate two lanes in each direction.

With the construction of the Gabilan Drive extension to US 101, the signalization of the intersection and widening of San Vicente Road would not be necessary. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(12) West Street and Market Street - The necessary improvements consist of the signalization of the intersection.

With the construction of the Gabilan Drive extension to US 101, the signalization of this intersection would not be necessary. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(14) East Street and Market Street - The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection.

(16) San Vicente Road and Gabilan Drive - The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection and addition of a second westbound left-turn lane, exclusive northbound right-turn lane, and southbound left-turn lane. The improvement will require the widening of southbound San Vicente Road to accommodate the dual left-turn lanes from Gabilan.

With the construction of the Gabilan Drive extension to US 101, the improvements described above would not be necessary. Instead, improvements associated with the Gabilan Drive extension would be made at the intersection to serve the new movements. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(17) West Street and Gabilan Drive - The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection and addition of exclusive left-turn lanes with protected phasing on all approaches.

(18) Main Street and Gabilan Drive - The necessary improvements consist of the signalization of the intersection with protected left-turn phasing along Gabilan Drive.

With the construction of the Gabilan Drive extension to US 101, the signalization of this intersection would not be necessary. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(19) Andalucia Drive and Gabilan Drive - The necessary improvements consist of the signalization of the intersection with protected left-turn phasing along Gabilan Drive.

(20) Orchard Lane and Metz Road - The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection with protected left-turn phasing on Metz Road and split phasing on Orchard Lane.

(21) Front Street and Oak Street - The necessary improvements to mitigate project impacts at this

intersection consist of the widening of Front Street to four lanes between Nestles Road and Oak Street. A second eastbound left-turn lane will also be needed at the intersection of Nestles Road and Front Street as part of the improvements at this intersection.

Freeway Segment Impacts

The results of the freeway segment analysis showed that four freeway segments are projected to operate at LOS D under project conditions.

US 101 – Northbound North of Gonzales-5th Street (AM Peak Hour)
US 101 – Northbound between Gonzales-5th Street to Gloria Road (AM Peak Hour)
US 101 – Northbound between Camphora Road and North Soledad (AM Peak Hour)
US 101 – Southbound between North Soledad and Camphora Road (PM Peak Hour)

The remaining segments are projected to operate at LOS C or better. The addition of project traffic will worsen conditions on each of the segments projected to operate at LOS D.

Freeway Ramp Impacts

The freeway ramp analysis indicates that two of the studied freeway ramps are projected to operate at LOS F under project conditions.

Moranda Road Interchange – Southbound US 101 off-ramp to Moranda Road (PM Peak Hour)
Moranda Road Interchange – Northbound US 101 on-ramp from Moranda Road (AM Peak Hour)

The existing ramp configurations are inadequate to serve existing traffic volumes. The ramps at both the Moranda Road and Front Street interchanges with US 101 were constructed years ago and not designed to accommodate existing traffic volumes. The existing ramp alignments are inadequate to feed the large ramp volumes onto the mainline that also has seen increased volumes. The project traffic will worsen conditions on each of the ramps.

Traffic Mitigation Triggers

The large size of the proposed project will require that construction of the project be phased over the next ten years. As such, it is necessary to phase mitigation costs/fees along with the development of the project in order to ensure the financial feasibility of the initial development activities. The two major roadway improvements, Gabilan Extension and reconstruction of the US 101Moranda Road interchange, proposed as mitigation measures for the proposed project will require substantial funding that cannot be provided at the initial stages of this development nor completely by the proposed development alone. Therefore, triggers were determined for the two major roadway improvement projects.

Gabilan Extension Development Level Trigger

Analysis was conducted at intersections and roadway segments along San Vicente Road to determine at what development level the extension of Gabilan Drive needed to be implemented to support project traffic. The traffic analysis indicated that the most critical point of constraint is the intersection of San Vicente Road and Front Street. The capacity of the eastbound left-turn movement, Front Street to San Vicente, during the PM peak hour is the critical movement at the intersection. Under background conditions, the intersection was shown to meet traffic signal warrants. Analysis indicates that with the installation of a signal at the intersection, acceptable levels of service, LOS D, will be maintained at the

intersection with up to 50% of the project development traffic added to the roadway system. It should be noted, that though intersection levels of service may be acceptable, the number of left-turning vehicles under background conditions (545 during the PM peak hour) indicates the need for a second left-turn lane and subsequent widening of San Vicente Road to receive the two left-turn lanes. With 50% of the project development traffic added to the roadway system, an additional 350 trips would be added to the left-turn movement during the PM peak hour.

Based on roadway segment analysis conducted along San Vicente Road, LOS D operations along the roadway can be maintained with up to 75% of the project traffic added to the roadway system. However, as previously discussed, the intersection of San Vicente Road and Front Street would be unable to serve this level of development and would create spill over onto adjacent streets, such as West Street, that provide an alternate access to San Vicente Road.

US 101 and Moranda Road Interchange Improvement Development Level Trigger

The existing freeway ramps at Moranda Road and US 101 are not designed to accommodate existing traffic volumes. The addition of project traffic, as well as background traffic, would compound the need for improvement of the ramps. The US 101 southbound off-ramp to Moranda Road will be the constraint on any further development. Analysis of ramp capacities indicate that LOS D operations can be maintained on the ramps with up to 25% of the project traffic added to the roadway system.

Intersection level of service analysis indicates that with signalization of the ramp termini intersections, up to 50% of the project development traffic can be accommodated; However, even with the signalization of the intersections, the ramps would be inadequate to serve this level of development.

Traffic Impact Fees

Funding for the above described mitigation measures, as well as others described in the previous section, will be obtained via traffic impact fees imposed upon the project by both the City of Soledad and The Transportation Agency for Monterey County (TAMC). Mitigation of the project impacts would be in the form of payment of traffic impact fees estimated for the project.

Local Intersection Impacts

The above significant impacts will be reduced to a less than significant level through the implementation of one or more of the following actions:

a. The applicant shall construct circulation improvements as specified by the city and outlined above;

b. The applicant shall pay traffic impact fees per the city traffic impact fee ordinance in effect at the time the applicant requests building permits;

c. For any improvement that will not be constructed by the applicant or mitigated through payment of impact fees per city impact fee ordinance, the applicant shall pay a fair share of the improvement

The City's forthcoming traffic impact fee (TIF) program mentioned in item b above is to be adopted August 15, 2008. The City TIF identifies fees per single-family unit and multi-family unit to be collected from proposed development and used towards identified improvements to the roadway system within and serving the City of Soledad. Mitigation of the project impacts would be in the form of payment of City of

Soledad's traffic impact fees estimated for the project. The City of Soledad Impact Fee schedule is included in Appendix E.

Regional Transportation Impacts

The identified freeway segment and interchange ramp improvements cannot be completely funded by a single development. In lieu of one single project absorbing the total cost of freeway widening, a regional development impact fee program has been established for state highways and regional roads within Monterey County. The Transportation Agency for Monterey County (TAMC) implements the fee program based on the 2004 TAMC "Nexus Study for Regional Development Impact Fee." The payment of fees is considered mitigation for project impacts to freeway facilities. This contribution to the regional fund shall be in addition to any other city fees and project mitigation measures. Should the widening of the freeway and improvement of interchanges be deemed infeasible or not part of the fee program, the impact should be considered significant and unavoidable.

Project Area Roadway System

Primary access to the site will be provided via extensions of San Vicente Road, West Street, and Orchard Lane. Each of the roadways will be extended into the project area with connections to a completely new roadway system of collectors and local roads that will serve each of the residential and commercial areas of the project.

Future Roadway Classification

Projected daily volumes and the city's criteria for roadway designation were used to determine the designation of each of the new major roadways. Projected volumes are based on the same trip generation estimates and assignment methodology described earlier in this chapter. Traffic associated with other pending non-residential projects was also included in the projected volumes.

Traffic projections indicate that only West Street, between the project boundary and J Street, will meet arterial criteria. San Vicente Road and Orchard Lane will meet collector road criteria throughout their extent. All other roadways will meet criteria for classification as local roadways. All new streets should be designed to meet city standards. As part of the planned golf course, there will be a need to provide golf cart crossings along project roadways. Due to large traffic volumes and vehicle speeds, at-grade golf cart crossings should not be provided along streets classified as collectors or arterials.

Future Intersection Control

With implementation of the future roadways described above, several new intersections will be created. Peak hour signal warrant checks were completed for each of the new intersections. Results indicate that only the intersection of West Street and H Street will meet signal warrants. Projected peak hour volumes at all other intersections within the project area will not be large enough to require signalization.

Transit and Pedestrian Analysis

It can be assumed that some of the project trips could be made by transit. Assuming up to 3% transit mode share, which is probably the highest that could be expected, yields an estimate of 76 AM and 97 PM transit trips during each of the peak hours. This demand along with existing and other future demand

for transit service will justify the need for establishing a plan and implementation of a transit system to serve the City of Soledad as a whole.

Pedestrian facilities in the project area will consist primarily of sidewalks along the streets. Sidewalks will be provided along virtually all streets and at intersections within the project area. There are no existing bicycle facilities that can be extended into the project area. The residential uses of the project along with existing and future neighborhoods will justify the need for a continuos bicycle facility system throughout the City of Soledad. A draft City Bike Plan that identifies proposed future bicycle facilities is currently being processed and is expected to be adopted in late 2007. All pedestrian and bicycle lanes of the project should provide for future connection to existing sidewalks and streets as well as planned bicycle facilities.

Year 2030 Long-Term Analysis

Long-term traffic analysis of the proposed development levels for the project as well as long-term land use growth and transportation improvements within the entire City of Soledad indicate that the development levels will have an adverse impact on the major regional facilities serving Soledad. The proposed project as well as other development projects within the City of Soledad will be required to contribute to the regional development impact fee program as described under near-term project conditions.

Table ES 1
Intersection Levels of Service Summary

	Intersection	Intersection Control	Peak Hour	Count Date	Existing Conditions Ave. Delay	Existing Conditions LOS	Background Conditions Ave. Delay	Background Conditions LOS	Background with Improvements Ave. Delay	Background with Improvements LOS	Project Conditions Ave. Delay	Project Conditions LOS	Project Mitigated Ave. Delay	Project Mitigated LOS	Project With Gabilan Ext. Ave. Delay	Project With Gabilan Ext. LOS	No Project Cumulative Conditions Ave. Delay	No Project Cumulative Conditions LOS	With Project Cumulative Conditions Ave. Delay	With Project Cumulative Conditions LOS	With Project Cumulative With Gabilan Ext. Ave. Delay	With Project Cumulative With Gabilan Ext. LOS
1	Moranda Road and US 101 NB Ramps	TWSC	AM	7/26/06	16	C	33	D			**425**	**F**	13	B	18	B	8	A	14	B	18	B
			PM	7/26/06	11	B	14	B			**72**	**F**	12	B	10	B	15	B	16	B	10	B
2	Moranda Road and Front Street	TWSC	AM	7/26/06	10	A	***11***	***B***	14	B	**172**	**F**	7	A	14	B	10	A	5	A	15	B
			PM	7/26/06	28	D	***102***	***F***	21	C	**189**	**F**	6	A	13	B	18	B	11	B	14	B
3	San Vicente Road and Front Street	AWSC	AM	7/26/06	12	B	***22***	***C***	19	B	**143**	**F**	12	B	16	B	19	B	13	B	16	B
			PM	7/26/06	14	B	***40***	***E***	18	B	**146**	**F**	15	B	16	B	20	C	17	B	19	B
4	West Street and Front Street	AWSC	AM	7/26/06	9	A	10	A			***18***	***C***	18	B	15	B	11	B	19	B	14	B
			PM	7/26/06	11	B	13	B			***34***	***D***	20	B	12	B	25	C	34	C	13	B
5	Main Street and Front Street	AWSC	AM	7/27/06	8	A	9	A			11	B	19	B	10	B	9	A	23	C	21	C
			PM	7/27/06	10	B	12	B			***28***	***D***	23	C	17	C	24	C	22	C	23	C
6	East Street and Front Street	AWSC	AM	7/27/06	9	A	***14***	***B***	19	B	22	C			22	C	20	B	24	C	23	C
			PM	7/27/06	14	B	***73***	***F***	23	C	27	C			24	C	25	C	38	D	32	C
7	Front Street and Nestles Road	TWSC	AM	7/26/06	14	B	23	C	14	B	14	B			19	B	17	B	20	B	21	C
			PM	7/26/06	23	C	***300***	***F***	16	B	26	C			22	C	24	C	42	D	42	D
8	Front Street and US 101 NB Ramps	AWSC	AM	7/26/06	9	A	9	A	20	C	10	B			11	B	20	C	10	A	12	B
			PM	7/26/06	12	B	***14***	***B***	20	B	25	C			23	C	19	B	25	C	23	C
9	Front Street and US 101 SB Ramps	TWSC	AM	7/26/06	9	A	11	B			13	B	7	A	7	A	11	B	7	A	7	A
			PM	7/26/06	15	B	19	C			**62**	**F**	8	A	8	A	21	C	12	B	13	B
10	Front Street and Morisoli Road	TWSC	AM	7/27/06	10	A	11	B			14	B			14	B	11	B	14	B	14	B
			PM	7/27/06	11	B	13	B			17	C			16	C	14	B	18	C	18	C
11	San Vicente Road and Market Street	TWSC	AM	7/26/06	11	B	15	B			**47**	**E**	7	A	12	B	14	B	8	A	11	B
			PM	7/26/06	11	B	16	C			**114**	**F**	8	A	15	B	34	D	10	B	11	B
12	West Street and Market Street	AWSC	AM	7/27/06	8	A	8	A			12	B	5	A	10	A	9	A	6	A	10	A
			PM	7/27/06	9	A	9	A			***15***	***C***	7	A	11	B	11	B	9	A	11	B
13	Main Street and Market Street	AWSC	AM	7/25/06	7	A	8	A			9	A			8	A	8	A	9	A	8	A
			PM	7/26/06	8	A	8	A			10	A			9	A	9	A	11	B	9	A
14	East Street and Market Street	AWSC	AM	7/27/06	8	A	10	B			25	C	5	A	5	A	11	B	5	A	5	A
			PM	7/27/06	9	A	16	C			**95**	**F**	6	A	6	A	34	D	9	A	8	A
15	East Street and North Street/Metz Road	AWSC	AM	7/27/06	8	A	11	B	13	B	16	B			14	B	13	B	16	B	14	B
			PM	7/27/06	9	A	***21***	***C***	15	B	15	B			15	B	15	B	16	B	16	B
16	San Vicente Road and Gabilan Drive	TWSC	AM	7/26/06	11	B	13	B			***375***	***F***	15	B	15	B	18	B	21	C	16	B
			PM	7/26/06	10	B	13	B			***395***	***F***	12	B	18	B	19	B	23	C	27	C
17	West Street and Gabilan Drive	AWSC	AM	7/27/06	9	A	10	B			***26***	***D***	26	C	29	C	11	B	27	C	30	C
			PM	7/27/06	9	A	11	B			***58***	***F***	37	D	37	D	13	B	39	D	38	D
18	Main Street and Gabilan Drive	AWSC	AM	7/27/06	8	A	9	A			10	A	12	B	11	B	9	A	12	B	10	A
			PM	7/27/06	8	A	9	A			***12***	***B***	16	B	13	B	10	B	16	B	15	B
19	Andalucia Drive and Gabilan Drive	TWSC	AM	7/27/06	10	A	14	B			15	B	20	B	20	B	12	B	20	B	20	B
			PM	7/27/06	10	B	16	C			***18***	***C***	23	C	22	C	16	C	23	C	23	C
20	Orchard Lane and Metz Road	TWSC	AM	N/A	6	B	15	C			**37**	**E**	14	B	18	B	17	C	36	D	18	B
			PM	N/A	4	A	9	B			***17***	***C***	24	C	18	B	11	C	32	C	20	B
21	Front Street and Oak Street	TWSC	AM	N/A	***33***	***D***	***134***	***F***	12	B	20	B	12	B	12	B	12	B	12	B	12	B
			PM	N/A	***473***	***F***	***1247***	***F***	14	B	**74**	**E**	12	B	12	B	26	C	13	B	12	B

Notes:
1. Intersection control based on existing conditions
   -TWSC = Two-way stop-controlled intersection
   -AWSC = Four-way stop-controlled intersection
2. Significant impacts are shown in **BOLD** and boxed.
3. *Italics* and **BOLD** indicates signal warrant met.

Table ES 2

Signal Warrant Results Summary

Study Number	Intersection Name	Scenario: Existing Conditions AM	Existing Conditions PM	Background Conditions AM	Background Conditions PM	Project Conditions AM	Project Conditions PM	Cumulative Conditions AM	Cumulative Conditions PM
Existing Unsignalized Intersections									
1	Moranda Road & US 101 NB Ramps	No	No	No	No	No	No	**Yes**	**Yes**
2	Moranda Road & Front Street	No	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
3	San Vicente Road & Front Street	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
4	West Street & Front Street	No	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**
5	Main Street & Front Street	No	No	No	No	No	**Yes**	No	**Yes**
6	East Street & Front Street	No	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
7	Front Street & Nestles Road	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
8	Front Street & US 101 NB Ramps	No	No	No	**Yes**	No	**Yes**	No	**Yes**
9	Front Street & US 101 SB Ramps	No	No	No	No	No	No	No	No
10	Front Street & Morisoli Road	No	No	No	No	No	No	No	No
11	San Vicente Road & Market Street	No	No	No	No	No	No	No	**Yes**
12	West Street & Market Street	No	No	No	No	No	**Yes**	No	**Yes**
13	Main Street & Market Street	No	No	No	No	No	No	No	No
14	East Street & Market Street	No	No	No	No	No	**Yes**	No	**Yes**
15	East Street & North Street/Metz Road	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
16	San Vicente Road & Gabilan Drive	No	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**
17	West Street & Gabilan Drive	No	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**
18	Main Street & Gabilan Drive	No	No	No	No	No	**Yes**	No	**Yes**
19	Andalucia Drive & Gabilan Drive	No	No	No	No	No	**Yes**	No	**Yes**
20	Orchard Street & Metz Road	No	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**
21	Oak Street & Front Street	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**

Notes:
1. Signal warrant analysis based on Caltrans Peak Hour Signal Warrant #11.

Table ES 3

Project Freeway Segment Level of Service Summary

				Background Conditions						Project Trips				Project Conditions					
				AM Peak-Hour			PM Peak-Hour			AM Peak-Hour		PM Peak-Hour		AM Peak-Hour			PM Peak-Hour		
Segment	Direction	# Of Lanes	Capacity (vph) /a/	Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
US 101																			
North Gonzales and Gonzales-5th Street	Both	4	9,600	4,791	0.499	B	4,903	0.511	B	1,837	38.34%	1,688	34.44%	6,628	0.690	C	6,591	0.687	C
	NB	2	4,800	2,863	0.597	C	1,985	0.413	B	**1,019**	**35.60%**	1,266	63.80%	**3,883**	**0.809**	**D**	3,251	0.677	C
	SB	2	4,800	1,928	0.402	B	2,918	0.608	C	818	42.41%	422	14.47%	2,746	0.572	C	3,340	0.696	C
Gonzales-5th Street and Gloria Road	Both	4	9,600	4,697	0.489	B	4,824	0.503	B	2,099	44.69%	1,930	40.00%	6,796	0.708	C	6,754	0.704	C
	NB	2	4,800	2,805	0.584	C	1,957	0.408	B	**1,165**	**41.52%**	1,447	73.96%	**3,970**	**0.827**	**D**	3,404	0.709	C
	SB	2	4,800	1,892	0.394	B	2,868	0.597	C	934	49.39%	482	16.82%	2,826	0.589	C	3,350	0.698	C
Gloria Road and Soledad Prison	Both	4	9,600	3,853	0.401	B	3,996	0.416	B	2,362	61.29%	2,171	54.32%	6,215	0.647	C	6,167	0.642	C
	NB	2	4,800	2,297	0.479	B	1,629	0.339	A	1,310	57.05%	1,628	99.95%	3,608	0.752	C	3,257	0.679	C
	SB	2	4,800	1,556	0.324	A	2,367	0.493	B	1,051	67.56%	543	22.92%	2,607	0.543	B	2,910	0.606	C
Soledad Prison and Camphora	Both	4	9,600	3,681	0.383	B	3,832	0.399	B	2,493	67.72%	2,291	59.79%	6,174	0.643	C	6,124	0.638	C
	NB	2	4,800	2,193	0.457	B	1,565	0.326	A	1,383	63.07%	1,719	109.82%	3,576	0.745	C	3,284	0.684	C
	SB	2	4,800	1,488	0.310	A	2,267	0.472	B	1,110	74.57%	573	25.27%	2,598	0.541	B	2,840	0.592	C
Camphora and North Soledad	Both	4	9,600	4,859	0.506	B	5,018	0.523	B	1,456	29.97%	1,809	36.05%	6,315	0.658	C	6,827	0.711	C
	NB	2	4,800	2,899	0.604	C	2,041	0.425	B	**1,168**	**40.29%**	603	29.54%	**4,067**	**0.847**	**D**	2,644	0.551	C
	SB	2	4,800	1,960	0.408	B	2,977	0.620	C	288	14.69%	**1,206**	**40.51%**	2,248	0.468	B	**4,183**	**0.871**	**D**
North Soledad and South Soledad	Both	4	9,600	3,954	0.412	B	3,994	0.416	B	374	9.46%	465	11.64%	4,328	0.451	B	4,459	0.464	B
	NB	2	4,800	2,379	0.496	B	1,601	0.334	A	250	10.51%	189	11.81%	2,629	0.548	B	1,790	0.373	B
	SB	2	4,800	1,575	0.328	A	2,393	0.499	B	124	7.87%	276	11.53%	1,699	0.354	A	2,669	0.556	C
South Soledad and Arroyo Seco Road	Both	4	9,600	3,861	0.402	B	3,909	0.407	B	416	10.77%	517	13.23%	4,277	0.446	B	4,426	0.461	B
	NB	2	4,800	2,104	0.438	B	1,780	0.371	B	82	3.90%	345	19.38%	2,186	0.455	B	2,125	0.443	B
	SB	2	4,800	1,757	0.366	B	2,129	0.444	B	334	19.01%	172	8.08%	2,091	0.436	B	2,301	0.479	B
Arroyo Seco Road and North Greenfield	Both	4	9,600	3,703	0.386	B	3,749	0.390	B	395	10.67%	491	13.10%	4,098	0.427	B	4,240	0.442	B
	NB	2	4,800	2,018	0.420	B	1,707	0.356	A	78	3.86%	328	19.20%	2,096	0.437	B	2,035	0.424	B
	SB	2	4,800	1,685	0.351	A	2,042	0.425	B	317	18.83%	163	8.00%	2,002	0.417	B	2,205	0.459	B
North Greenfield and Walnut Avenue	Both	4	9,600	3,187	0.332	A	3,228	0.336	A	354	11.10%	439	13.62%	3,540	0.369	B	3,667	0.382	B
	NB	2	4,800	1,736	0.362	B	1,470	0.306	A	70	4.01%	293	19.95%	1,806	0.376	B	1,764	0.367	B
	SB	2	4,800	1,451	0.302	A	1,757	0.366	B	284	19.57%	146	8.32%	1,735	0.361	B	1,904	0.397	B
Walnut Avenue and Oak Avenue	Both	4	9,600	2,971	0.309	A	3,007	0.313	A	312	10.50%	388	12.90%	3,283	0.342	A	3,395	0.354	A
	NB	2	4,800	1,619	0.337	A	1,369	0.285	A	62	3.80%	259	18.90%	1,681	0.350	A	1,628	0.339	A
	SB	2	4,800	1,352	0.282	A	1,638	0.341	A	251	18.53%	129	7.88%	1,602	0.334	A	1,767	0.368	B
South Greenfield and Oak Avenue	Both	4	9,600	2,455	0.256	A	2,486	0.259	A	270	11.02%	336	13.52%	2,725	0.284	A	2,822	0.294	A
	NB	2	4,800	1,337	0.279	A	1,132	0.236	A	53	3.99%	224	19.81%	1,391	0.290	A	1,357	0.283	A
	SB	2	4,800	1,117	0.233	A	1,354	0.282	A	217	19.43%	112	8.26%	1,334	0.278	A	1,465	0.305	A

Notes:
/a/ Capacity of freeway lanes based on assumed capacity of 2,400 vphpl, as prescribed by the Highway Capacity Manual
/b/ Data provided by Caltrans Data System Unit 2005, Route 101 District 5.

Table ES 4

Freeway Ramp Analysis Summary

					Background Conditions						Project Trips				Project Conditions					
					AM Peak-Hour			PM Peak-Hour			AM Peak-Hour		PM Peak-Hour		AM Peak-Hour			PM Peak-Hour		
Interchange	Direction	# Of Lanes	Type	Capacity (vph)	Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
US 101																				
Camphora Road	SB to Camphora Road	1	Diagonal	1,500	24	0.016	A	30	0.020	A	0	0.00%	0	0.00%	24	0.016	A	30	0.020	A
	NB from Camphora Road	1	Diagonal	1,500	40	0.027	A	32	0.021	A	0	0.00%	0	0.00%	40	0.027	A	32	0.021	A
	SB from Camphora Road	1	Diagonal	1,500	88	0.059	A	115	0.077	A	14	15.91%	60	52.17%	102	0.068	A	175	0.117	A
	NB to Camphora Road	1	Diagonal	1,500	96	0.064	A	80	0.053	A	58	60.42%	30	37.50%	154	0.103	A	110	0.073	A
Moranda Road	SB to Moranda Road	1	Diagonal	1,500	408	0.272	A	1107	0.738	C	230	56.37%	**965**	**87.17%**	638	0.425	B	**2072**	**1.381**	**F**
	NB from Moranda Road	1	Loop	1,500	877	0.585	C	482	0.321	A	**935**	**106.61%**	482	100.00%	**1812**	**1.208**	**F**	964	0.643	C
	SB from Moranda Road	1	Loop	1,500	52	0.035	A	42	0.028	A	67	128.85%	34	80.95%	119	0.079	A	76	0.051	A
	NB to Moranda Road	1	Loop	1,500	37	0.025	A	86	0.057	A	16	43.24%	69	80.23%	53	0.035	A	155	0.103	A
Front Street	SB to Front Street	1	Loop	1,500	162	0.108	A	283	0.189	A	58	35.80%	241	85.16%	220	0.147	A	524	0.349	A
	NB from Front Street	1	Loop	1,500	322	0.215	A	216	0.144	A	234	72.67%	121	56.02%	556	0.371	B	337	0.225	A
	SB from Front Street	1	Diagonal	1,500	281	0.187	A	376	0.251	A	267	95.02%	138	36.70%	548	0.365	B	514	0.343	A
	NB to Front Street	1	Diagonal	1,500	317	0.211	A	508	0.339	A	66	20.82%	276	54.33%	383	0.255	A	784	0.523	B
Arroyo Seco Road	SB to Arroyo Seco Road	1	Diagonal	1,500	75	0.050	A	93	0.062	A	17	22.67%	9	9.68%	92	0.061	A	102	0.068	A
	NB from Arroyo Seco Road	1	Diagonal	1,500	91	0.061	A	76	0.051	A	4	4.40%	17	22.37%	95	0.063	A	93	0.062	A

Notes:
1. Capacity for all ramps based on assumed capacity of 1,500 vphpl, as prescribed by the Highway Capacity Manual

Table ES 5

Year 2030 Freeway Segment Analysis Summary

				Year 2030 Conditions						Miravale Phase III Project Trips			
		# Of	Capacity	AM Peak-Hour			PM Peak-Hour			AM Peak-Hour		PM Peak-Hour	
Segment	Direction	Lanes	(vph)	Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase
US 101													
Soledad Prison and Camphora	NB	2	4,800	**4,170**	**0.869**	**D**	2,920	0.608	C	**770**	**18%**	150	5%
	SB	2	4,800	2,920	0.608	C	**4,170**	**0.869**	**D**	150	5%	**770**	**18%**
Camphora and North Soledad	NB	2	4,800	3,300	0.688	C	2,310	0.481	B	250	8%	50	2%
	SB	2	4,800	2,190	0.456	B	3,130	0.652	C	0	0%	0	0%
North Soledad and South Soledad	NB	2	4,800	2,760	0.575	C	1,930	0.402	B	40	1%	200	10%
	SB	2	4,800	1,880	0.392	B	2,690	0.560	C	0	0%	0	0%
South Soledad and Arroyo Seco Road	NB	2	4,800	2,750	0.573	C	1,930	0.402	B	60	2%	320	17%
	SB	2	4,800	1,930	0.402	B	2,750	0.573	C	320	17%	60	2%
Arroyo Seco Road and North Greenfield	NB	2	4,800	2,700	0.563	C	1,890	0.394	B	60	2%	290	15%
	SB	2	4,800	1,890	0.394	B	2,700	0.563	C	290	15%	60	2%

Notes:

1. Capacity of freeway lanes based on assumed capacity of 2,400 vphpl, as prescribed by the Highway Capacity Manual
2. Year 2030 traffic volumes based on projections produced by Omni Means, March 27, 2007
3. Miravale Phase III project trips based on Year 2030 projections produced by Omni Means, Miravale III Future Traffic Volume, March 27, 2007

Table ES 6

Year 2030 Freeway Ramp Analysis Summary

					Year 2030 Conditions						Miravale Phase III Year 2030 Project Trips			
		# Of		Capacity	AM Peak-Hour			PM Peak-Hour			AM Peak-Hour		PM Peak-Hour	
Interchange	Direction	Lanes	Type	(vph)	Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase
US 101														
Camphora Road	SB to Camphora Road	1	Diagonal	1,500	900	0.600	C	**1290**	**0.860**	**D**	150	17%	**770**	**60%**
	NB from Camphora Road	1	Diagonal	1,500	970	0.647	C	680	0.453	B	520	54%	100	15%
	SB from Camphora Road	1	Diagonal	1,500	180	0.120	A	250	0.167	A	0	0%	0	0%
	NB to Camphora Road	1	Diagonal	1,500	100	0.067	A	70	0.047	A	0	0%	0	0%
Moranda Road	SB to Moranda Road	1	Diagonal	1,500	390	0.260	A	550	0.367	B	0	0%	0	0%
	NB from Moranda Road	1	Loop	1,500	830	0.553	C	580	0.387	B	250	30%	50	9%
	SB from Moranda Road	1	Loop	1,500	80	0.053	A	110	0.073	A	0	0%	0	0%
	NB to Moranda Road	1	Loop	1,500	290	0.193	A	200	0.133	A	40	14%	200	100%
Front Street	SB to Front Street	1	Loop	1,500	220	0.147	A	320	0.213	A	0	0%	0	0%
	NB from Front Street	1	Loop	1,500	360	0.240	A	250	0.167	A	0	0%	20	8%
	SB from Front Street	1	Diagonal	1,500	270	0.180	A	380	0.253	A	320	119%	60	16%
	NB to Front Street	1	Diagonal	1,500	350	0.233	A	250	0.167	A	30	9%	140	56%
Arroyo Seco Road	SB to Arroyo Seco Road	1	Diagonal	1,500	110	0.073	A	150	0.100	A	30	27%	10	7%
	NB from Arroyo Seco Road	1	Diagonal	1,500	150	0.100	A	110	0.073	A	10	7%	30	27%

Notes:
1. Capacity of freeway lanes based on assumed capacity of 1,500 vphpl for all ramps, as prescribed by the Highway Capacity Manual
2. Year 2030 traffic volumes based on projections produced by Omni Means, March 27, 2007
3. Miravale Phase III project trips based on Year 2030 projections produced by Omni Means, Miravale III Future Traffic Volume, March 27, 2007

1. Introduction

This report presents the results of the traffic impact analysis conducted for the Miravale Phase III Mixed-Use development Specific Plan in Soledad, California. The project site is located in the northern outskirts of the city generally between San Vicente Road and Orchard Lane. The project as proposed will consist of 1,470 single-family homes, 2,230 multi-family units, 500 senior housing units, 120 hotel rooms, and up to 275,000 s.f. of supporting retail. A golf course, schools, and parks will also be part of the 920-acre site. The land uses of the project site are consistent with the City of Soledad General Plan that calls for major residential development in areas east and north of city limits. The project site incorporates the identified specific plan expansion areas of San Vicente West, Mirassou, and the Northwest area. A specific plan is required of all development within the identified expansion areas. The Specific Plan includes project zoning and development standards and design guidelines that implement the Specific Plan vision and land use provisions and the General Plan's goals, policies, and standards relating to Miravale Phase III. Access to the site will be provided via extensions of San Vicente Road, West Street, and Orchard Lane. Future access also will be provided by the extension of Miravale Road to Camphora/Gloria Road and the Orchard Lane extensions north and west of the project, eventually connecting via other planned routes to Camphora/Gloria Road when other development is completed. The project site and the surrounding study area are shown on Figure 1. The project site plan is shown on Figure 2.

Scope of Study

This study was conducted for the purpose of identifying the potential traffic impacts related to the proposed development. The impacts of the project were evaluated following the standards and methodologies set forth by the City of Soledad. The traffic analysis is based on peak-hour levels of service for unsignalized intersections. The traffic analysis also includes an evaluation of peak-hour signal warrants for unsignalized intersections and roadway and freeway level of service analysis. The study facilities are identified below:

Study Intersections

1 Moranda Road and US 101 Northbound Ramps
2 Moranda Road and Front Street
3 San Vicente Road and Front Street

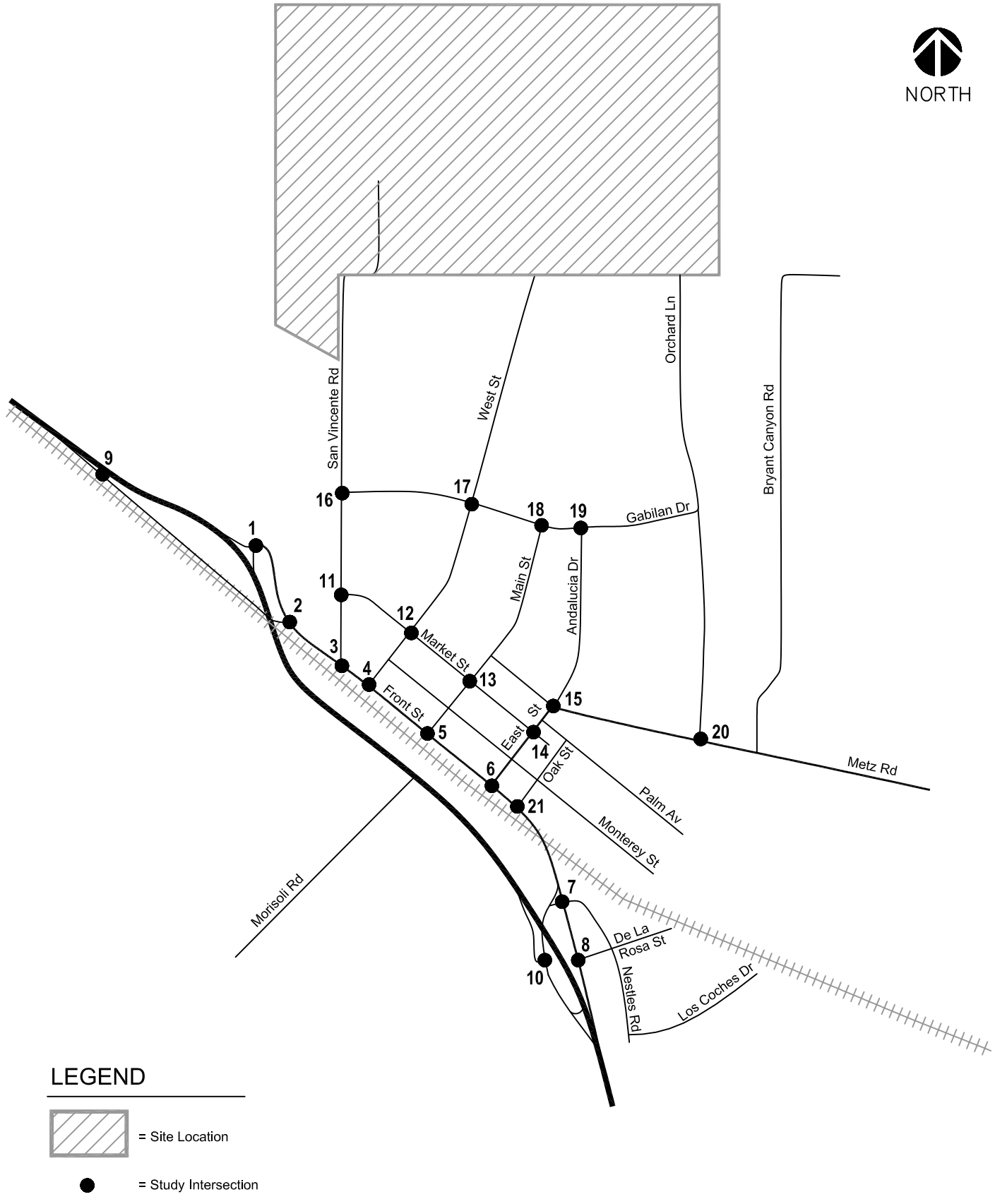


Figure 1

SITE LOCATION AND STUDY INTERSECTIONS

Soledad Miravale

Hexagon
Transportation Consultants, Inc.

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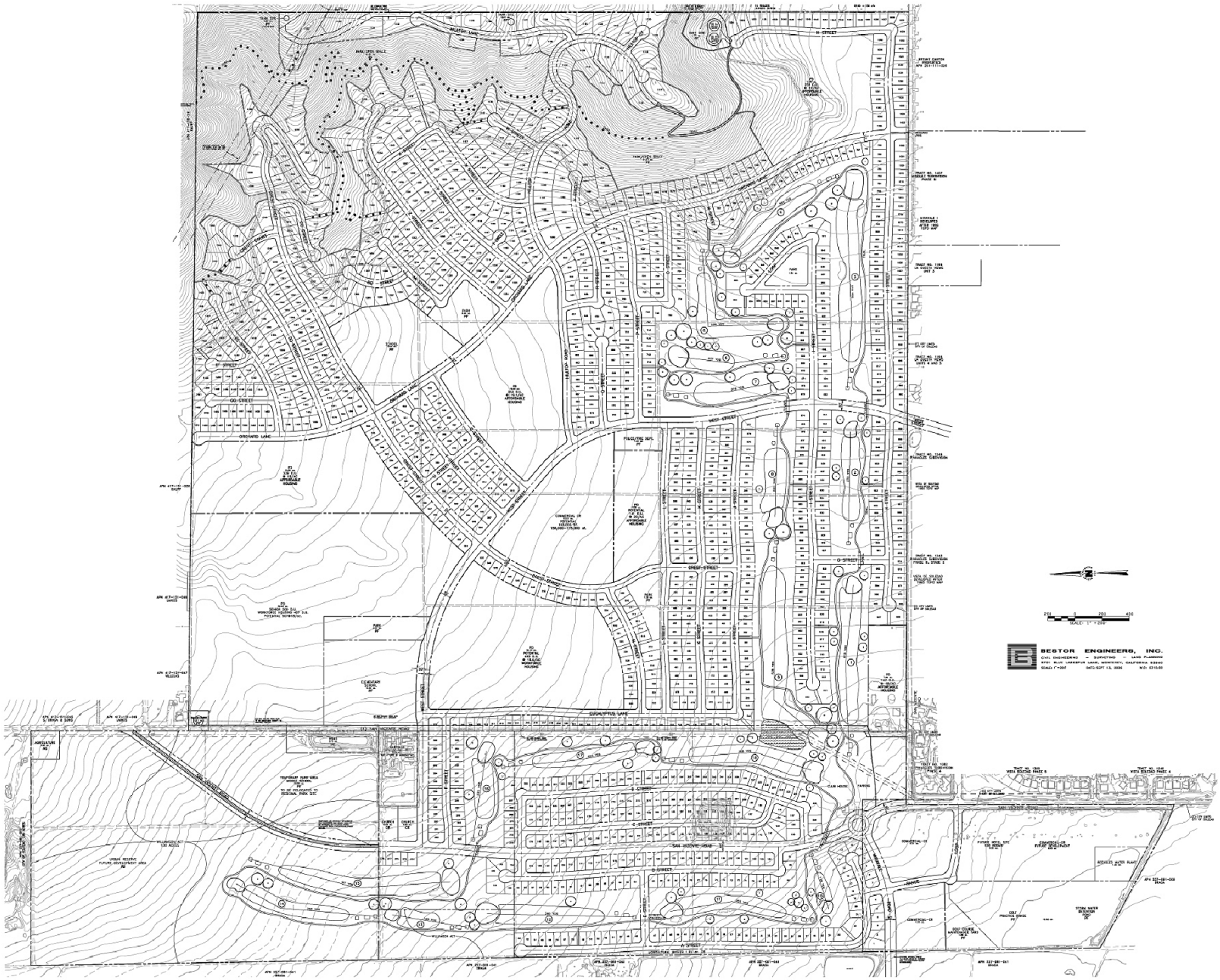


Figure 2

SITE PLAN

Soledad Miravale

Hexagon
Transportation Consultants, Inc.

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4 West Street and Front Street
5 Main Street and Front Street
6 East Street and Front Street
7 Front Street and Nestles Road
8 Front Street and US 101 Northbound Ramps
9 Front Street and US 101 Southbound Ramps
10 Front Street and Morisoli Road
11 San Vicente Road and Market Street
12 West Street and Market Street
13 Main Street and Market Street
14 East Street and Market Street
15 East Street and Metz Road
16 San Vicente Road and Gabilan Drive
17 West Street and Gabilan Drive
18 Main Street and Gabilan Drive
19 Andalucia Drive and Gabilan Drive
20 Orchard Lane and Metz Road
21 Oak Street and Front Street

Roadway Segments

1 Front Street, between Front Street and San Vicente Road
2 Front Street, between San Vicente Road and West Street
3 Front Street, between West Street and Main Street
4 Front Street, between Main Street and East Street
5 Front Street, between East Street and Front Street
6 Gabilan Drive, between San Vicente Road and West Street
7 Gabilan Drive, between West Street and Andalucia Drive
8 San Vicente Road, between Market Street and Gabilan Drive
9 San Vicente Road, North of Gabilan Drive
10 West Street, between Market Street and Gabilan Drive
11 West Street, North of Gabilan Drive

Freeway Segments

1 US 101 between North Gonzalez and 5th Street
2 US 101 between 5th Street and Gloria Road
3 US 101 between Gloria Road and Soledad Prison
4 US 101 between Soledad Prison and Camphora
5 US 101 between Camphora and North Soledad
6 US 101 between North Soledad and South Soledad
7 US 101 between South Soledad and Arroyo Seco Road
8 US 101 between Arroyo Seco Road and North Greenfield
9 US 101 between North Greenfield and Walnut Avenue
10 US 101 between Walnut Avenue and Oak Avenue
11 US 101 between Oak Avenue and South Greenfield

In summary, the study includes an analysis of 21 unsignalized intersections, 11 roadway segments, and 11 freeway segments in the vicinity of the project site. Traffic conditions at the intersections were analyzed for the weekday AM and PM peak hours of traffic. The AM peak hour of traffic is generally between 7:00 and 9:00 AM, and the PM peak hour is typically between 4:00 and 6:00 PM. It is during these periods that

the most congested traffic conditions occur on an average day.

Traffic conditions were evaluated for the following scenarios:

Scenario 1: *Existing Conditions.* Existing conditions were represented by existing peak-hour traffic volumes on the existing roadway network. Existing traffic volumes were obtained from recent (July 2006) traffic counts.

Scenario 2: *Background Conditions.* Background conditions were represented by future background traffic volumes on the near-term roadway network. Background traffic volumes were estimated by adding to existing peak-hour volumes the projected volumes from approved but not yet completed developments. The latter component was developed based on a list of approved projects provided by the City of Soledad.

Scenario 3: *Project Conditions.* Project conditions were represented by future traffic volumes, with the project, on the near-term future roadway network. Future traffic volumes with the project (hereafter called *project traffic volumes*) were estimated by adding to background traffic volumes the additional traffic generated by the project. Project conditions were evaluated relative to background conditions with improvements in order to determine potential project impacts.

Scenario 4: *Cumulative Growth No Project Conditions.* Traffic volumes for cumulative conditions without the project were estimated by adding traffic associated with pending developments in the City of Soledad to background traffic volumes. The analysis of cumulative growth conditions was conducted at the request of the City of Soledad and is in conformance with the California Environmental Quality Act CEQA.

Scenario 5: *Cumulative Growth With Project Conditions.* Cumulative traffic volumes with the project were estimated by adding to cumulative no project traffic volumes the additional traffic generated by the project.

Scenario 6: *Year 2030 Conditions.* Year 2030 conditions were represented by forecasted Year 2030 traffic volumes. The traffic forecasts for Year 2030 were produced using the Association of Monterey Bay Area Governments (AMBAG) Regional Traffic Model. The 2030 model includes land use growth and transportation improvements associated with buildout of all General Plans within the AMBAG region and 30 year through-traffic growth on major regional facilities.

Methodology

This section presents the methods used to determine the traffic conditions for each scenario described above. It includes descriptions of the data requirements, the analysis methodologies, and the applicable level of service standards.

Data Requirements

The data required for the analysis were obtained from new traffic counts and field observations. The following data were collected from these sources:

- existing traffic volumes

- lane configurations
- roadway widths
- intersection control

Analysis Methodologies and Level of Service Standards

Traffic conditions at the study intersections were evaluated using level of service (LOS). *Level of Service* is a qualitative description of operating conditions ranging from LOS A, or free-flow conditions with little or no delay, to LOS F, or jammed conditions with excessive delays. The various analysis methods are described below.

Unsignalized Intersections

The study intersections are analyzed with the TRAFFIX level of service software, which uses the *Highway Capacity Manual* (HCM) 2000 methodology for unsignalized intersections. This method is applicable for both two-way stop-controlled (TWSC) and all-way stop-controlled (AWSC) intersections. Two-way stop-controlled intersections have stop signs on the minor street approaches and no control on the major street approaches. The TWSC intersection level of service are determined from average control delay for the most congested approach at the intersection. While AWSC intersection level of service are determined from average control delay time for all approaches at the intersection. The City of Soledad acceptable level of service standard is LOS D or better. The correlation between average control delay and level of service for both TWSC and AWSC unsignalized intersections is shown in Table 1.

Table 1
Unsignalized Intersection Level of Service Definition Based on Delay

Level of Service	Average Control Delay per Vehicle (sec.)
A	0 - 10
B	> 10 - 15
C	> 15 - 25
D	> 25 - 35
E	> 35 - 50
F	> 50

Source: Transportation Research Board, Highway Capacity Manual (Washington, D.C., 2000) pp. 17-2.

Signal Warrant

Unsignalized intersections are also assessed for the need of signalization. This assessment is made on the basis of the Peak-hour Volume Signal Warrant, Warrant #11, described in the Caltrans *Traffic Manual*. This method makes no evaluation of intersection level of service, but simply provides an indication whether peak-hour traffic volumes are, or would be, sufficient to justify installation of a traffic signal.

Signalized Intersections

Should it be found that study intersections meet signal warrants and/or require signalization based on level of service analysis, the intersections will be analyzed with standard signalized intersection methodology. The intersections will be analyzed using TRAFFIX, which is based on the *Highway Capacity Manual* (HCM) 2000 method for signalized intersections. TRAFFIX evaluates signalized intersection operations on the basis of average control delay time for all vehicles at the intersection. The correlation between average control delay for signalized intersections and level of service is shown in Table 2.

Table 2
Signalized Intersection Level of Service Definitions Based on Delay

Level of Service	Description	Average Control Delay Per Vehicle (Sec.)
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	Less than 10.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.1 to 20.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.1 to 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.1 to 80.0
F	Operation with delays unacceptable to most drivers occurring due to oversaturation, poor progression, or very long cycle lengths.	Greater than 80.0

Source: Transportation Research Board, Highway Capacity Manual (Washington, D.C., 2000), p. 16-2

Freeway Segment Analysis

Freeway segments that serve the Soledad area were also analyzed as part of the study. Similar to the selected study intersections, freeway segments were analyzed for the weekday AM and PM peak hours of traffic.

Freeway Segment Level of Service Methodology

Standard methodology for the analysis of freeway segments consists of the evaluation of the segments based on the density method. The density method requires measurement of vehicle travel speeds on the freeway segments. Unfortunately, the use of vehicle density does not lend itself well to the calculation of future levels of service for freeway segments. It is not possible to project the future travel speeds on the segments, due to changes in traffic conditions. Therefore, levels of service for freeway segments were calculated based on a volume-to-capacity ratio (V/C). The V/C method is simpler and does not use travel speed as a variable in its calculation. Freeway segment level of service based on V/C is shown in Table 3. Caltrans level of service standard for freeway segments is LOS C.

Table 3
Freeway Segment Levels of Service Based on Volume-to-Capacity Ratio

Level of Service	Description	V/C Ratio
A	Primarily free-flow operations. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.	Less than 0.36
B	Reasonably free-flow conditions. The ability to maneuver within the traffic traffic stream is only slightly restricted.	0.36 - 0.54
C	Provides for stable operation, however flows approach the range in which small increases will cause a substantial deterioration in service. Freedom to maneuver withtin the traffic is noticeably restricted.	0.55 - 0.77
D	Borders on unstable flow. Small increases in flow cause substantial deterioration in service. Freedom to maneuver within the traffic stream is severely limited. Minor incidents can be expected to create substantial queuing, as the traffic stream has little space to absorb disruptions.	0.78 - 0.93
E	Operations are extremely unstable. Any incident can be expected to produce a serious breakdown with extensive queuing. Maneuverability within the traffic stream is extremely limited.	0.94 - 1.00
F	Forced or breakdown conditions. Such conditions generally exist within queues forming behind breakdown points.	Greater than 1.00

Source: 1985 Highway Capacity Manual for freeway sections with a 70 mph design speed.

Report Organization

The remainder of this report is divided into six chapters. Chapter 2 describes existing conditions in terms of the existing roadway network, transit service, and existing bicycle and pedestrian facilities. Chapter 3 presents the intersection operations under background conditions. Chapter 4 describes the method used to estimate project traffic and its impact on the transportation system and describes the recommended mitigation measures. Chapter 5 discusses the traffic conditions resulting from additional cumulative

growth. Chapter 6 presents the long-term Year 2030 analysis. Chapter 7 presents the conclusions of the traffic impact analysis.

2.
Existing Conditions

This chapter describes the existing conditions for all of the major transportation facilities in the vicinity of the site, including the roadway network, and bicycle and pedestrian facilities.

Existing Roadway Network

Regional access to the project site is provided solely via US 101. This facility is described below.

US 101 is a four-lane freeway within the City of Soledad. It extends north through Salinas and south through King City. Access to the site is provided via its interchanges with Moranda Road and Front Street within the City of Soledad.

Local access to the site is provided by Moranda Road, Front Street, San Vicente Road, West Street, Orchard Lane, and Gabilan Drive. These roadways are described below.

Moranda Road is a north/south roadway that runs from Front Street to US 101. Moranda Road serves as the access road to and from the US 101 northbound ramps in the northern part of the city. The roadway is one lane in each direction with a 35-mph speed limit.

Front Street is an arterial that runs parallel to and along the eastside of US 101 and the Union Pacific Railroad tracks, between Moranda Road and Oak Street. South of the Oak Street, Front Street crosses under the tracks and terminates at the US 101 northbound off ramp at Hector De La Rosa Sr. Street. The roadway varies in width between its north and south termination points at US 101. Between the US 101 northbound off-ramps in the southern part of Soledad and West Street, Front Street is two lanes wide. Between West Street and Moranda Road, the roadway widens to four lanes prior to narrowing once again to two lanes at its intersection with Moranda Road. The roadway has a 25-mph speed limit through downtown and increases to 35-mph north and south of downtown.

San Vicente Road is a north/south collector roadway that extends north from Front Street to the project boundary. The roadway is one lane in each direction with a 25-mph speed limit. The project includes the extension of San Vicente Road into the site providing direct access to the project area from northern Soledad.

West Street is a north/south collector roadway that runs from Front Street to the project boundary and will extend from the project boundary to Metz Road in the future, as part of the Miravale II development. The roadway is four lanes wide with speed limit ranging from 25 to 35 mph. The roadway is lined by residential uses. The project includes the extension of West Street into the site providing direct access to the project area from central Soledad.

Orchard Lane is a north/south roadway that runs from Gabilan Drive to the project boundary. As part of the Miravale Phase II development, Orchard lane will be extended from the project boundary to Metz Road. The roadway is one lane in each direction with a 25-mph speed limit. The roadway is lined by residential uses. The project includes the extension of Orchard Lane into the site providing direct access to the project area from southern Soledad.

Gabilan Drive is an east/west arterial roadway that extends from Orchard lane to San Vicente Road. The roadway is four lanes wide with a 25 mph speed limit between San Vicente Road and Prado Drive. Gabilan Drive narrows to one lane in each direction from Toledo Street to its terminus as a cul-de-sac just west of Bryant Canyon Road.

Existing Bicycle and Pedestrian Facilities

Bike lanes are provided along Front Street between East Street and Nestles Road and along Gabilan Drive from San Vicente Road to West Street and from Toledo Street to Orchard Lane; and along Orchard Lane from the projects south boundary to Gabilan Drive with future extension of Orchard Lane to Metz Road.

Pedestrian facilities in the study area consist primarily of sidewalks and crosswalks at intersections. Sidewalks are found along all previously described local roadways in the study area and along the local residential streets and collectors surrounding the study area.

Existing Intersection Lane Configurations

The existing lane configurations at the study intersections were obtained by observations in the field. The existing intersection lane configurations are shown on Figure 3.

Existing Traffic Volumes

Existing peak-hour traffic volumes were obtained from new manual intersection turn-movement counts conducted in July 2006. The existing peak-hour intersection volumes are shown on Figure 4. The traffic count data are included in Appendix A.

Existing Intersection Analysis

The results of the level of service analysis under existing conditions are summarized in Table 4. The results show that, measured against the City of Soledad level of service standards, all but one of the study intersections currently operate at an acceptable LOS D or better. The intersection of Oak Street and Front Street currently operates at an LOS F during both peak hours. The level of service calculation sheets are included in Appendix C.

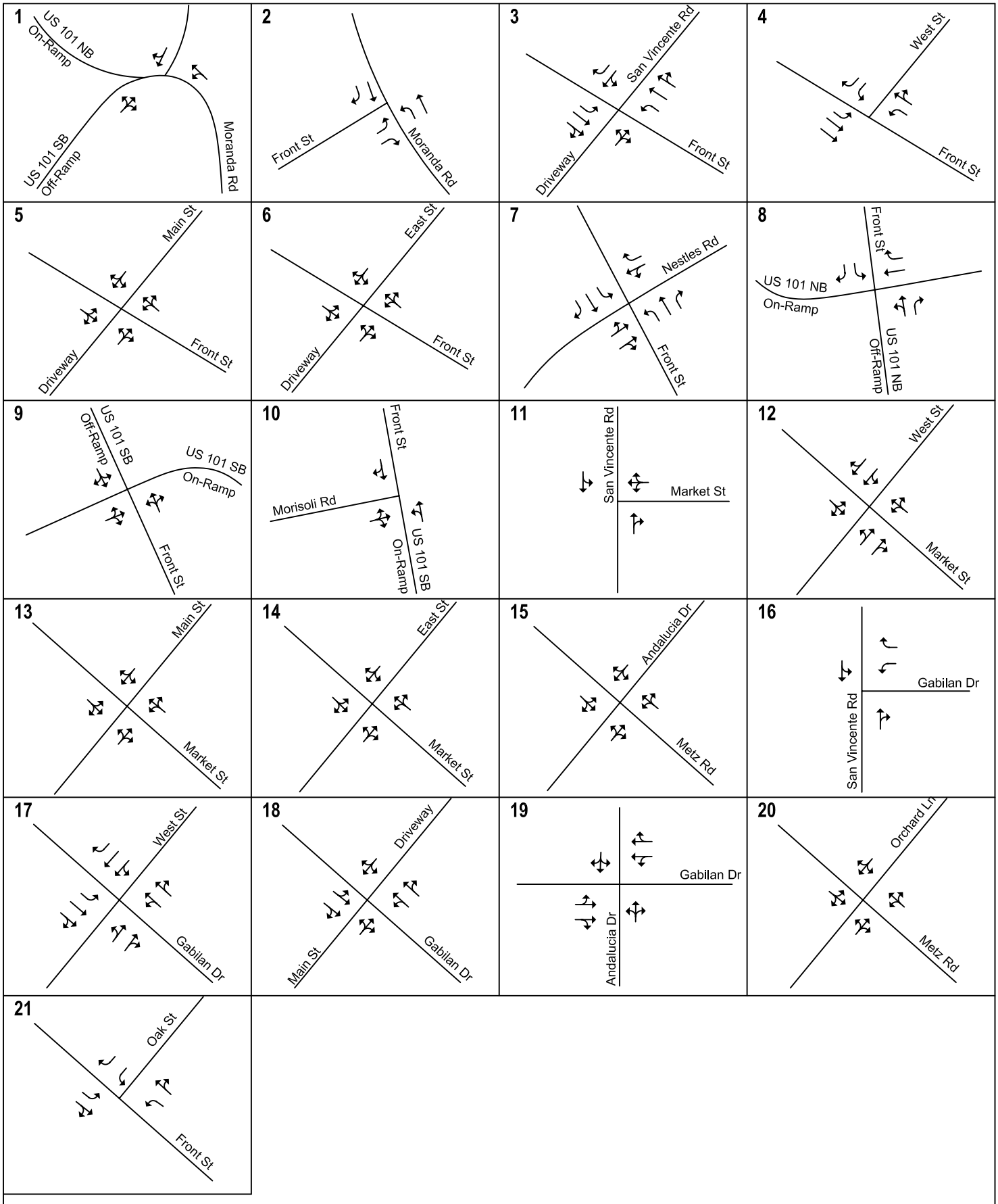


Figure 3

EXISTING LANE CONFIGURATIONS

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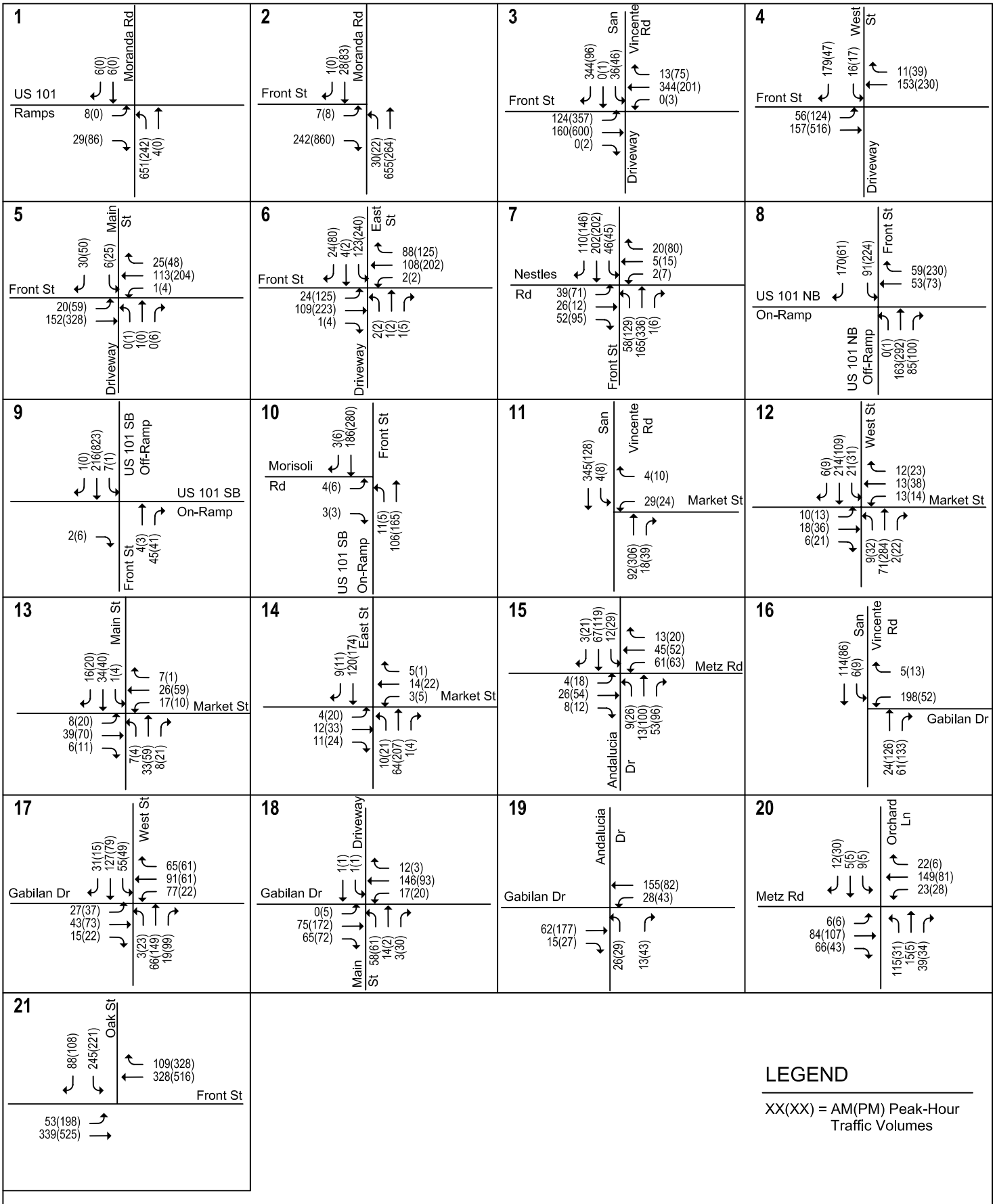


Figure 4

EXISTING TRAFFIC VOLUMES

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Table 4

Existing Intersection Levels of Service

	Intersection	Intersection Control	Peak Hour	Count Date	Ave. Delay	LOS
1	Moranda Road and US 101 NB Ramps	TWSC	AM	07/26/06	16	C
			PM	07/26/06	11	B
2	Moranda Road and Front Street	TWSC	AM	07/26/06	10	A
			PM	07/26/06	28	D
3	San Vicente Road and Front Street	AWSC	AM	07/26/06	12	B
			PM	07/26/06	14	B
4	West Street and Front Street	AWSC	AM	07/26/06	9	A
			PM	07/26/06	11	B
5	Main Street and Front Street	AWSC	AM	07/27/06	8	A
			PM	07/27/06	10	B
6	East Street and Front Street	AWSC	AM	07/27/06	9	A
			PM	07/27/06	14	B
7	Front Street and Nestles Road	TWSC	AM	07/26/06	14	B
			PM	07/26/06	23	C
8	Front Street and US 101 NB Ramps	AWSC	AM	07/26/06	9	A
			PM	07/26/06	12	B
9	Front Street and US 101 SB Ramps	TWSC	AM	07/26/06	9	A
			PM	07/26/06	15	B
10	Front Street and Morisoli Road	TWSC	AM	07/27/06	10	A
			PM	07/27/06	11	B
11	San Vicente Road and Market Street	TWSC	AM	07/26/06	11	B
			PM	07/26/06	11	B
12	West Street and Market Street	AWSC	AM	07/27/06	8	A
			PM	07/27/06	9	A
13	Main Street and Market Street	AWSC	AM	07/25/06	7	A
			PM	07/26/06	8	A
14	East Street and Market Street	AWSC	AM	07/27/06	8	A
			PM	07/27/06	9	A
15	East Street and North Street/Metz Road	AWSC	AM	07/27/06	8	A
			PM	07/27/06	9	A
16	San Vicente Road and Gabilan Drive	TWSC	AM	07/26/06	11	B
			PM	07/26/06	10	B
17	West Street and Gabilan Drive	AWSC	AM	07/27/06	9	A
			PM	07/27/06	9	A
18	Main Street and Gabilan Drive	AWSC	AM	07/27/06	8	A
			PM	07/27/06	8	A
19	Andalucia Drive and Gabilan Drive	TWSC	AM	07/27/06	10	A
			PM	07/27/06	10	B
20	Orchard Lane and Metz Road	TWSC	AM	N/A	6	B
			PM	N/A	4	A
21	Front Street and Oak Street	TWSC	AM	N/A	***33***	***D***
			PM	N/A	***473***	***F***

Notes:

TWSC = Two-way stop-controlled intersection

AWSC = Four-way stop-controlled intersection

Existing Intersection Signal Warrant Analysis

Peak-hour signal warrant checks were completed for all study intersections to determine whether signalization would be justified on the basis peak-hour volumes. A summary of the signal warrant checks is shown in Table 5. The analysis showed that the Caltrans peak-hour volume warrant is met during at least one peak hour at the following four intersections under existing conditions:

2	Moranda Road and Front Street
3	San Vicente Road and Front Street
6	East Street and Front Street
21	Oak Street and Front Street

The signal warrant analysis sheets are included in Appendix D.

Existing Roadway Segment Analysis

Twenty-four hour roadway segment tube counts were conducted on all major roadways serving the selected study intersections. Figure 5 shows daily traffic volumes along the roadways counted. The collected counts provide peak hour as well as daily volumes along some of the major roadways within the City of Soledad. The collected segment volumes were used to evaluate roadway segment operations. Since there is no evaluation criteria for roadway segments, the roadway segment analysis is presented for informative purposes only. The roadway segment analysis indicates that all studied roadway segments currently operate at LOS A during both peak hours. Table 6 presents the roadway segment analysis.

Existing Freeway Segment Analysis

Traffic volumes for the studied freeway segments were obtained from 2005 data collected by the Traffic and Vehicle Data Systems Unit for Caltrans District 5. The collected data provides average annual daily and peak hour volumes along each freeway segment for both directions of travel. Peak hour splits for each segment were developed using directional peak-hour volume data collected by Caltrans. The directional peak hour volume provides a percentage of total peak hour traffic by direction. The freeway segment analysis indicates that all freeway segments analyzed currently operate at LOS C or better. Freeway segment analysis is presented in Table 7.

Existing Freeway Ramp Analysis

Traffic volumes for the studied freeway ramps were obtained from the traffic counts collected at each of the interchange intersections. The collected counts were compared to historical Caltrans ramp counts and found to be greater than Caltrans counts. The freeway ramp analysis indicates that all freeway ramps analyzed currently operate at LOS B or better. Freeway ramp analysis is presented in Table 8.

Though levels of service analysis does not indicate deficient operations on the ramps based on the ramps' capacities, there are existing operational deficiencies due to inadequate ramp configurations to serve existing traffic volumes. The ramps at both the Moranda Road and Front Street interchanges with US 101 were constructed years ago and not designed to accommodate existing traffic volumes. The existing ramp alignments are inadequate to feed the large ramp volumes onto the mainline that also has seen increased volumes.

Table 5

Signal Warrant Results Summary

Study Number	Intersection Name	Existing Conditions AM	Existing Conditions PM
Existing Unsignalized Intersections			
1	Moranda Road & US 101 NB Ramps	No	No
2	Moranda Road & Front Street	No	**Yes**
3	San Vicente Road & Front Street	**Yes**	**Yes**
4	West Street & Front Street	No	No
5	Main Street & Front Street	No	No
6	East Street & Front Street	No	**Yes**
7	Front Street & Nestles Road	No	No
8	Front Street & US 101 NB Ramps	No	No
9	Front Street & US 101 SB Ramps	No	No
10	Front Street & Morisoli Road	No	No
11	San Vicente Road & Market Street	No	No
12	West Street & Market Street	No	No
13	Main Street & Market Street	No	No
14	East Street & Market Street	No	No
15	East Street & North Street/Metz Road	No	No
16	San Vicente Road & Gabilan Drive	No	No
17	West Street & Gabilan Drive	No	No
18	Main Street & Gabilan Drive	No	No
19	Andalucia Drive & Gabilan Drive	No	No
20	Orchard Street & Metz Road	No	No
21	Oak Street & Front Street	**Yes**	**Yes**

Notes:
1. Signal warrant analysis based on Caltrans Peak Hour Signal Warrant #11.

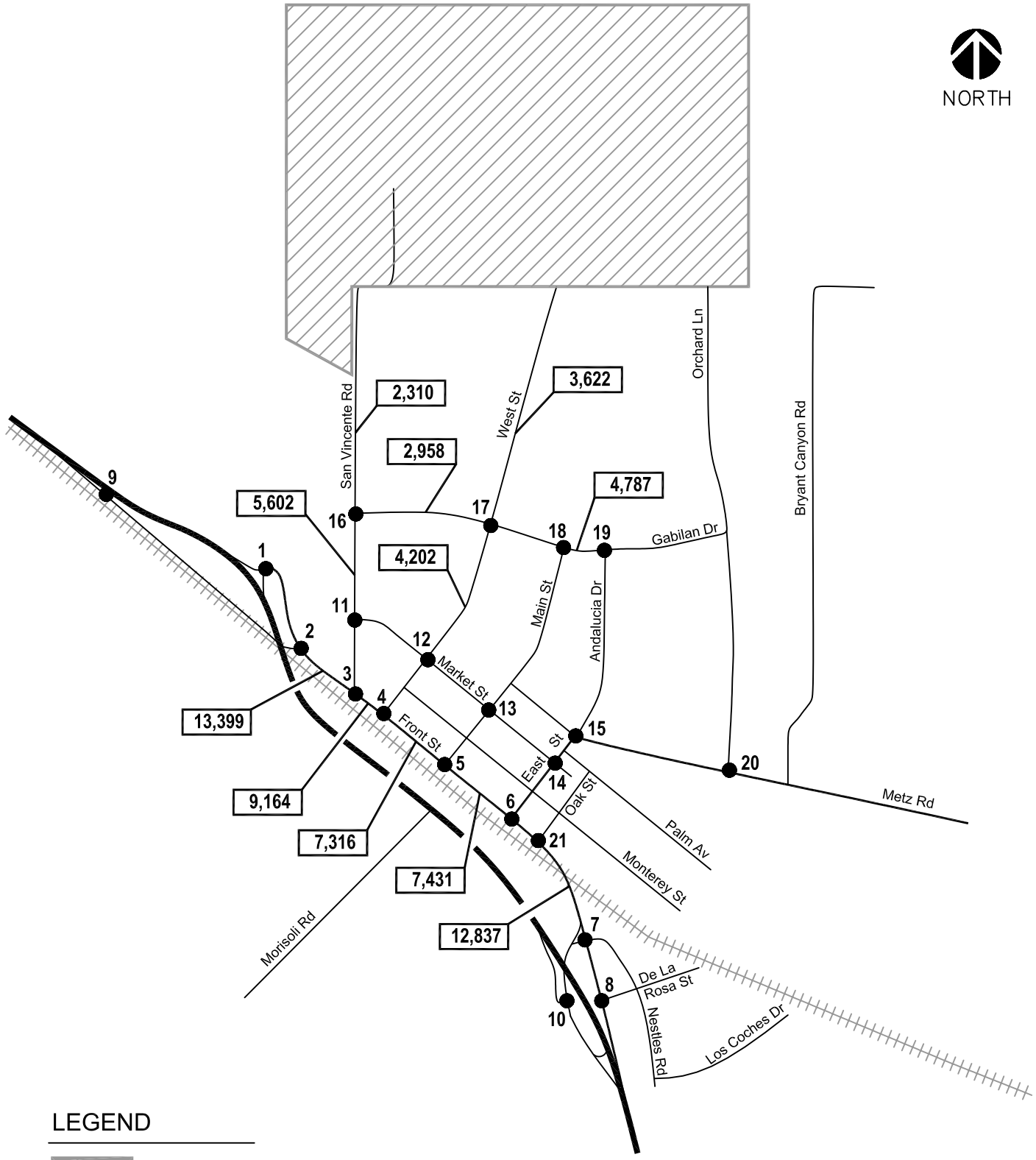


Figure 5

EXISTING DAILY ROADWAY VOLUMES

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Table 6
Existing Roadway Segment Analysis

Segment	Direction	# Of Lanes	Capacity (vph)	24-Hr Tot. Volume	AM Peak-Hr			PM Peak-Hr		
					Volume	V/C	LOS	Volume	V/C	LOS
Front St										
Moranda Rd and San Vicente Rd	EB	2	2,400	7,335	289	0.120	A	971	0.405	A
	WB	2	2,400	6,064	756	0.315	A	360	0.150	A
San Vicente Rd and West St	EB	2	2,400	4,981	211	0.088	A	635	0.265	A
	WB	2	2,400	4,183	436	0.182	A	278	0.116	A
West St and Main St	EB	1	1,200	3,888	197	0.164	A	476	0.397	A
	WB	1	1,200	3,428	195	0.163	A	283	0.236	A
Main St and East St	EB	1	1,200	3,767	237	0.198	A	408	0.340	A
	WB	1	1,200	3,664	260	0.217	A	352	0.293	A
East St and Nestles Rd	EB	1	1,200	6,686	470	0.392	A	495	0.413	A
	WB	1	1,200	6,151	393	0.328	A	568	0.473	A
Gabilan Dr										
San Vicente Rd and West St	EB	2	2,400	1,339	79	0.033	A	146	0.061	A
	WB	2	2,400	1,619	201	0.084	A	93	0.039	A
West St and Andalucia Dr	EB	2	2,400	2,308	146	0.061	A	231	0.096	A
	WB	2	2,400	2,479	261	0.109	A	196	0.082	A
San Vicente Rd										
Market St and Gabilan Dr	NB	1	1,200	2,698	109	0.091	A	341	0.284	A
	SB	1	1,200	2,904	355	0.296	A	165	0.138	A
North of Gabilan Dr	NB	1	1,200	1,189	61	0.051	A	134	0.112	A
	SB	1	1,200	1,121	127	0.106	A	77	0.064	A
West St										
Market St and Gabilan Dr	NB	2	2,400	2,168	101	0.042	A	253	0.105	A
	SB	2	2,400	2,034	215	0.090	A	125	0.052	A
North of Gabilan Dr	NB	2	2,400	1,834	151	0.063	A	200	0.083	A
	SB	2	2,400	1,788	205	0.085	A	134	0.056	A

Notes:
1. Capacity of roadways based on assumed capacity of 1,200 vphpl and existing lanes on roadways.
2. Volumes based on 24 hour tube counts collected in July 2006

Table 7
Existing Freeway Segment Analysis

Segment	Direction	# Of Lanes	Capacity (vph) /a/	24-Hr Tot. Volume /b/	AM Peak-Hr Volume /b/	AM Peak-Hr V/C	AM Peak-Hr LOS	PM Peak-Hr Volume /b/	PM Peak-Hr V/C	PM Peak-Hr LOS
US 101										
North Gonzales and Gonzales-5th Street	Both	4	9,600	40,500	4,400	0.458	B	4,400	0.458	B
	NB	2	4,800	20,250	2,640	0.550	C	1,760	0.367	B
	SB	2	4,800	20,250	1,760	0.367	B	2,640	0.550	C
Gonzales-5th Street and Gloria Road	Both	4	9,600	38,000	4,250	0.443	B	4,250	0.443	B
	NB	2	4,800	19,000	2,550	0.531	B	1,700	0.354	A
	SB	2	4,800	19,000	1,700	0.354	A	2,550	0.531	B
Gloria Road and Soledad Prison	Both	4	9,600	40,500	3,350	0.349	A	3,350	0.349	A
	NB	2	4,800	20,250	2,010	0.419	B	1,340	0.279	A
	SB	2	4,800	20,250	1,340	0.279	A	2,010	0.419	B
Soledad Prison and Camphora	Both	4	9,600	38,000	3,150	0.328	A	3,150	0.328	A
	NB	2	4,800	19,000	1,890	0.394	B	1,260	0.263	A
	SB	2	4,800	19,000	1,260	0.263	A	1,890	0.394	B
Camphora and North Soledad	Both	4	9,600	39,000	4,300	0.448	B	4,300	0.448	B
	NB	2	4,800	19,500	2,580	0.538	B	1,720	0.358	A
	SB	2	4,800	19,500	1,720	0.358	A	2,580	0.538	B
North Soledad and South Soledad	Both	4	9,600	34,000	3,800	0.396	B	3,800	0.396	B
	NB	2	4800	17,000	2,280	0.475	B	1,520	0.317	A
	SB	2	4,800	17,000	1,520	0.317	A	2,280	0.475	B
South Soledad and Arroyo Seco Road	Both	4	9,600	34,000	3,700	0.385	B	3,700	0.385	B
	NB	2	4,800	17,000	2,035	0.424	B	1,665	0.347	A
	SB	2	4,800	17,000	1,665	0.347	A	2,035	0.424	B
Arroyo Seco Road and North Greenfield	Both	4	9,600	33,000	3,550	0.370	B	3,550	0.370	B
	NB	2	4,800	16,500	1,953	0.407	B	1,598	0.333	A
	SB	2	4,800	16,500	1,598	0.333	A	1,953	0.407	B
North Greenfield and Walnut Avenue	Both	4	9,600	30,000	3,050	0.318	A	3,050	0.318	A
	NB	2	4,800	15,000	1,678	0.349	A	1,373	0.286	A
	SB	2	4,800	15,000	1,373	0.286	A	1,678	0.349	A
Walnut Avenue and Oak Avenue	Both	4	9,600	28,000	2,850	0.297	A	2,850	0.297	A
	NB	2	4,800	14,000	1,568	0.327	A	1,283	0.267	A
	SB	2	4,800	14,000	1,283	0.267	A	1,568	0.327	A
South Greenfield and Oak Avenue	Both	4	9,600	23,500	2,350	0.245	A	2,350	0.245	A
	NB	2	4,800	11,750	1,293	0.269	A	1,058	0.220	A
	SB	2	4,800	11,750	1,058	0.220	A	1,293	0.269	A

Notes:
/a/ Capacity of freeway lanes based on assumed capacity of 2,400 vphpl, as prescribed by the Highway Capacity Manual
/b/ Data provided by Caltrans Data System Unit 2005, Route 101 District 5.

Table 8
Existing Freeway Ramp Analysis

Interchange	Direction	# Of Lanes	Type	Capacity (vph)	Existing					
					AM Peak-Hour			PM Peak-Hour		
					Volume	V/C	LOS	Volume	V/C	LOS
US 101										
Camphora Road	SB to Camphora Road	1	Diagonal	1,500	24	0.016	A	30	0.020	A
	NB from Camphora Road	1	Diagonal	1,500	40	0.027	A	32	0.021	A
	SB from Camphora Road	1	Diagonal	1,500	76	0.051	A	95	0.063	A
	NB to Camphora Road	1	Diagonal	1,500	80	0.053	A	64	0.043	A
Moranda Road	SB to Moranda Road	1	Diagonal	1,500	224	0.149	A	824	0.549	B
	NB from Moranda Road	1	Loop	1,500	657	0.438	B	242	0.161	A
	SB from Moranda Road	1	Loop	1,500	52	0.035	A	42	0.028	A
	NB to Moranda Road	1	Loop	1,500	37	0.025	A	86	0.057	A
Front Street	SB to Front Street	1	Loop	1,500	107	0.071	A	170	0.113	A
	NB from Front Street	1	Loop	1,500	223	0.149	A	135	0.090	A
	SB from Front Street	1	Diagonal	1,500	189	0.126	A	283	0.189	A
	NB to Front Street	1	Diagonal	1,500	248	0.165	A	393	0.262	A
Arroyo Seco Road	SB to Arroyo Seco Road	1	Diagonal	1,500	70	0.047	A	88	0.059	A
	NB from Arroyo Seco Road	1	Diagonal	1,500	88	0.059	A	70	0.047	A

Notes:
1. Capacity for all ramps based on assumed capacity of 1,500 vphpl, as prescribed by the Highway Capacity Manual

3.
Background Conditions

This chapter describes background traffic conditions. Background conditions are defined as conditions just prior to completion of the proposed development. Traffic volumes for background conditions comprise volumes from existing traffic counts plus traffic generated by other approved developments in the vicinity of the site. This chapter describes the procedure used to determine background traffic volumes and the resulting traffic conditions.

Background Transportation Network

It is assumed in this analysis that the transportation network under background conditions would be the same as the existing transportation network.

Background Traffic Volumes

Background peak-hour traffic volumes were estimated by adding to existing volumes the estimated traffic from approved, but not yet constructed, developments. City staff provided a list of five approved developments within the City of Soledad.

- *Miravale II* – 453 single-family homes and 323 Townhomes/Apartments, the site will be bound by Bryant Canyon Road , Orchard Lane, Santa Clara Street and Metz Road.

- *Gabilan Square* – 9,960 s.f. of commercial space and 183 Townhomes/Apartments, located south of Gabilan Drive at Orchard Lane.

- *Orchard Villas* – 172 single-family homes, located along the west side of Orchard Lane north of Metz Road.

- *Monterey Street Public Housing Facility* – 52 multi-family units, located along the north side of Monterey Street between First and Second Streets.

- *Benito Street Public Housing* – 143 units, located between West and Benito Streets, and Gabilan and North Street.

The added traffic associated with the approved projects was developed based on trip generation estimates and assignments produced by Hexagon. The magnitude of traffic added to the roadway system by each of the approved developments is estimated by multiplying the applicable trip generation rates to the size of the development. The trip generation rates published in the Institute of Transportation Engineers (ITE) manual entitled *Trip Generation*, seventh edition, 2003, were used for this analysis. On the basis of these rates, it is estimated that the approved projects would generate a combined total of 10,774 daily trips, with 810 trips occurring during the AM peak hour and 1,051 occurring during the PM peak hour. The type of land use, size, and trip estimates of each approved development is presented in Table 9. Background traffic volumes are shown on Figure 6.

Background Intersection Levels of Service

The results of the intersection level of service analysis under background conditions are summarized in Table 10. The results show that, measured against the City of Soledad level of service standards, five of the study intersections are projected to operate at an unacceptable LOS E or worse during at least one peak hour under background conditions.

2 Moranda Road and Front Street
3 San Vicente Road and Front Street
6 East Street and Front Street
7 Front Street and Nestles Road
21 Oak Street and Front Street

The level of service calculation sheets are included in Appendix C.

Background Intersection Signal Warrant Analysis

Peak-hour signal warrant checks were completed for all study intersections to determine whether signalization would be justified on the basis of background peak-hour volumes. A summary of the signal warrant checks is shown in Table 11. The analysis showed that the Caltrans peak-hour volume warrant is projected to be met during at least one peak hour at the following seven intersections under background conditions:

2 Moranda Road and Front Street
3 San Vicente Road and Front Street
6 East Street and Front Street
7 Front Street and Nestles Road
8 Front Street and US 101 NB Ramps
15 East Street and North Street/Metz Road
21 Oak Street and Front Street

The signal warrant analysis sheets are included in Appendix D.

Table 9

Approved Project Trip Generation Estimates

		Daily		AM Peak Hour				PM Peak Hour			
Land Use	Size	Rate /a/	Trips	Rate /a/	In	Out	Total	Rate /a/	In	Out	Total
Miravale II											
Residential - Homes /b/	453 sfdu's	9.57	4,335	0.75	207	133	340	1.01	220	238	458
Residential - Townhomes /c/	323 units	5.86	1,893	0.44	24	118	142	0.52	113	55	168
Totals			6,228		231	250	482		332	293	625
Gabilan											
Gabilan Square Commercial /d/	9,960 s.f.	44.32	441	1.35	6	7	13	2.71	12	15	27
Gabilan Square Town Homes /c/	15 units	5.86	88	0.44	1	5	7	0.52	5	3	8
Gabilan Apartments /e/	88 units	6.72	591	0.51	8	37	45	0.62	37	18	55
Gabilan Townhomes /c/	80 units	5.86	469	0.44	6	29	35	0.52	28	14	42
Totals			1,589		21	79	100		82	49	131
Orchard Villas											
Residential /b/	172 sfdu's	9.57	1,646	0.75	79	50	129	1.01	83	90	174
Monterey Street Public Housing Facility											
Residential /e/	143 units	6.72	961	0.51	12	61	73	0.62	59	29	89
Residential /e/	52 units	6.72	349	0.51	5	22	27	0.62	22	11	32
Totals			1,310		17	83	99		81	40	121
Total All Approved Projects			**10,774**		**348**	**462**	**810**		**578**	**473**	**1,051**

Notes:

/a/ Rates expressed in trips per dwelling units.

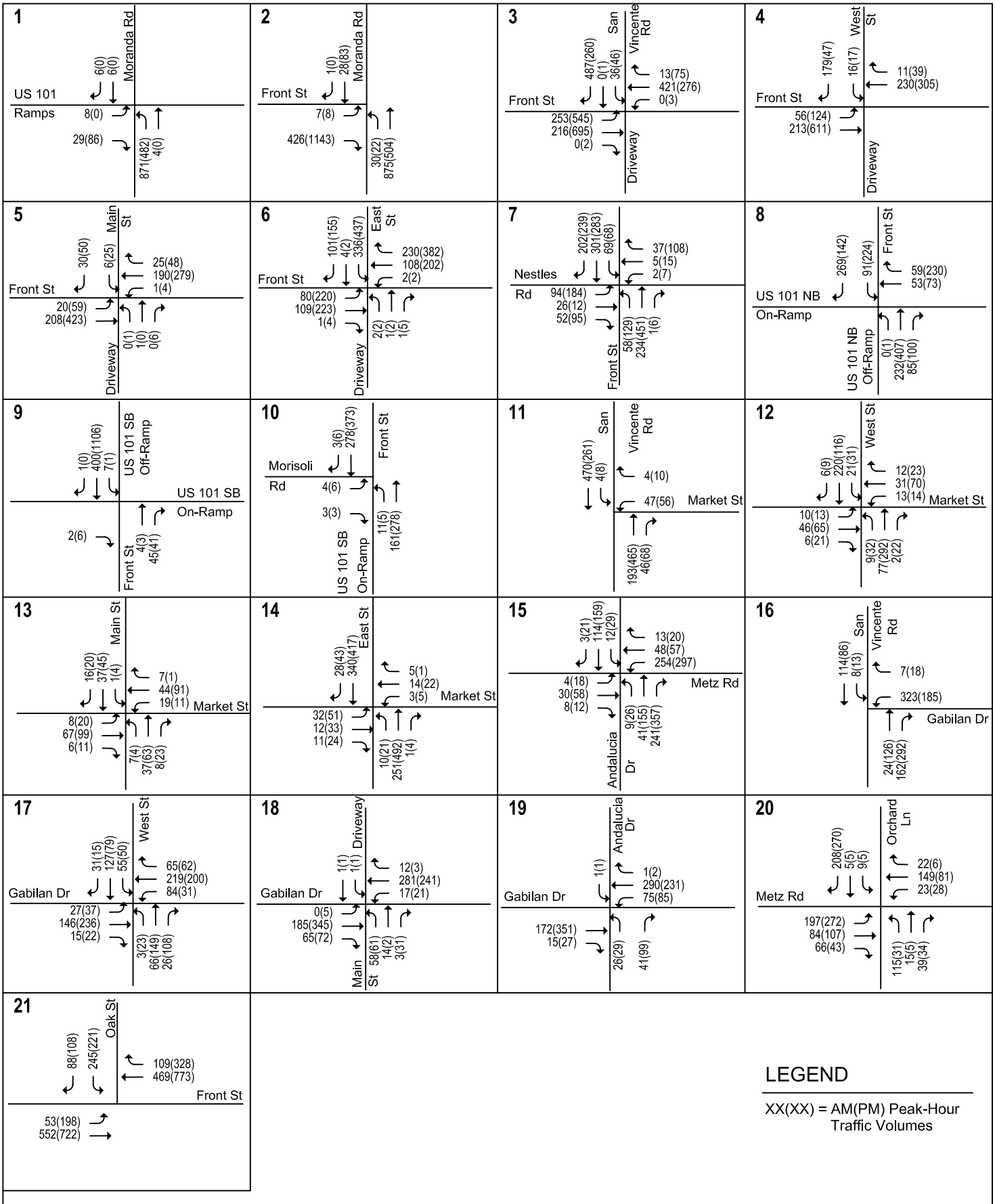
/b/ Trip Generation rates for single-family detached housing (ITE Land Use #210) used for this project.

/c/ Trip Generation rates for residential condominium/townhouse (ITE Land Use #230) used for this project.

/d/ Trip Generation rates for specialty retail center (ITE Land Use #814) used for this project.

/e/ Trip Generation rates for apartment (ITE Land Use #220) used for this project.

Source for rates: *ITE Trip Generation, Seventh Edition.*



LEGEND

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Figure 6

BACKGROUND TRAFFIC VOLUMES

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Table 10

Background Intersection Levels of Service

	Intersection	Intersection Control	Peak Hour	Count Date	Existing Conditions Ave. Delay	Existing Conditions LOS	Background Conditions Ave. Delay	Background Conditions LOS
1	Moranda Road and US 101 NB Ramps	TWSC	AM	07/26/06	16	C	33	D
			PM	07/26/06	11	B	14	B
2	Moranda Road and Front Street	TWSC	AM	07/26/06	10	A	***11***	***B***
			PM	07/26/06	28	D	**102**	**F**
3	San Vicente Road and Front Street	AWSC	AM	07/26/06	12	B	***22***	***C***
			PM	07/26/06	14	B	**40**	**E**
4	West Street and Front Street	AWSC	AM	07/26/06	9	A	10	A
			PM	07/26/06	11	B	13	B
5	Main Street and Front Street	AWSC	AM	07/27/06	8	A	9	A
			PM	07/27/06	10	B	12	B
6	East Street and Front Street	AWSC	AM	07/27/06	9	A	***14***	***B***
			PM	07/27/06	14	B	***73***	***F***
7	Front Street and Nestles Road	TWSC	AM	07/26/06	14	B	23	C
			PM	07/26/06	23	C	***300***	***F***
8	Front Street and US 101 NB Ramps	AWSC	AM	07/26/06	9	A	9	A
			PM	07/26/06	12	B	***14***	***B***
9	Front Street and US 101 SB Ramps	TWSC	AM	07/26/06	9	A	11	B
			PM	07/26/06	15	B	19	C
10	Front Street and Morisoli Road	TWSC	AM	07/27/06	10	A	11	B
			PM	07/27/06	11	B	13	B
11	San Vicente Road and Market Street	TWSC	AM	07/26/06	11	B	15	B
			PM	07/26/06	11	B	16	C
12	West Street and Market Street	AWSC	AM	07/27/06	8	A	8	A
			PM	07/27/06	9	A	9	A
13	Main Street and Market Street	AWSC	AM	07/25/06	7	A	8	A
			PM	07/26/06	8	A	8	A
14	East Street and Market Street	AWSC	AM	07/27/06	8	A	10	B
			PM	07/27/06	9	A	16	C
15	East Street and North Street/Metz Road	AWSC	AM	07/27/06	8	A	11	B
			PM	07/27/06	9	A	***21***	***C***
16	San Vicente Road and Gabilan Drive	TWSC	AM	07/26/06	11	B	13	B
			PM	07/26/06	10	B	13	B
17	West Street and Gabilan Drive	AWSC	AM	07/27/06	9	A	10	B
			PM	07/27/06	9	A	11	B
18	Main Street and Gabilan Drive	AWSC	AM	07/27/06	8	A	9	A
			PM	07/27/06	8	A	9	A
19	Andalucia Drive and Gabilan Drive	TWSC	AM	07/27/06	10	A	14	B
			PM	07/27/06	10	B	16	C
20	Orchard Lane and Metz Road	TWSC	AM	N/A	6	B	15	C
			PM	N/A	4	A	9	B
21	Front Street and Oak Street	TWSC	AM	N/A	***33***	***D***	***134***	***F***
			PM	N/A	***473***	***F***	***1247***	***F***

Notes:

1. Intersection control based on existing conditions
   -TWSC = Two-way stop-controlled intersection
   -AWSC = Four-way stop-controlled intersection
2. Significant impacts are shown in **BOLD** and boxed.
3. *Italics* and **BOLD** indicates signal warrant met.

Table 11

Background Intersection Signal Warrant Analysis

Study Number	Intersection Name	Existing Conditions AM	Existing Conditions PM	Background Conditions AM	Background Conditions PM
Existing Unsignalized Intersections					
1	Moranda Road & US 101 NB Ramps	No	No	No	No
2	Moranda Road & Front Street	No	**Yes**	**Yes**	**Yes**
3	San Vicente Road & Front Street	**Yes**	**Yes**	**Yes**	**Yes**
4	West Street & Front Street	No	No	No	No
5	Main Street & Front Street	No	No	No	No
6	East Street & Front Street	No	**Yes**	**Yes**	**Yes**
7	Front Street & Nestles Road	No	No	No	**Yes**
8	Front Street & US 101 NB Ramps	No	No	No	**Yes**
9	Front Street & US 101 SB Ramps	No	No	No	No
10	Front Street & Morisoli Road	No	No	No	No
11	San Vicente Road & Market Street	No	No	No	No
12	West Street & Market Street	No	No	No	No
13	Main Street & Market Street	No	No	No	No
14	East Street & Market Street	No	No	No	No
15	East Street & North Street/Metz Road	No	No	No	**Yes**
16	San Vicente Road & Gabilan Drive	No	No	No	No
17	West Street & Gabilan Drive	No	No	No	No
18	Main Street & Gabilan Drive	No	No	No	No
19	Andalucia Drive & Gabilan Drive	No	No	No	No
20	Orchard Street & Metz Road	No	No	No	No
21	Oak Street & Front Street	**Yes**	**Yes**	**Yes**	**Yes**

Notes:

1. Signal warrant analysis based on Caltrans Peak Hour Signal Warrant #11.

Background Conditions Necessary Improvements

Based on the results of the background conditions level of service analysis and signal warrant checks, necessary improvements to support approved project traffic volumes were determined for the study intersections projected to operate at LOS D or worse and/or meet signal warrants. The resulting background with improvement conditions will serve as a basis from which to determine impacts attributable to the Miravale Phase III development. Without the improvements in place, level of service conditions with the Miravale Phase III development will not accurately reflect impacts due to project traffic, but rather show problem areas under background conditions compounded by the Miravale Phase III project. Described below and presented in Figure 7 are the necessary improvements to improve background conditions levels of service to acceptable levels.

(2) Moranda Road and Front Street

Necessary Improvements: The intersection is projected to operate at LOS F during the PM peak hour and meet signal warrants under background conditions. The necessary improvements consist of the signalization of the intersection with protected left-turn phasing on Front Street and the addition of a second eastbound right-turn lane. Intersection operation levels would improve to LOS C with implementation of these improvements.

(3) San Vicente Road and Front Street

Necessary Improvements: The intersection is projected to operate at LOS E during the PM peak hour and meet signal warrants under background conditions. The necessary improvements consist of the signalization of the intersection with protected left-turn phasing on Front Street. Intersection operation levels would improve to LOS B with implementation of these improvements.

(6) East Street and Front Street

Necessary Improvements: The intersection is projected to operate at LOS F during the PM peak hour and meet signal warrants under background conditions. The necessary improvements consist of the signalization of the intersection with protected left-turn phasing on Front Street and the addition of a second southbound left-turn lane and exclusive westbound right-turn lane. Intersection operation levels would improve to LOS C with implementation of these improvements.

(7) Front Street and Nestles Road

Necessary Improvements: The intersection is projected to operate at LOS F during the PM peak hour and meet signal warrants under background conditions. The necessary improvements consist of the signalization of the intersection. Intersection operation levels would improve to LOS B with the installation of a signal.

(8) Front Street and US 101 NB Ramps

Necessary Improvements: The intersection is projected to meet signal warrants under background conditions. The necessary improvements consist of the signalization of the intersection.

(15) East Street and North Street/Metz Road

Necessary Improvements: The intersection is projected to meet signal warrants under background conditions. The necessary improvements consist of the signalization of the intersection with

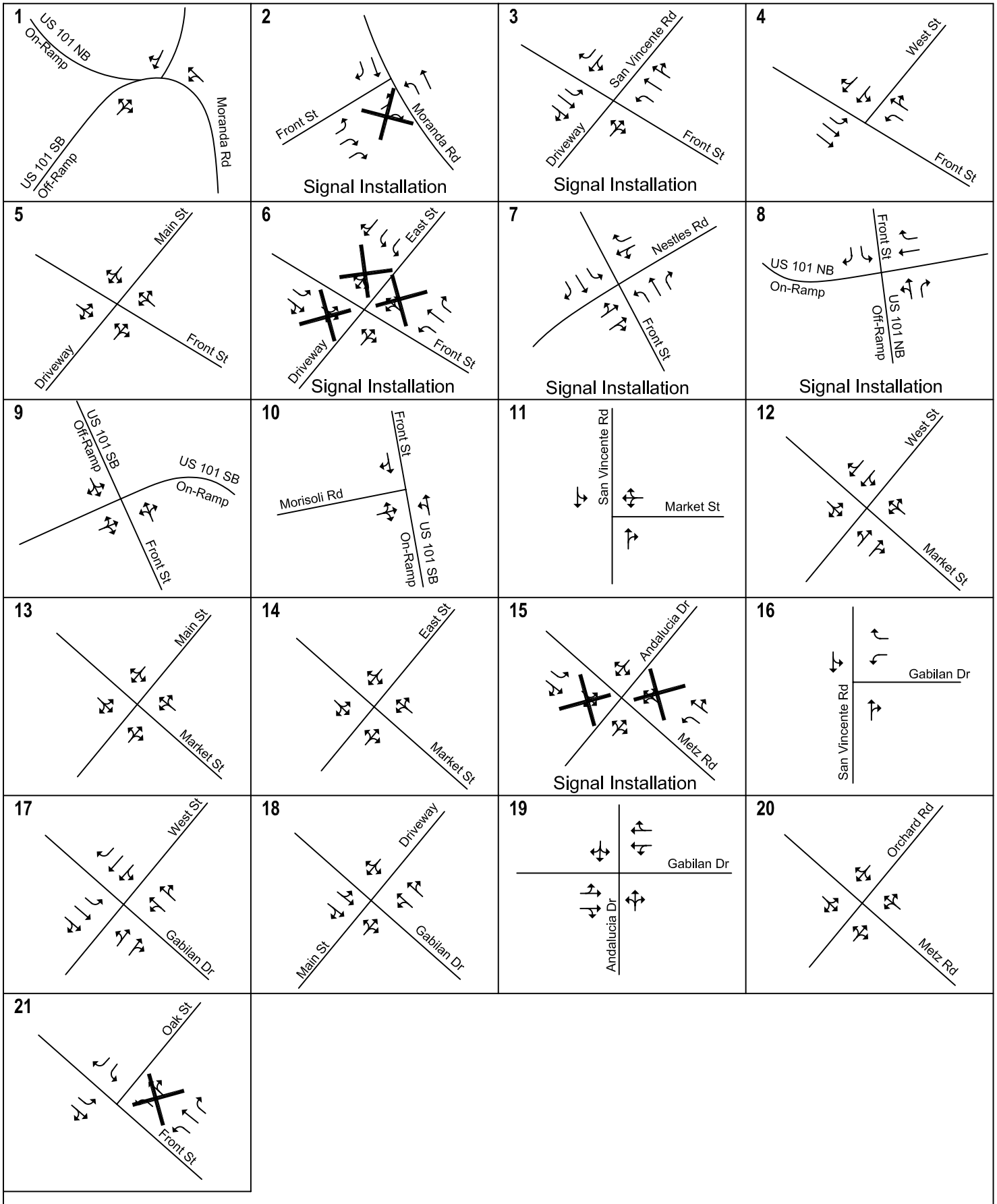


Figure 7

BACKGROUND CONDITIONS NECESSARY IMPROVEMENTS

Soledad Miravale

Hexagon Transportation Consultants, Inc.

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protected left-turn phasing on Metz Road and separate right-turn lanes on East Street.

(21) Oak Street and Front Street

Necessary Improvements: The intersection is projected to operate at LOS F during the both peak hours and meet signal warrants under background conditions. The necessary improvements consist of the signalization of the intersection and the addition of a separate westbound right-turn lane. Intersection operation levels would improve to LOS B during both peak hours with implementation of these improvements.

Background Roadway Segment Analysis

Traffic volumes for background conditions on each of the studied roadway segments were developed by adding to existing volumes the trips associated with each of the approved developments. The approved project trips were assigned to the roadway system in the same manner as with intersections. The roadway segment analysis indicates that all studied roadway segments are projected to operate at LOS B or better during both peak hours under background conditions. Table 12 presents the roadway segment analysis.

Background Freeway Segment Analysis

Traffic volumes for background conditions on each of the studied freeway segments were developed by adding to existing volumes the trips associated with each of the approved developments. The approved project trips were assigned to the freeway system in the same manner as with intersections. The freeway segment analysis indicates that all freeway segments analyzed are projected to operate at LOS C or better under background conditions. Freeway segment analysis is presented in Table 13.

Background Freeway Ramp Analysis

Traffic volumes for background conditions on each of the studied freeway ramps were developed by adding to existing volumes the trips associated with each of the approved developments. The approved project trips were assigned to the freeway ramps in the same manner as with intersections. The freeway ramp analysis indicates that all freeway ramps analyzed are projected to operate at LOS C or better under background conditions. Freeway ramp analysis is presented in Table 14.

As stated under existing conditions, the existing ramp configurations are inadequate to serve existing traffic volumes. The ramps at both the Moranda Road and Front Street interchanges with US 101 were constructed years ago and not designed to accommodate existing traffic volumes. The existing ramp alignments are inadequate to feed the large ramp volumes onto the mainline that also has seen increased volumes. The traffic associated with the approved projects will worsen conditions on each of the ramps.

Table 12

Background Roadway Segment Analysis

				Existing Conditions						Approved Project Trips				Background Conditions					
		# Of	Capacity	AM Peak-Hr			PM Peak-Hr			AM Peak-Hr		PM Peak-Hr		AM Peak-Hr			PM Peak-Hr		
Segment	Direction	Lanes	(vph)	Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
Front St																			
Moranda Rd and San Vicente Rd	EB	2	2,400	289	0.120	A	971	0.405	A	185	64.01%	283	29.15%	474	0.198	A	1,254	0.523	A
	WB	2	2,400	756	0.315	A	360	0.150	A	220	29.10%	240	66.67%	976	0.407	A	600	0.250	A
San Vicente Rd and West St	EB	2	2,400	211	0.088	A	635	0.265	A	56	26.54%	95	14.96%	267	0.111	A	730	0.304	A
	WB	2	2,400	436	0.182	A	278	0.116	A	77	17.66%	75	26.98%	513	0.214	A	353	0.147	A
West St and Main St	EB	1	1,200	197	0.164	A	476	0.397	A	56	28.43%	95	19.96%	253	0.211	A	571	0.476	A
	WB	1	1,200	195	0.163	A	283	0.236	A	77	39.49%	75	26.50%	272	0.227	A	358	0.298	A
Main St and East St	EB	1	1,200	237	0.198	A	408	0.340	A	56	23.63%	95	23.28%	293	0.244	A	503	0.419	A
	WB	1	1,200	260	0.217	A	352	0.293	A	77	29.62%	75	21.31%	337	0.281	A	427	0.356	A
East St and Nestles Rd	EB	1	1,200	470	0.392	A	495	0.413	A	213	45.32%	197	39.80%	683	0.569	A	692	0.577	A
	WB	1	1,200	393	0.328	A	568	0.473	A	141	35.88%	257	45.25%	534	0.445	A	825	0.688	B
Gabilan Dr																			
San Vicente Rd and West St	EB	2	2,400	79	0.033	A	146	0.061	A	103	130.38%	163	111.64%	182	0.076	A	309	0.129	A
	WB	2	2,400	201	0.084	A	93	0.039	A	128	63.68%	138	148.39%	329	0.137	A	231	0.096	A
West St and Andalucia Dr	EB	2	2,400	146	0.061	A	231	0.096	A	110	75.34%	174	75.32%	256	0.107	A	405	0.169	A
	WB	2	2,400	261	0.109	A	196	0.082	A	135	51.72%	148	75.51%	396	0.165	A	344	0.143	A
San Vicente Rd																			
Market St and Gabilan Dr	NB	1	1,200	109	0.091	A	341	0.284	A	101	92.66%	159	46.63%	210	0.175	A	500	0.417	A
	SB	1	1,200	355	0.296	A	165	0.138	A	125	35.21%	133	80.61%	480	0.400	A	298	0.248	A
North of Gabilan Dr	NB	1	1,200	61	0.051	A	134	0.112	A	2	3.28%	5	3.73%	63	0.053	A	139	0.116	A
	SB	1	1,200	127	0.106	A	77	0.064	A	2	1.57%	4	5.19%	129	0.108	A	81	0.068	A
West St																			
Market St and Gabilan Dr	NB	2	2,400	101	0.042	A	253	0.105	A	6	5.94%	8	3.16%	107	0.045	A	261	0.109	A
	SB	2	2,400	215	0.090	A	125	0.052	A	6	2.79%	7	5.60%	221	0.092	A	132	0.055	A
North of Gabilan Dr	NB	2	2,400	151	0.063	A	200	0.083	A	0	0.00%	1	0.50%	151	0.063	A	201	0.084	A
	SB	2	2,400	205	0.085	A	134	0.056	A	0	0.00%	1	0.75%	205	0.085	A	135	0.056	A

Notes:

1. Capacity of roadways based on assumed capacity of 1,200 vphpl and existing lanes on roadways.

Table 13

Background Freeway Segment Analysis

				Existing Conditions						Approved Project Trips				Background Conditions					
		# Of	Capacity	AM Peak-Hour			PM Peak-Hour			AM Peak-Hour		PM Peak-Hour		AM Peak-Hour			PM Peak-Hour		
Segment	Direction	Lanes	(vph) /a/	Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
US 101				/b/			/b/												
North Gonzales and Gonzales-5th Street	Both	4	9,600	4,400	0.458	B	4,400	0.458	B	391	8.89%	503	11.42%	4,791	0.499	B	4,903	0.511	B
	NB	2	4,800	2,640	0.550	C	1,760	0.367	B	223	8.46%	225	12.77%	2,863	0.597	C	1,985	0.413	B
	SB	2	4,800	1,760	0.367	B	2,640	0.550	C	168	9.55%	278	10.53%	1,928	0.402	B	2,918	0.608	C
Gonzales-5th Street and Gloria Road	Both	4	9,600	4,250	0.443	B	4,250	0.443	B	447	10.52%	574	13.52%	4,697	0.489	B	4,824	0.503	B
	NB	2	4,800	2,550	0.531	B	1,700	0.354	A	255	10.01%	257	15.11%	2,805	0.584	C	1,957	0.408	B
	SB	2	4,800	1,700	0.354	A	2,550	0.531	B	192	11.29%	318	12.45%	1,892	0.394	B	2,868	0.597	C
Gloria Road and Soledad Prison	Both	4	9,600	3,350	0.349	A	3,350	0.349	A	503	15.02%	646	19.29%	3,853	0.401	B	3,996	0.416	B
	NB	2	4,800	2,010	0.419	B	1,340	0.279	A	287	14.28%	289	21.56%	2,297	0.479	B	1,629	0.339	A
	SB	2	4,800	1,340	0.279	A	2,010	0.419	B	216	16.12%	357	17.78%	1,556	0.324	A	2,367	0.493	B
Soledad Prison and Camphora	Both	4	9,600	3,150	0.328	A	3,150	0.328	A	531	16.86%	682	21.65%	3,681	0.383	B	3,832	0.399	B
	NB	2	4,800	1,890	0.394	B	1,260	0.263	A	303	16.03%	305	24.20%	2,193	0.457	B	1,565	0.326	A
	SB	2	4,800	1,260	0.263	A	1,890	0.394	B	228	18.10%	377	19.96%	1,488	0.310	A	2,267	0.472	B
Camphora and North Soledad	Both	4	9,600	4,300	0.448	B	4,300	0.448	B	559	13.00%	718	16.70%	4,859	0.506	B	5,018	0.523	B
	NB	2	4,800	2,580	0.538	B	1,720	0.358	A	319	12.36%	321	18.66%	2,899	0.604	C	2,041	0.425	B
	SB	2	4,800	1,720	0.358	A	2,580	0.538	B	240	13.95%	397	15.39%	1,960	0.408	B	2,977	0.620	C
North Soledad and South Soledad	Both	4	9,600	3,800	0.396	B	3,800	0.396	B	154	4.05%	194	5.11%	3,954	0.412	B	3,994	0.416	B
	NB	2	4,800	2,280	0.475	B	1,520	0.317	A	99	4.34%	81	5.33%	2,379	0.496	B	1,601	0.334	A
	SB	2	4,800	1,520	0.317	A	2,280	0.475	B	55	3.62%	113	4.96%	1,575	0.328	A	2,393	0.499	B
South Soledad and Arroyo Seco Road	Both	4	9,600	3,700	0.385	B	3,700	0.385	B	161	4.35%	209	5.65%	3,861	0.402	B	3,909	0.407	B
	NB	2	4,800	2,035	0.424	B	1,665	0.347	A	69	3.39%	115	6.91%	2,104	0.438	B	1,780	0.371	B
	SB	2	4,800	1,665	0.347	A	2,035	0.424	B	92	5.53%	94	4.62%	1,757	0.366	B	2,129	0.444	B
Arroyo Seco Road and North Greenfield	Both	4	9,600	3,550	0.370	B	3,550	0.370	B	153	4.31%	199	5.59%	3,703	0.386	B	3,749	0.390	B
	NB	2	4,800	1,953	0.407	B	1,598	0.333	A	66	3.36%	109	6.84%	2,018	0.420	B	1,707	0.356	A
	SB	2	4,800	1,598	0.333	A	1,953	0.407	B	87	5.47%	89	4.57%	1,685	0.351	A	2,042	0.425	B
North Greenfield and Walnut Avenue	Both	4	9,600	3,050	0.318	A	3,050	0.318	A	137	4.49%	178	5.82%	3,187	0.332	A	3,228	0.336	A
	NB	2	4,800	1,678	0.349	A	1,373	0.286	A	59	3.50%	98	7.12%	1,736	0.362	B	1,470	0.306	A
	SB	2	4,800	1,373	0.286	A	1,678	0.349	A	78	5.70%	80	4.76%	1,451	0.302	A	1,757	0.366	B
Walnut Avenue and Oak Avenue	Both	4	9,600	2,850	0.297	A	2,850	0.297	A	121	4.24%	157	5.50%	2,971	0.309	A	3,007	0.313	A
	NB	2	4,800	1,568	0.327	A	1,283	0.267	A	52	3.30%	86	6.73%	1,619	0.337	A	1,369	0.285	A
	SB	2	4,800	1,283	0.267	A	1,568	0.327	A	69	5.38%	71	4.50%	1,352	0.282	A	1,638	0.341	A
South Greenfield and Oak Avenue	Both	4	9,600	2,350	0.245	A	2,350	0.245	A	105	4.45%	136	5.78%	2,455	0.256	A	2,486	0.259	A
	NB	2	4,800	1,293	0.269	A	1,058	0.220	A	45	3.47%	75	7.07%	1,337	0.279	A	1,132	0.236	A
	SB	2	4,800	1,058	0.220	A	1,293	0.269	A	60	5.65%	61	4.73%	1,117	0.233	A	1,354	0.282	A

Notes:
/a/ Capacity of freeway lanes based on assumed capacity of 2,400 vphpl, as prescribed by the Highway Capacity Manual
/b/ Data provided by Caltrans Data System Unit 2005, Route 101 District 5

Table 14

Background Freeway Ramp Analysis

					Existing						Approved Trips				Background Conditions					
					AM Peak-Hour			PM Peak-Hour			AM Peak-Hour		PM Peak-Hour		AM Peak-Hour			PM Peak-Hour		
Interchange	Direction	# Of Lanes	Type	Capacity (vph)	Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
US 101																				
Camphora Road	SB to Camphora Road	1	Diagonal	1,500	24	0.016	A	30	0.020	A	0	0.00%	0	0.00%	24	0.016	A	30	0.020	A
	NB from Camphora Road	1	Diagonal	1,500	40	0.027	A	32	0.021	A	0	0.00%	0	0.00%	40	0.027	A	32	0.021	A
	SB from Camphora Road	1	Diagonal	1,500	76	0.051	A	95	0.063	A	12	15.79%	20	21.05%	88	0.059	A	115	0.077	A
	NB to Camphora Road	1	Diagonal	1,500	80	0.053	A	64	0.043	A	16	20.00%	16	25.00%	96	0.064	A	80	0.053	A
Moranda Road	SB to Moranda Road	1	Diagonal	1,500	224	0.149	A	824	0.549	B	184	82.14%	283	34.34%	408	0.272	A	1107	0.738	C
	NB from Moranda Road	1	Loop	1,500	657	0.438	B	242	0.161	A	220	33.49%	240	99.17%	877	0.585	C	482	0.321	A
	SB from Moranda Road	1	Loop	1,500	52	0.035	A	42	0.028	A	0	0.00%	0	0.00%	52	0.035	A	42	0.028	A
	NB to Moranda Road	1	Loop	1,500	37	0.025	A	86	0.057	A	0	0.00%	0	0.00%	37	0.025	A	86	0.057	A
Front Street	SB to Front Street	1	Loop	1,500	107	0.071	A	170	0.113	A	55	51.40%	113	66.47%	162	0.108	A	283	0.189	A
	NB from Front Street	1	Loop	1,500	223	0.149	A	135	0.090	A	99	44.39%	81	60.00%	322	0.215	A	216	0.144	A
	SB from Front Street	1	Diagonal	1,500	189	0.126	A	283	0.189	A	92	48.68%	93	32.86%	281	0.187	A	376	0.251	A
	NB to Front Street	1	Diagonal	1,500	248	0.165	A	393	0.262	A	69	27.82%	115	29.26%	317	0.211	A	508	0.339	A
Arroyo Seco Road	SB to Arroyo Seco Road	1	Diagonal	1,500	70	0.047	A	88	0.059	A	5	7.14%	5	5.68%	75	0.050	A	93	0.062	A
	NB from Arroyo Seco Road	1	Diagonal	1,500	88	0.059	A	70	0.047	A	3	3.41%	6	8.57%	91	0.061	A	76	0.051	A

Notes:
1. Capacity for all ramps based on assumed capacity of 1,500 vphpl, as prescribed by the Highway Capacity Manual

4.
Project Impacts and Mitigation Measures

This chapter describes project traffic conditions, significant project impacts, and measures that are recommended to mitigate project impacts. Included are descriptions of the significance criteria that define an impact, estimates of project-generated traffic, identification of the impacts, and descriptions of the mitigation measures. Project conditions are represented by background traffic conditions with the addition of traffic generated by the project.

Significant Impact Criteria

Significance criteria are used to establish what constitutes an impact. The impact criteria are based on the City of Soledad level of service standards. The project is said to create a significant adverse impact on traffic conditions at an intersection if for either peak hour:

- The level of service at the intersection degrades from an acceptable LOS D or better under background conditions to an unacceptable LOS E or worse under project conditions.

A significant intersection impact is said to be satisfactorily mitigated when measures are implemented that would restore intersection level of service to LOS D conditions or better.

Future Roadway Network Under Project Conditions

It is assumed in this analysis that the roadway network and intersection configurations under project conditions would be the same as described under background with improvements conditions.

Project Trip Estimates

The magnitude of traffic produced by a new development and the locations where that traffic would appear are estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In determining project trip generation, the magnitude of traffic entering and exiting the site is estimated for the AM and PM peak hours. As part of the project trip distribution, an estimate is made of the directions to and from which the project trips would travel. In the project trip assignment, the project trips are assigned to specific streets and intersections. These procedures are described further in the following sections.

Trip Generation

Through empirical research, data have been collected that correlate to common land uses their propensity for producing traffic. Thus, for the most common land uses there are standard trip generation rates that can be applied to help predict the future traffic increases that would result from a new development.

The magnitude of traffic added to the roadway system by a particular development is estimated by multiplying the applicable trip generation rates to the size of the development. The trip generation rates published in the Institute of Transportation Engineers (ITE) manual entitled *Trip Generation*, seventh edition, 2003, were used for this analysis. On the basis of these rates, it is estimated that the project would generate 34,856 daily trips, with 2,451 trips occurring during the AM peak hour and 3,143 occurring during the PM peak hour. Using the specified inbound/outbound splits, the project would produce 619 inbound trips and 1,833 outbound trips during the AM peak hour and 1,969 inbound and 1,174 outbound trips during the PM peak hour.

The trip generation estimates do not include estimates for the proposed schools, parks, and golf course. Trip estimates for the proposed residential uses of the project account for trips made to schools and other types of complimentary land uses. Therefore, it is assumed that trips to the schools, parks, and golf course would originate from within the project area and the proposed residential units.

Similarly, the trip estimates for residential land uses of the project were reduced to account for internalization, or interaction, between the retail and residential land uses. The project is proposing up to o275,000 s.f. of retail space. A portion of the retail space will be located centrally within the project area and proposed residential units. The remaining retail space will be located in the southeastern portion of the project site. The retail land uses are intended to be neighborhood serving retail, not major retail establishments. As such, it is assumed that the majority of trips generated by the retail space will originate from within the project area. The residential uses of the project were reduced by a magnitude equal to 90% of the estimated trips for the centrally located retail space and 50% of the retail space located in the southeastern portion of the site. The difference in reduction percentages for the retail is due to the expectation that the southeastern retail space will attract some trips from outside the project area since it is located near existing neighborhoods and other land uses. While nearly all trips to the centrally located retail would originate from surrounding neighborhoods within the project area. The project trip generation estimates are presented in Table 15.

Trip Distribution

The trip distribution pattern for the proposed project was estimated based on existing travel patterns in the area and the locations of complementary land uses. Two separate trip distributions were used for the residential and non-residential land uses of the site. Generally, the non-residential trip distribution contains trips produced by the project within city limits. On the other hand, it is expected that the majority of residential trips will leave city limits for employment zones north and south of Soledad. The trip

Table 15
Trip Generation Estimates

				AM Peak Hour						PM Peak Hour						
		Daily	Daily	Pk-Hr	Splits		Trips			Pk-Hr	Splits		Pass-By			
Land Use	Size	Trip Rates	Trips	Rate	In	Out	In	Out	Total	Rate	In	Out	Red. /e/	In	Out	Total
Proposed Uses																
Single-Family Homes/a/	1,470 Units	9.57	14,068	0.75	25%	75%	276	827	1,103	1.01	63%	37%		935	549	1,485
Multi-Family/b/	2,230 Units	6.72	14,986	0.51	20%	80%	227	910	1,137	0.62	65%	35%		899	484	1,383
Senior Housing/c/	500 Units	3.48	1,740	0.08	45%	55%	18	22	40	0.11	61%	39%		34	21	55
Hotel/d/	120 Units	8.92	1,070	0.67	58%	42%	47	34	80	0.70	49%	51%		41	43	84
			31,864				568	1,792	2,360					1,909	1,098	3,006
			-9,196				-157	-123	-280					-186	-236	-422
			22,668				411	1,669	2,080					1,723	861	2,585
Retail "A"/e/	175,000 s.f.	44.3	7,756	1.35	56%	44%	132	104	236	2.71	44%	56%	25%	157	199	356
Retail "B"/e/	100,000 s.f.	44.3	4,432	1.35	56%	44%	76	59	135	2.71	44%	56%	25%	89	114	203
			12,188				208	163	371					246	313	559
			34,856				**619**	**1,833**	**2,451**					**1,969**	**1,174**	**3,143**

Source:
ITE Trip Generation, 7th Edition

Notes:
/a/ Single-Family Detached Housing (210) average rates used for proposed single-family units
/b/ Apartment (220) average rates used for proposed multi-family units
/c/ Senior Adult Housing-Attached (252) average rates used for proposed senior housing units
/d/ Hotel (310) average rates used for proposed hotel units
/e/ Specialty Retail Center (814) average rates used for proposed retail space. No AM peak hour rates are available for Specialty Retail, therefore half of the PM peak hour rates were assumed for the AM peak hour.
/f/ A reduction of of residential trips equal to 90% of Retail "A" and 50% of Retail "B" was applied for internalization of retail/residential uses.
/e/ A reduction of 25% to account for pass-by trips was applied to retail use during the PM peak hour

distribution patterns for each land use type are shown graphically on Figure 8.

Trip Assignment

The peak-hour trips generated by the proposed development were assigned to the roadway system in accordance with the trip distribution pattern discussed above. Figure 9 shows the project trip assignment.

Project Traffic Volumes

Project trips, as represented in the above project trip assignment, were added to background traffic volumes to obtain background plus project traffic volumes. Background traffic volumes plus project trips are typically referred to simply as *project traffic volumes*; this is contrasted with the term *project trips,* which is used to signify the traffic that is produced specifically by the project. The project traffic volumes are shown graphically on Figure 10. Traffic volumes for all components of traffic are tabulated in Appendix B.

Project Intersection Level of Service Analysis

The results of the intersection level of service analysis under project conditions are summarized in Table 16. The results show that 11 of the study intersections would operate at an unacceptable LOS E or worse during at least one of the peak hours analyzed under project conditions:

1 Moranda Road and US 101 Northbound Ramps
2 Moranda Road and Front Street
3 San Vicente Road and Front Street
4 West Street and Front Street
9 Front Street and US 101 Southbound Ramps
11 San Vicente Road and Market Street
14 East Street and Market Street
16 San Vicente Road and Gabilan Drive
17 West Street and Gabilan Drive
20 Orchard Lane and Metz Road
21 Oak Street and Front Street

Each of these intersections would be impacted by the project, according to City of Soledad standards. The remaining 10 intersections would continue to operate at acceptable levels of service. The level of service calculation sheets are included in Appendix C.

Project Intersection Signal Warrant Analysis

The peak-hour signal warrant were checked for the existing unsignalized intersections to determine whether signalization would be justified on the basis peak-hour volumes. A summary of the signal warrant checks is shown in Table 17. The analysis showed that the Caltrans peak-hour volume warrant would be satisfied at nine intersections under project conditions. The signal warrant analysis sheets are included in Appendix D.

4 West Street and Front Street

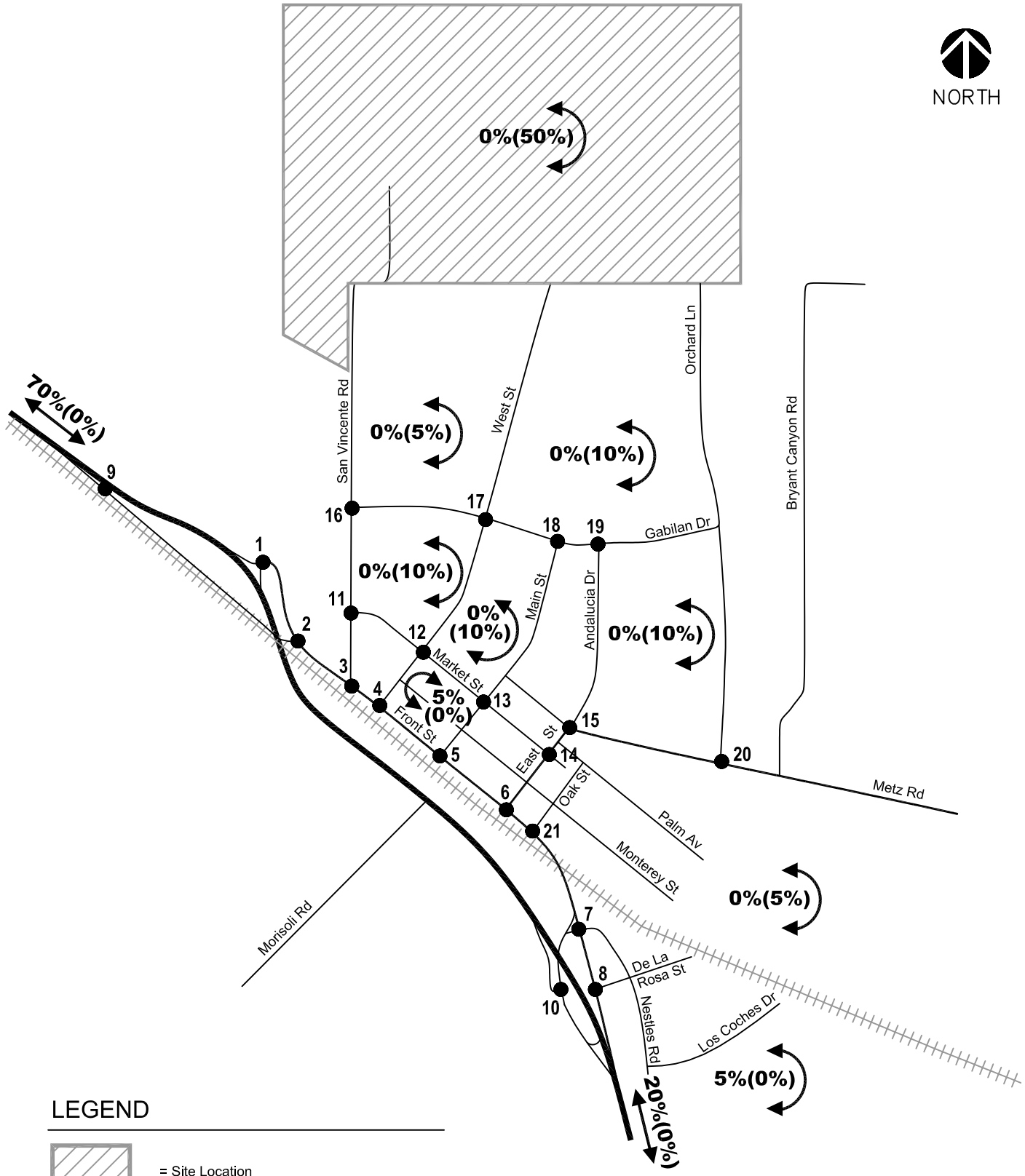


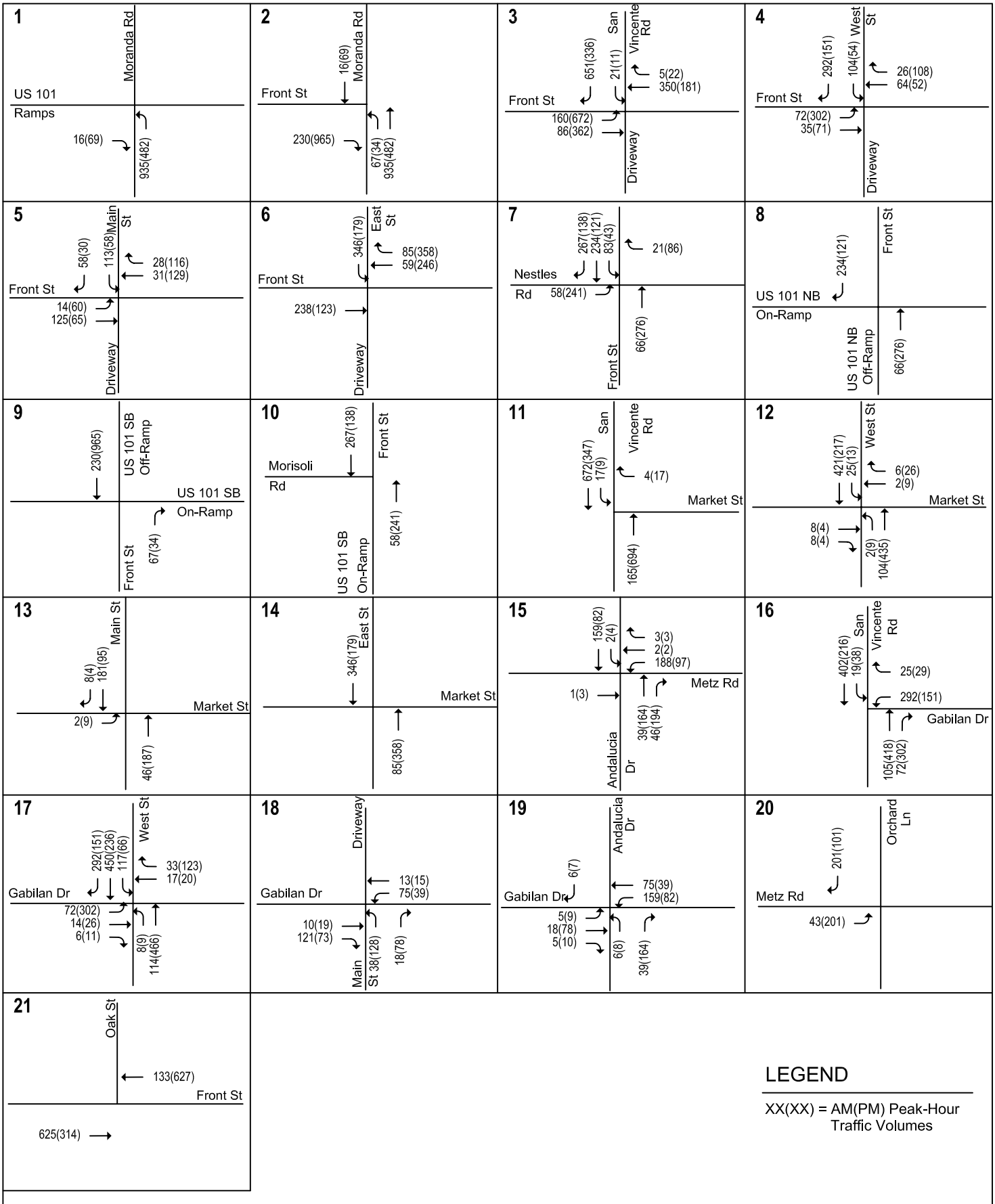
Figure 8

PROJECT TRIP DISTRIBUTION

Soledad Mirevale

Hexagon
Transportation Consultants, Inc.

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LEGEND

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Figure 9

PROJECT TRIP ASSIGNMENT

Soledad Miravale

Hexagon Transportation Consultants, Inc.

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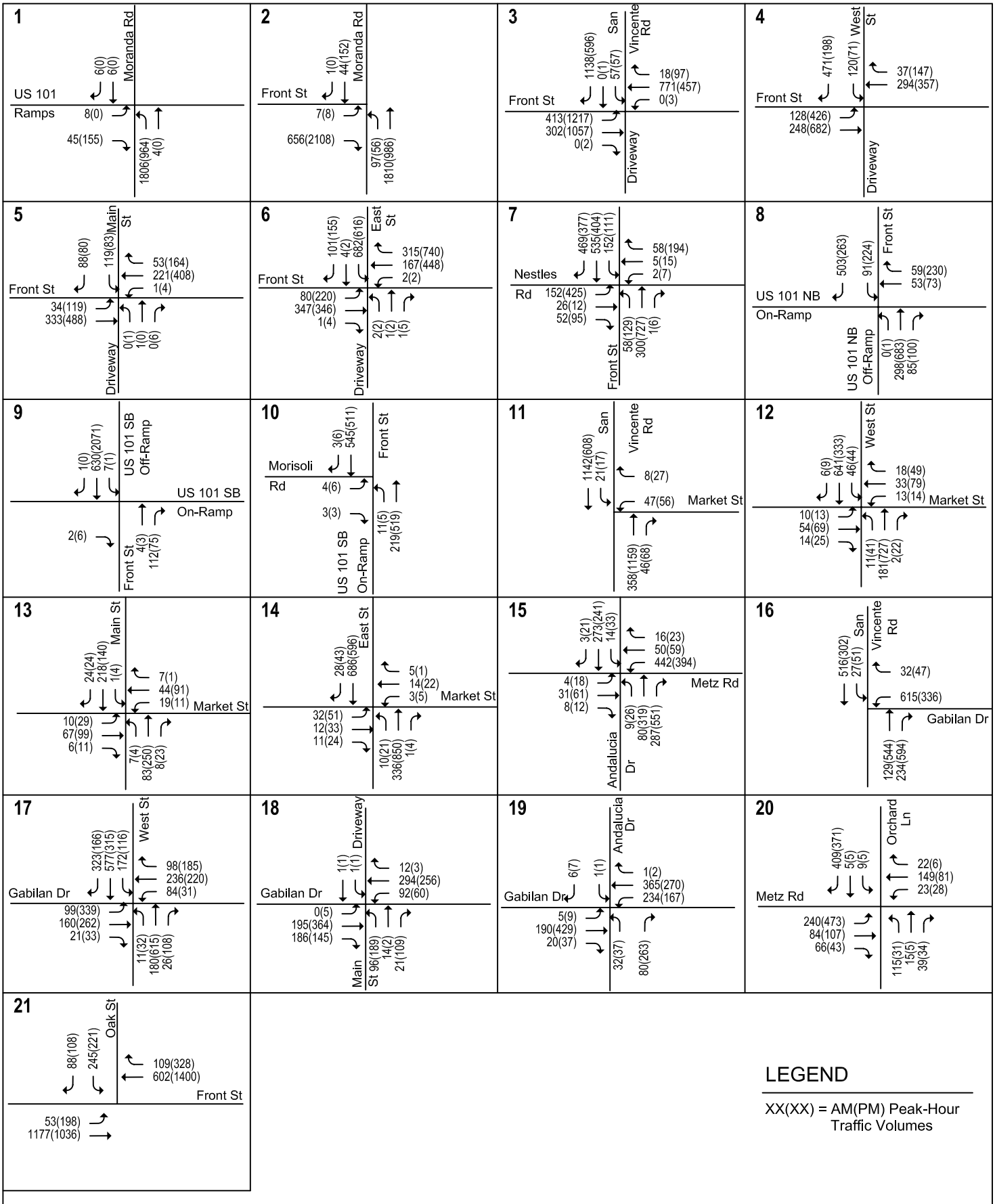


Figure 10

PROJECT PLUS BACKGROUND TRAFFIC VOLUMES

Hexagon Transportation Consultants, Inc.

Soledad Miravale

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Table 16

Project Intersection Levels of Service

	Intersection	Intersection Control	Peak Hour	Background Conditions Ave. Delay	Background Conditions LOS	Project Conditions Ave. Delay	Project Conditions LOS
1	Moranda Road and US 101 NB Ramps	TWSC	AM	33	D	**425**	**F**
			PM	14	B	**72**	**F**
2	Moranda Road and Front Street	Signal	AM	14	B	**172**	**F**
			PM	21	C	**189**	**F**
3	San Vicente Road and Front Street	Signal	AM	19	B	**143**	**F**
			PM	18	B	**146**	**F**
4	West Street and Front Street	AWSC	AM	10	A	***18***	***C***
			PM	13	B	***34***	***D***
5	Main Street and Front Street	AWSC	AM	9	A	11	B
			PM	12	B	***28***	***D***
6	East Street and Front Street	Signal	AM	19	B	22	C
			PM	23	C	27	C
7	Front Street and Nestles Road	Signal	AM	14	B	14	B
			PM	16	B	26	C
8	Front Street and US 101 NB Ramps	Signal	AM	20	C	10	B
			PM	20	B	25	C
9	Front Street and US 101 SB Ramps	TWSC	AM	11	B	13	B
			PM	19	C	**62**	**F**
10	Front Street and Morisoli Road	TWSC	AM	11	B	14	B
			PM	13	B	17	C
11	San Vicente Road and Market Street	TWSC	AM	15	B	***47***	***E***
			PM	16	C	**114**	**F**
12	West Street and Market Street	AWSC	AM	8	A	12	B
			PM	9	A	***15***	***C***
13	Main Street and Market Street	AWSC	AM	8	A	9	A
			PM	8	A	10	A
14	East Street and Market Street	AWSC	AM	10	B	25	C
			PM	16	C	***95***	***F***
15	East Street and North Street/Metz Road	Signal	AM	13	B	16	B
			PM	15	B	15	B
16	San Vicente Road and Gabilan Drive	TWSC	AM	13	B	***375***	***F***
			PM	13	B	***395***	***F***
17	West Street and Gabilan Drive	AWSC	AM	10	B	26	D
			PM	11	B	***58***	***F***
18	Main Street and Gabilan Drive	AWSC	AM	9	A	10	A
			PM	9	A	***12***	***B***
19	Andalucia Drive and Gabilan Drive	TWSC	AM	14	B	15	B
			PM	16	C	***18***	***C***
20	Orchard Lane and Metz Road	TWSC	AM	15	C	***37***	***E***
			PM	9	B	***17***	***C***
21	Front Street and Oak Street	TWSC	AM	12	B	20	B
			PM	14	B	***74***	***E***

Notes:

1. Intersection control based on background wth improvements conditions
   -TWSC = Two-way stop-controlled intersection
   -AWSC = Four-way stop-controlled intersection
2. Significant impacts are shown in **BOLD** and boxed.
3. *Italics* and **BOLD** indicates signal warrant met.

Table 17

Project Intersection Signal Warrant Analysis

Study Number	Intersection Name	Existing Conditions AM	Existing Conditions PM	Background Conditions AM	Background Conditions PM	Project Conditions AM	Project Conditions PM
Existing Unsignalized Intersections							
1	Moranda Road & US 101 NB Ramps	No	No	No	No	No	No
2	Moranda Road & Front Street	No	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
3	San Vicente Road & Front Street	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
4	West Street & Front Street	No	No	No	No	**Yes**	**Yes**
5	Main Street & Front Street	No	No	No	No	No	**Yes**
6	East Street & Front Street	No	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
7	Front Street & Nestles Road	No	No	No	**Yes**	**Yes**	**Yes**
8	Front Street & US 101 NB Ramps	No	No	No	**Yes**	No	**Yes**
9	Front Street & US 101 SB Ramps	No	No	No	No	No	No
10	Front Street & Morisoli Road	No	No	No	No	No	No
11	San Vicente Road & Market Street	No	No	No	No	No	No
12	West Street & Market Street	No	No	No	No	No	**Yes**
13	Main Street & Market Street	No	No	No	No	No	No
14	East Street & Market Street	No	No	No	No	No	**Yes**
15	East Street & North Street/Metz Road	No	No	No	**Yes**	**Yes**	**Yes**
16	San Vicente Road & Gabilan Drive	No	No	No	No	**Yes**	**Yes**
17	West Street & Gabilan Drive	No	No	No	No	**Yes**	**Yes**
18	Main Street & Gabilan Drive	No	No	No	No	No	**Yes**
19	Andalucia Drive & Gabilan Drive	No	No	No	No	No	**Yes**
20	Orchard Street & Metz Road	No	No	No	No	**Yes**	**Yes**
21	Oak Street & Front Street	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**

Notes:
1. Signal warrant analysis based on Caltrans Peak Hour Signal Warrant #11.

5 Main Street and Front Street
12 West Street and Market Street
14 East Street and Market Street
16 San Vicente Road and Gabilan Drive
17 West Street and Gabilan Drive
18 Main Street and Gabilan Drive
19 Andalucia Drive and Gabilan Drive
20 Orchard Lane and Metz Road

Project Roadway Segment Analysis

Traffic volumes for project conditions on each of the studied roadway segments were developed by adding to background condition volumes the project trips. The project trips were assigned to the roadway system in the same manner as with intersections. The roadway segment analysis indicates that the addition of project traffic will cause five studied roadway segments to operate at LOS E or worse during at least one peak hour under project conditions.

Front Street, between Moranda Road and San Vicente Road (Eastbound PM)
Front Street, between East Street and Nestles Road (Eastbound AM/Westbound PM)
San Vicente Road, between Market Street and Gabilan Drive (Southbound AM/Northbound PM)

Table 18 presents the roadway segment analysis. The degradation of roadway segment levels of service indicate the need for roadway widening. Since there is no evaluation criteria for roadway segments, the roadway segment analysis is presented for informative purposes only. All other studied roadway segments will operate at LOS C or better conditions.

Project Freeway Segment Analysis

The results of the freeway segment analysis showed that four freeway segments are projected to operate at LOS D under project conditions.

US 101 – Northbound North of Gonzales-5th Street (AM Peak Hour)
US 101 – Northbound between Gonzales-5th Street to Gloria Road (AM Peak Hour)
US 101 – Northbound between Camphora Road and North Soledad (AM Peak Hour)
US 101 – Southbound between North Soledad and Camphora Road (PM Peak Hour)

The remaining segments are projected to operate at LOS C or better. The addition of project traffic will worsen conditions on each of the segments projected to operate at LOS D. Freeway segment analysis is presented in Table 19.

Project Freeway Ramp Analysis

Traffic volumes for project conditions on each of the studied freeway ramps were developed by adding to background condition volumes the project trips. The project trips were assigned to the freeway ramps in the same manner as with intersections. Freeway ramp analysis is presented in Table 20. The freeway ramp analysis indicates that two of the studied freeway ramps are projected to operate at LOS F under project conditions.

Table 18
Project Roadway Segment Analysis

				Background Conditions						Project Trips				Project Conditions					
		# Of	Capacity	AM Peak-Hr			PM Peak-Hr			AM Peak-Hr		PM Peak-Hr		AM Peak-Hr			PM Peak-Hr		
Segment	Direction	Lanes	(vph)	Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
Front St																			
Moranda Rd and San Vicente Rd	EB	2	2,400	474	0.198	A	1,254	0.523	A	247	52.11%	**1,034**	**82.46%**	721	0.300	A	**2,288**	**0.953**	**E**
	WB	2	2,400	976	0.407	A	600	0.250	A	1,001	102.56%	517	86.17%	1,977	0.824	D	1,117	0.465	A
San Vicente Rd and West St	EB	2	2,400	267	0.111	A	730	0.304	A	107	40.07%	373	51.10%	374	0.156	A	1,103	0.460	A
	WB	2	2,400	513	0.214	A	353	0.147	A	356	69.40%	202	57.22%	869	0.362	A	555	0.231	A
West St and Main St	EB	1	1,200	253	0.211	A	571	0.476	A	140	55.34%	125	21.89%	393	0.328	A	696	0.580	A
	WB	1	1,200	272	0.227	A	358	0.298	A	89	32.72%	159	44.41%	361	0.301	A	517	0.431	A
Main St and East St	EB	1	1,200	293	0.244	A	503	0.419	A	238	81.23%	123	24.45%	531	0.443	A	626	0.522	A
	WB	1	1,200	337	0.281	A	427	0.356	A	59	17.51%	246	57.61%	396	0.330	A	673	0.561	A
East St and Nestles Rd	EB	1	1,200	683	0.569	A	692	0.577	A	**584**	**85.51%**	301	43.50%	**1,267**	**1.056**	**F**	993	0.828	D
	WB	1	1,200	534	0.445	A	825	0.688	B	144	26.97%	**603**	**73.09%**	678	0.565	A	**1,428**	**1.190**	**F**
Gabilan Dr																			
San Vicente Rd and West St	EB	2	2,400	182	0.076	A	309	0.129	A	91	50.00%	339	109.71%	273	0.114	A	648	0.270	A
	WB	2	2,400	329	0.137	A	231	0.096	A	317	96.35%	180	77.92%	646	0.269	A	411	0.171	A
West St and Andalucia Dr	EB	2	2,400	256	0.107	A	405	0.169	A	130	50.78%	92	22.72%	386	0.161	A	497	0.207	A
	WB	2	2,400	396	0.165	A	344	0.143	A	51	12.88%	143	41.57%	447	0.186	A	487	0.203	A
San Vicente Rd																			
Market St and Gabilan Dr	NB	1	1,200	210	0.175	A	500	0.417	A	170	80.95%	**711**	**142.20%**	380	0.317	A	**1,211**	**1.009**	**F**
	SB	1	1,200	480	0.400	A	298	0.248	A	**688**	**143.33%**	355	119.13%	**1,168**	**0.973**	**E**	653	0.544	A
North of Gabilan Dr	NB	1	1,200	63	0.053	A	139	0.116	A	130	206.35%	447	321.58%	193	0.161	A	586	0.488	A
	SB	1	1,200	129	0.108	A	81	0.068	A	422	327.13%	254	313.58%	551	0.459	A	335	0.279	A
West St																			
Market St and Gabilan Dr	NB	2	2,400	107	0.045	A	261	0.109	A	110	102.80%	461	176.63%	217	0.090	A	722	0.301	A
	SB	2	2,400	221	0.092	A	132	0.055	A	446	201.81%	230	174.24%	667	0.278	A	362	0.151	A
North of Gabilan Dr	NB	2	2,400	151	0.063	A	201	0.084	A	219	145.03%	890	442.79%	370	0.154	A	1,091	0.455	A
	SB	2	2,400	205	0.085	A	135	0.056	A	858	418.54%	453	335.56%	1,063	0.443	A	588	0.245	A

Notes:
1. Capacity of roadways based on assumed capacity of 1,200 vphpl and existing lanes on roadways.
2. **BOLD** indictaes significant increase in roadway segment volume and LOS.

Table 19

Project Freeway Segment Analysis

Segment	Direction	# Of Lanes	Capacity (vph) /a/	Background Conditions						Project Trips				Project Conditions					
				AM Peak-Hour			PM Peak-Hour			AM Peak-Hour		PM Peak-Hour		AM Peak-Hour			PM Peak-Hour		
				Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
US 101																			
North Gonzales and Gonzales-5th Street	Both	4	9,600	4,791	0.499	B	4,903	0.511	B	1,837	38.34%	1,688	34.44%	6,628	0.690	C	6,591	0.687	C
	NB	2	4,800	2,863	0.597	C	1,985	0.413	B	**1,019**	**35.60%**	1,266	63.80%	**3,883**	**0.809**	**D**	3,251	0.677	C
	SB	2	4,800	1,928	0.402	B	2,918	0.608	C	818	42.41%	422	14.47%	2,746	0.572	C	3,340	0.696	C
Gonzales-5th Street and Gloria Road	Both	4	9,600	4,697	0.489	B	4,824	0.503	B	2,099	44.69%	1,930	40.00%	6,796	0.708	C	6,754	0.704	C
	NB	2	4,800	2,805	0.584	C	1,957	0.408	B	**1,165**	**41.52%**	1,447	73.96%	**3,970**	**0.827**	**D**	3,404	0.709	C
	SB	2	4,800	1,892	0.394	B	2,868	0.597	C	934	49.39%	482	16.82%	2,826	0.589	C	3,350	0.698	C
Gloria Road and Soledad Prison	Both	4	9,600	3,853	0.401	B	3,996	0.416	B	2,362	61.29%	2,171	54.32%	6,215	0.647	C	6,167	0.642	C
	NB	2	4,800	2,297	0.479	B	1,629	0.339	A	1,310	57.05%	1,628	99.95%	3,608	0.752	C	3,257	0.679	C
	SB	2	4,800	1,556	0.324	A	2,367	0.493	B	1,051	67.56%	543	22.92%	2,607	0.543	B	2,910	0.606	C
Soledad Prison and Camphora	Both	4	9,600	3,681	0.383	B	3,832	0.399	B	2,493	67.72%	2,291	59.79%	6,174	0.643	C	6,124	0.638	C
	NB	2	4,800	2,193	0.457	B	1,565	0.326	A	1,383	63.07%	1,719	109.82%	3,576	0.745	C	3,284	0.684	C
	SB	2	4,800	1,488	0.310	A	2,267	0.472	B	1,110	74.57%	573	25.27%	2,598	0.541	B	2,840	0.592	C
Camphora and North Soledad	Both	4	9,600	4,859	0.506	B	5,018	0.523	B	1,456	29.97%	1,809	36.05%	6,315	0.658	C	6,827	0.711	C
	NB	2	4,800	2,899	0.604	C	2,041	0.425	B	**1,168**	**40.29%**	603	29.54%	**4,067**	**0.847**	**D**	2,644	0.551	C
	SB	2	4,800	1,960	0.408	B	2,977	0.620	C	288	14.69%	**1,206**	**40.51%**	2,248	0.468	B	**4,183**	**0.871**	**D**
North Soledad and South Soledad	Both	4	9,600	3,954	0.412	B	3,994	0.416	B	374	9.46%	465	11.64%	4,328	0.451	B	4,459	0.464	B
	NB	2	4,800	2,379	0.496	B	1,601	0.334	A	250	10.51%	189	11.81%	2,629	0.548	B	1,790	0.373	B
	SB	2	4,800	1,575	0.328	A	2,393	0.499	B	124	7.87%	276	11.53%	1,699	0.354	A	2,669	0.556	C
South Soledad and Arroyo Seco Road	Both	4	9,600	3,861	0.402	B	3,909	0.407	B	416	10.77%	517	13.23%	4,277	0.446	B	4,426	0.461	B
	NB	2	4,800	2,104	0.438	B	1,780	0.371	B	82	3.90%	345	19.38%	2,186	0.455	B	2,125	0.443	B
	SB	2	4,800	1,757	0.366	B	2,129	0.444	B	334	19.01%	172	8.08%	2,091	0.436	B	2,301	0.479	B
Arroyo Seco Road and North Greenfield	Both	4	9,600	3,703	0.386	B	3,749	0.390	B	395	10.67%	491	13.10%	4,098	0.427	B	4,240	0.442	B
	NB	2	4,800	2,018	0.420	B	1,707	0.356	A	78	3.86%	328	19.20%	2,096	0.437	B	2,035	0.424	B
	SB	2	4,800	1,685	0.351	A	2,042	0.425	B	317	18.83%	163	8.00%	2,002	0.417	B	2,205	0.459	B
North Greenfield and Walnut Avenue	Both	4	9,600	3,187	0.332	A	3,228	0.336	A	354	11.10%	439	13.62%	3,540	0.369	B	3,667	0.382	B
	NB	2	4,800	1,736	0.362	B	1,470	0.306	A	70	4.01%	293	19.95%	1,806	0.376	B	1,764	0.367	B
	SB	2	4,800	1,451	0.302	A	1,757	0.366	B	284	19.57%	146	8.32%	1,735	0.361	B	1,904	0.397	B
Walnut Avenue and Oak Avenue	Both	4	9,600	2,971	0.309	A	3,007	0.313	A	312	10.50%	388	12.90%	3,283	0.342	A	3,395	0.354	A
	NB	2	4,800	1,619	0.337	A	1,369	0.285	A	62	3.80%	259	18.90%	1,681	0.350	A	1,628	0.339	A
	SB	2	4,800	1,352	0.282	A	1,638	0.341	A	251	18.53%	129	7.88%	1,602	0.334	A	1,767	0.368	B
South Greenfield and Oak Avenue	Both	4	9,600	2,455	0.256	A	2,486	0.259	A	270	11.02%	336	13.52%	2,725	0.284	A	2,822	0.294	A
	NB	2	4,800	1,337	0.279	A	1,132	0.236	A	53	3.99%	224	19.81%	1,391	0.290	A	1,357	0.283	A
	SB	2	4,800	1,117	0.233	A	1,354	0.282	A	217	19.43%	112	8.26%	1,334	0.278	A	1,465	0.305	A

Notes:
/a/ Capacity of freeway lanes based on assumed capacity of 2,400 vphpl, as prescribed by the Highway Capacity Manual
/b/ Data provided by Caltrans Data System Unit 2005, Route 101 District 5.

Table 20
Freeway Ramp Analysis

					Background Conditions						Project Trips				Project Conditions					
					AM Peak-Hour			PM Peak-Hour			AM Peak-Hour		PM Peak-Hour		AM Peak-Hour			PM Peak-Hour		
Interchange	Direction	# Of Lanes	Type	Capacity (vph)	Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
US 101																				
Camphora Road	SB to Camphora Road	1	Diagonal	1,500	24	0.016	A	30	0.020	A	0	0.00%	0	0.00%	24	0.016	A	30	0.020	A
	NB from Camphora Road	1	Diagonal	1,500	40	0.027	A	32	0.021	A	0	0.00%	0	0.00%	40	0.027	A	32	0.021	A
	SB from Camphora Road	1	Diagonal	1,500	88	0.059	A	115	0.077	A	14	15.91%	60	52.17%	102	0.068	A	175	0.117	A
	NB to Camphora Road	1	Diagonal	1,500	96	0.064	A	80	0.053	A	58	60.42%	30	37.50%	154	0.103	A	110	0.073	A
Moranda Road	SB to Moranda Road	1	Diagonal	1,500	408	0.272	A	1107	0.738	C	230	56.37%	**965**	**87.17%**	638	0.425	B	**2072**	**1.381**	**F**
	NB from Moranda Road	1	Loop	1,500	877	0.585	C	482	0.321	A	**935**	**106.61%**	482	100.00%	**1812**	**1.208**	**F**	964	0.643	C
	SB from Moranda Road	1	Loop	1,500	52	0.035	A	42	0.028	A	67	128.85%	34	80.95%	119	0.079	A	76	0.051	A
	NB to Moranda Road	1	Loop	1,500	37	0.025	A	86	0.057	A	16	43.24%	69	80.23%	53	0.035	A	155	0.103	A
Front Street	SB to Front Street	1	Loop	1,500	162	0.108	A	283	0.189	A	58	35.80%	241	85.16%	220	0.147	A	524	0.349	A
	NB from Front Street	1	Loop	1,500	322	0.215	A	216	0.144	A	234	72.67%	121	56.02%	556	0.371	B	337	0.225	A
	SB from Front Street	1	Diagonal	1,500	281	0.187	A	376	0.251	A	267	95.02%	138	36.70%	548	0.365	B	514	0.343	A
	NB to Front Street	1	Diagonal	1,500	317	0.211	A	508	0.339	A	66	20.82%	276	54.33%	383	0.255	A	784	0.523	B
Arroyo Seco Road	SB to Arroyo Seco Road	1	Diagonal	1,500	75	0.050	A	93	0.062	A	17	22.67%	9	9.68%	92	0.061	A	102	0.068	A
	NB from Arroyo Seco Road	1	Diagonal	1,500	91	0.061	A	76	0.051	A	4	4.40%	17	22.37%	95	0.063	A	93	0.062	A

Notes:
1. Capacity for all ramps based on assumed capacity of 1,500 vphpl, as prescribed by the Highway Capacity Manual

Moranda Road Interchange – Southbound US 101 off-ramp to Moranda Road (PM Peak Hour)
Moranda Road Interchange – Northbound US 101 on-ramp from Moranda Road (AM Peak Hour)

As stated under existing conditions, the existing ramp configurations are inadequate to serve existing traffic volumes. The ramps at both the Moranda Road and Front Street interchanges with US 101 were constructed years ago and not designed to accommodate existing traffic volumes. The existing ramp alignments are inadequate to feed the large ramp volumes onto the mainline that also has seen increased volumes. The project traffic will worsen conditions on each of the ramps.

Intersection Impacts and Mitigation Measures

Described below are the intersection impacts and recommended mitigation measures. Table 21 shows the resulting levels of service for project conditions with the recommended mitigation measures. Figure 11 indicates resulting lane configurations at each of the mitigated intersections.

Several of the identified impacts involve significant physical improvements to not only intersection configurations, but also roadway widening. In some cases, the improvements identified below will be undesirable due to the need for right-of-way acquisition and/or create inconsistency with the City's General Plan. The evaluation of necessary mitigation measures revealed that several of the project impacts could be mitigated with the construction of an extension of Gabilan Drive that will provide an alternate route to US 101. The City's General Plan calls for the extension of Gabilan Drive to US 101 as a four-lane divided arterial. The Gabilan Drive extension will provide for a more direct route to the project area and alleviate identified impacts at several intersections. Figure 12 shows the change in travel patterns of the project that would result with the extension of Gabilan Drive. The figure shows that project traffic would be significantly reduced through several of the intersections identified to be impacted. Therefore, it is recommended that rather than the project implementing undesirable roadway widening, that it instead contribute its fair-share towards the construction costs of the extension of Gabilan Drive to US 101 and widening of San Vicente Road from the project south to the Gabilan Drive extension.

(1) Moranda Road and US 101 NB Ramps

Impact: The intersection level of service would be an acceptable LOS D or better during both peak hours under Background with Improvements conditions and the intersection would degrade to LOS F during both peak hours under project conditions. This constitutes a significant impact by City of Soledad standards.

Mitigation Measure. The necessary improvement to mitigate the project impact at this intersection will consist of the signalization of the intersection and the addition of a second northbound left-turn lane, Moranda Road to northbound US 101. The implementation of these improvements will require that the northbound US 101 on-ramp be widened to receive the two lanes. Intersection level of service would improve to LOS B during both peak hours with the improvements.

With the construction of the Gabilan Drive extension to US 101, the improvements described above would not be necessary. Instead, improvements associated with the Gabilan Drive extension would be made at the intersection. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101. The volume of vehicles bound for northbound US 101 indicate the need for the reconfiguration/reconstruction of the US 101 interchange at Moranda Road/Front Street to provide more efficient access to the project site and north Soledad in general.

Table 21

Project Intersection Levels of Service with Mitigation

	Intersection	Peak Hour	Background Conditions Ave. Delay	Background Conditions LOS	Project Conditions Ave. Delay	Project Conditions LOS	Project Mitigated Ave. Delay	Project Mitigated LOS	Project With Gabilan Ext. Ave. Delay	Project With Gabilan Ext. LOS
1	Moranda Road and US 101 NB Ramps	AM	33	D	**425**	**F**	13	B	18	B
		PM	14	B	**72**	**F**	12	B	10	B
2	Moranda Road and Front Street	AM	14	B	**172**	**F**	7	A	14	B
		PM	21	C	**189**	**F**	6	A	13	B
3	San Vicente Road and Front Street	AM	19	B	**143**	**F**	12	B	16	B
		PM	18	B	**146**	**F**	15	B	16	B
4	West Street and Front Street	AM	10	A	***18***	***C***	18	B	15	B
		PM	13	B	***34***	***D***	20	B	12	B
5	Main Street and Front Street	AM	9	A	11	B	19	B	10	B
		PM	12	B	***28***	***D***	23	C	17	C
6	East Street and Front Street	AM	19	B	22	C			22	C
		PM	23	C	27	C			24	C
7	Front Street and Nestles Road	AM	14	B	14	B			19	B
		PM	16	B	26	C			22	C
8	Front Street and US 101 NB Ramps	AM	20	C	10	B			11	B
		PM	20	B	25	C			23	C
9	Front Street and US 101 SB Ramps	AM	11	B	13	B	7	A	7	A
		PM	19	C	**62**	**F**	8	A	8	A
10	Front Street and Morisoli Road	AM	11	B	14	B			14	B
		PM	13	B	17	C			16	C
11	San Vicente Road and Market Street	AM	15	B	**47**	**E**	7	A	12	B
		PM	16	C	**114**	**F**	8	A	15	B
12	West Street and Market Street	AM	8	A	12	B	5	A	10	A
		PM	9	A	***15***	***C***	7	A	11	B
13	Main Street and Market Street	AM	8	A	9	A			8	A
		PM	8	A	10	A			9	A
14	East Street and Market Street	AM	10	B	25	C			5	A
		PM	16	C	***95***	***F***			6	A
15	East Street and North Street/Metz Road	AM	13	B	16	B			14	B
		PM	15	B	15	B			15	B
16	San Vicente Road and Gabilan Drive	AM	13	B	***375***	***F***	15	B	15	B
		PM	13	B	***395***	***F***	12	B	18	B
17	West Street and Gabilan Drive	AM	10	B	***26***	***D***	26	C	29	C
		PM	11	B	***58***	***F***	37	D	37	D
18	Main Street and Gabilan Drive	AM	9	A	10	A	12	B	11	B
		PM	9	A	***12***	***B***	16	B	13	B
19	Andalucia Drive and Gabilan Drive	AM	14	B	15	B			20	B
		PM	16	C	***18***	***C***			22	C
20	Orchard Lane and Metz Road	AM	15	C	***37***	***E***			18	B
		PM	9	B	***17***	***C***			18	B
21	Front Street and Oak Street	AM	12	B	20	B			12	B
		PM	14	B	**74**	**E**			12	B

Notes:
1. Significant impacts are shown in **BOLD** and boxed.
2. *Italics* and **BOLD** indicates signal warrant met.

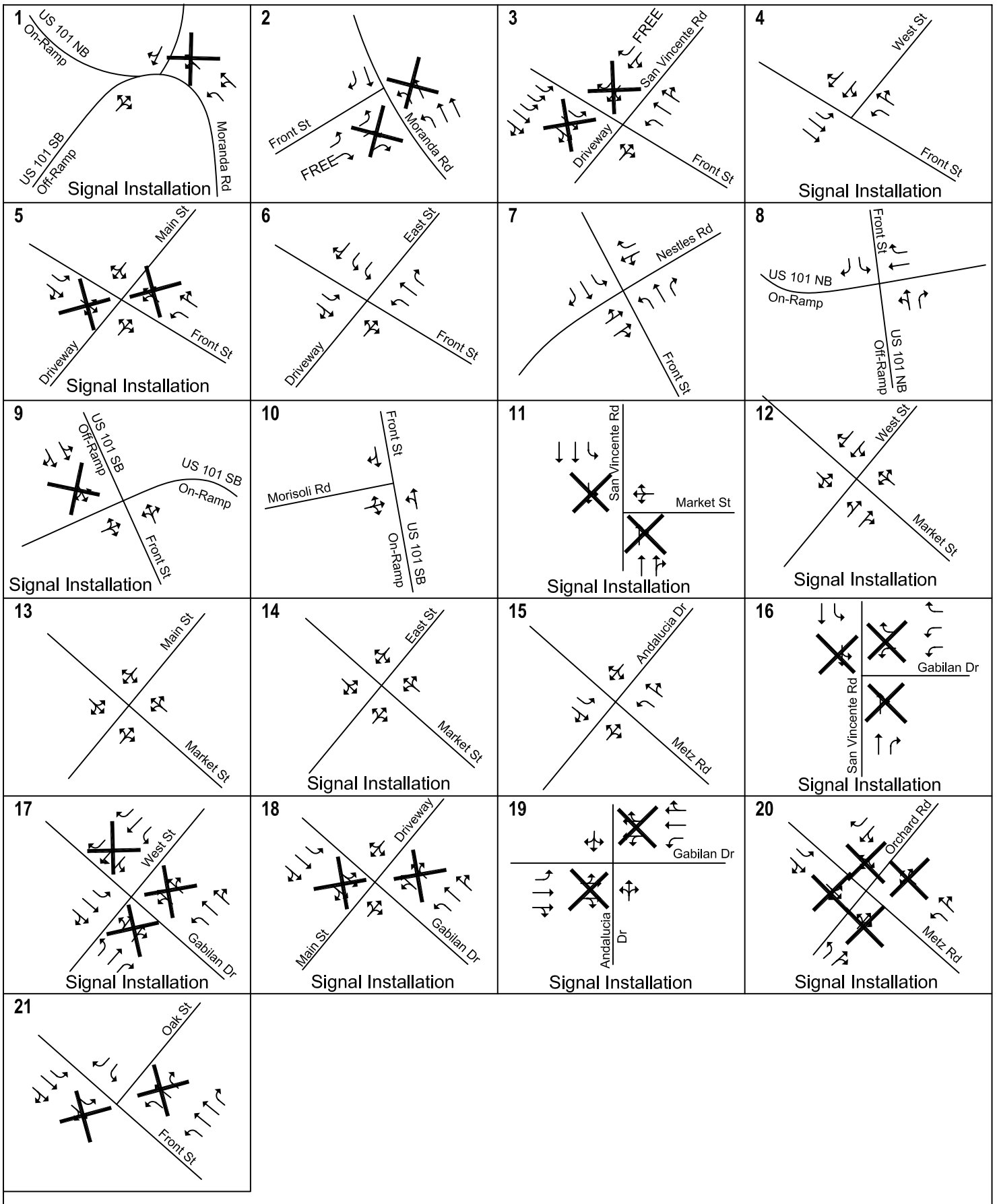


Figure 11

PROJECT MITIGATION MEASURES

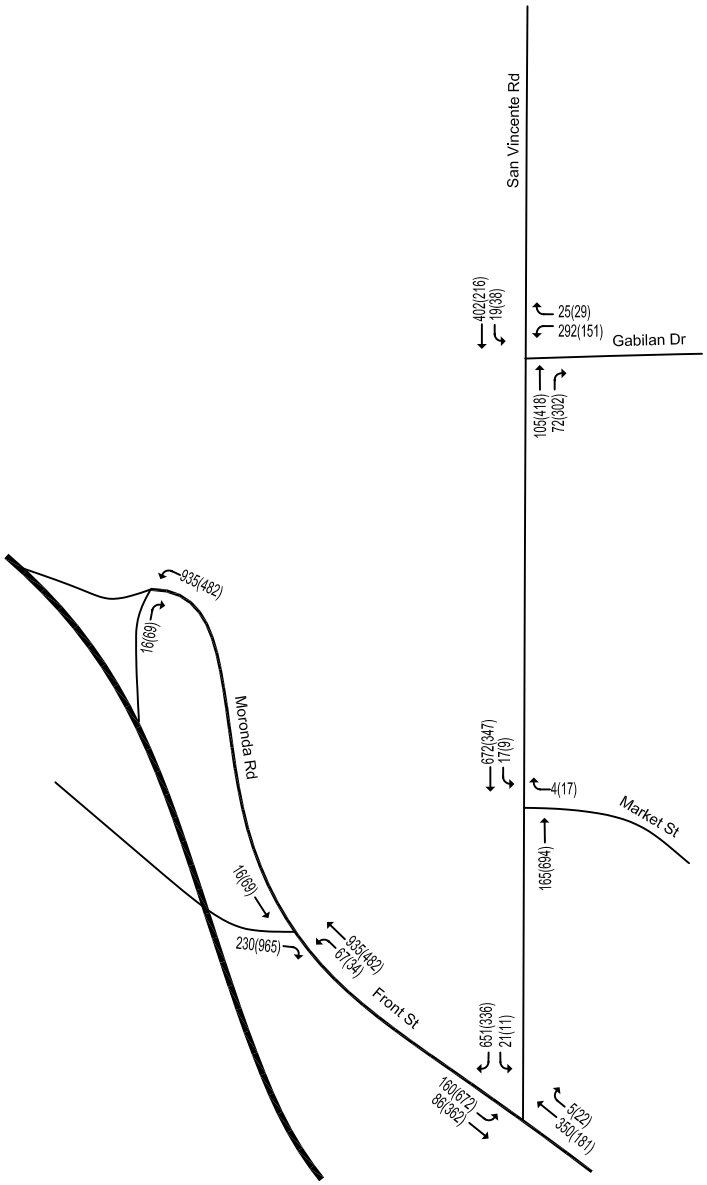
Hexagon Transportation Consultants, Inc.

Soledad Miravale

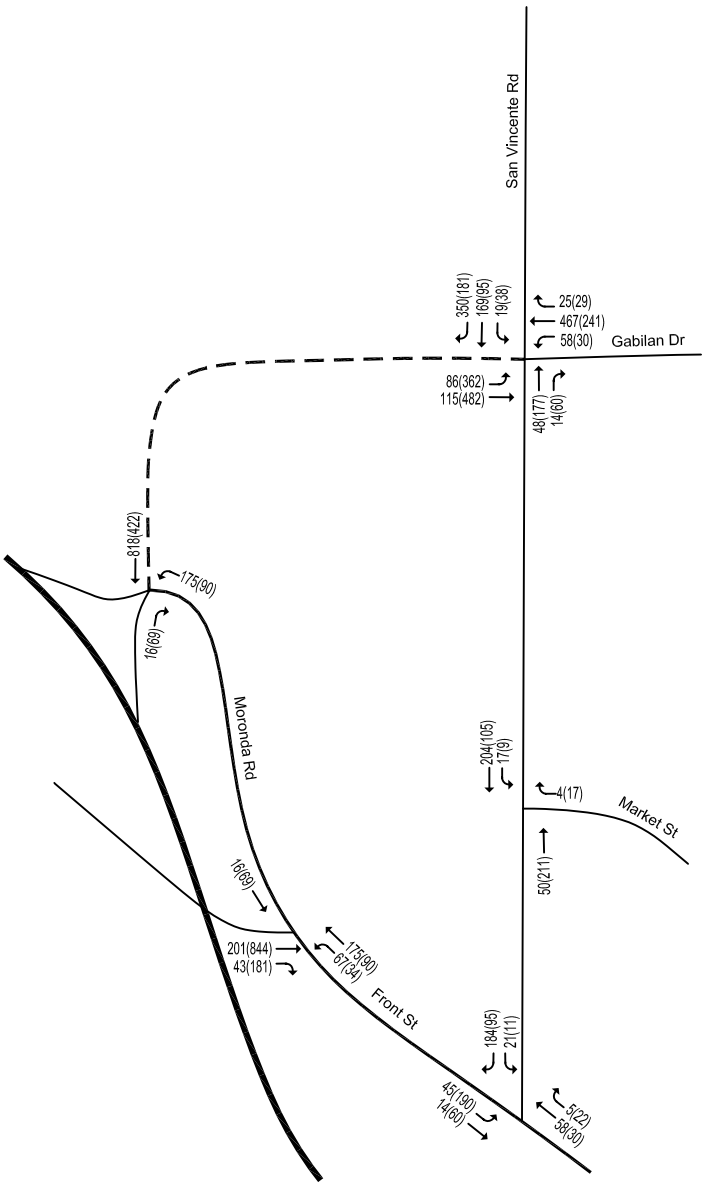
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NORTH

Without Gabilan Extension



With Gabilan Extension



LEGEND

XX(XX) = AM(PM) Traffic Volumes

Figure 12

PROJECT TRIPS WITH AND WITHOUT GABILAN EXTENSION

Soledad Miravale

Hexagon
Transportation Consultants, Inc.

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(2) Moranda Road and Front Street

Impact: The intersection level of service would be an acceptable LOS C or better during both peak hours under Background with Improvements conditions and the intersection would degrade to LOS F during both peak hours under project conditions. This constitutes a significant impact by City of Soledad standards.

Mitigation Measure. The additional improvement necessary, beyond those identified under background conditions, to mitigate the project impact at this intersection will consist of the addition of a second northbound through lane and eastbound free-right-turn lane. The implementation of this improvement will require that northbound Front Street be widened to two lanes. The roadway segment analysis also indicates the need for widening of Front Street between Moranda Road and San Vicente Road. Intersection level of service will improve to LOS A during both peak hours with the improvements.

With the construction of the Gabilan Drive extension to US 101, the improvements described above would not be necessary. Instead, improvements associated with the Gabilan Drive extension would be made at the intersection. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(3) San Vicente Road and Front Street

Impact: The intersection level of service would be an acceptable LOS B during both peak hours under Background with Improvements conditions and the intersection would degrade to LOS F during both peak hours under project conditions. This constitutes a significant impact by City of Soledad standards.

Mitigation Measure. The additional improvement necessary, beyond those identified under background conditions, to mitigate the project impact at this intersection will consist of the addition of two eastbound left-turn lanes and southbound free-right-turn lane. The implementation of this improvement will require that northbound Front Street be widened to two lanes and northbound San Vicente Road be widened to three lanes. Intersection level of service will improve to LOS B during both peak hours with the improvements. The improvements described above will require a significant amount of right-of-way acquisition and will not blend well with surrounding land uses.

With the construction of the Gabilan Drive extension to US 101, the improvements described above would not be necessary. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(4) West Street and Front Street

Impact: The intersection would meet signal warrants with the addition of project traffic.

Mitigation Measure. The necessary improvements consist of the signalization of the intersection with protected left-turn phasing along Front Street.

(5) Main Street and Front Street

Impact: The intersection would meet signal warrants with the addition of project traffic.

Mitigation Measure. The necessary improvements consist of the signalization of the intersection with

protected left-turn phasing along Front Street.

With the construction of the Gabilan Drive extension to US 101, the signalization of this intersection would not be necessary. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(7) Front Street and Nestles Road

Impact: Impact at Oak Street and Front Street creates need for improvements at this intersection.

Mitigation Measure. The necessary improvements consist of the addition of a second eastbound left-turn lane in combination with improvements proposed to mitigate project impacts at the intersection of Oak Street and Front Street.

(9) Front Street and US 101 SB Ramps

Impact: The intersection level of service would be an acceptable LOS C or better during both peak hours under Background with Improvements conditions and the intersection would degrade to LOS F during the PM peak hour under project conditions. This constitutes a significant impact by City of Soledad standards.

Mitigation Measure. The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection and addition of a second lane on the off-ramp. The improvement will require the widening of southbound Front Street to two lanes. Intersection level of service would improve to LOS A during the PM peak hour with the improvements. The volume of vehicles exiting southbound US 101 at Front Street indicate the need for widening of Front Street, between US 101 and Moranda Road, to two lanes southbound and/or reconfiguration/reconstruction of the US 101 interchange at Moranda Road/Front Street to provide more efficient access to the project site and north Soledad in general.

(11) San Vicente Road and Market Street

Impact: The intersection level of service would be an acceptable LOS C or better during both peak hours under Background with Improvements conditions and the intersection would degrade to LOS E and F during the AM and PM peak hours, respectively, under project conditions. This constitutes a significant impact by City of Soledad standards.

Mitigation Measure. The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection and widening of San Vicente Road to accommodate two lanes in each direction. Intersection level of service will improve to LOS A during both peak hours with the improvements.

With the construction of the Gabilan Drive extension to US 101, the signalization of the intersection and widening of San Vicente Road would not be necessary. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(12) West Street and Market Street

Impact: The intersection would meet signal warrants with the addition of project traffic.

Mitigation Measure. The necessary improvements consist of the signalization of the intersection.

With the construction of the Gabilan Drive extension to US 101, the signalization of this intersection would not be necessary. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(14) East Street and Market Street

Impact: The intersection level of service would be an acceptable LOS C or better during both peak hours under Background with Improvements conditions and the intersection would degrade to LOS F during the PM peak hour under project conditions. This constitutes a significant impact by City of Soledad standards. The intersection would also meet signal warrants with the addition of project traffic.

Mitigation Measure. The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection. Intersection level of service will improve to LOS A during both peak hours with the improvements.

(16) San Vicente Road and Gabilan Drive

Impact: The intersection level of service would be an acceptable LOS B during both peak hours under Background with Improvements conditions and the intersection would degrade to LOS F during both peak hours under project conditions. This constitutes a significant impact by City of Soledad standards. The intersection would also meet signal warrants with the addition of project traffic.

Mitigation Measure. The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection and addition of a second westbound left-turn lane, exclusive northbound right-turn lane, and southbound left-turn lane. The improvement will require the widening of southbound San Vicente Road to accommodate the dual left-turn lanes from Gabilan. Intersection level of service will improve to LOS B during both peak hours with the improvements.

With the construction of the Gabilan Drive extension to US 101, the improvements described above would not be necessary. Instead, improvements associated with the Gabilan Drive extension would be made at the intersection to serve the new movements. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(17) West Street and Gabilan Drive

Impact: The intersection level of service would be an acceptable LOS B during both peak hours under Background with Improvements conditions and the intersection would degrade to LOS F during the PM peak hour under project conditions. This constitutes a significant impact by City of Soledad standards. The intersection would also meet signal warrants with the addition of project traffic.

Mitigation Measure. The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection and addition of exclusive left-turn lanes with protected phasing on all approaches. The improvements will fit within right-of-way. Intersection level of service will improve to LOS D during the PM peak hour with the improvements.

(18) Main Street and Gabilan Drive

Impact: The intersection would meet signal warrants with the addition of project traffic.

Mitigation Measure. The necessary improvements consist of the signalization of the intersection with protected left-turn phasing along Gabilan Drive.

With the construction of the Gabilan Drive extension to US 101, the signalization of this intersection would not be necessary. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(19) Andalucia Drive and Gabilan Drive

Impact: The intersection would meet signal warrants with the addition of project traffic.

Mitigation Measure. The necessary improvements consist of the signalization of the intersection with protected left-turn phasing along Gabilan Drive.

(20) Orchard Lane and Metz Road

Impact: The intersection level of service would be an acceptable LOS C during both peak hours under Background with Improvements conditions and the intersection would degrade to LOS E during the AM peak hour under project conditions. This constitutes a significant impact by City of Soledad standards. The intersection would also meet signal warrants with the addition of project traffic.

Mitigation Measure. The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection with protected left-turn phasing on Metz Road and split phasing on Orchard Lane. Intersection level of service will improve to LOS B and C during the AM and PM peak hours, respectively, with the improvements.

(21) Oak Street and Front Street

Impact: The intersection level of service would be an acceptable LOS B during both peak hours under Background with Improvements conditions and the intersection would degrade to LOS E during the PM peak hour under project conditions. This constitutes a significant impact by City of Soledad standards.

Mitigation Measure. The necessary improvements to mitigate project impacts at this intersection consist of the widening of Front Street to four lanes between Nestles Road and Oak Street. A second eastbound left-turn lane will also be needed at the intersection of Nestles Road and Front Street as part of the improvements at this intersection. Intersection levels of service will improve to LOS B during both peak hours with the improvements.

Traffic Mitigation Triggers and Impact Fees

Discussed below are project development level trigger points for impacts and mitigation measures for the two major roadway improvements identified in the previous section, as well as the local and regional impact fees.

Traffic Mitigation Triggers

The large size of the proposed project will require that construction of the project be phased over the next ten years. As such, it is necessary to phase mitigation costs/fees along with the development of the project in order to ensure the financial feasibility of the initial development activities. The two major roadway improvements, Gabilan Extension and reconstruction of the US 101Moranda Road interchange, proposed as mitigation measures for the proposed project will require substantial funding that cannot be provided at the initial stages of this development nor completely by the proposed development alone. Therefore, triggers were determined for the two major roadway improvement projects.

Gabilan Extension Development Level Trigger

Analysis was conducted at intersections and roadway segments along San Vicente Road to determine at what development level the extension of Gabilan Drive needed to be implemented to support project traffic. The traffic analysis indicated that the most critical point of constraint is the intersection of San Vicente Road and Front Street. The capacity of the eastbound left-turn movement, Front Street to San Vicente, during the PM peak hour is the critical movement at the intersection. Under background conditions, the intersection was shown to meet traffic signal warrants. Analysis indicates that with the installation of a signal at the intersection, acceptable levels of service, LOS D, will be maintained at the intersection with up to 50% of the project development traffic added to the roadway system. It should be noted, that though intersection levels of service may be acceptable, the number of left-turning vehicles under background conditions (545 during the PM peak hour) indicates the need for a second left-turn lane and subsequent widening of San Vicente Road to receive the two left-turn lanes. With 50% of the project development traffic added to the roadway system, an additional 350 trips would be added to the left-turn movement during the PM peak hour.

Based on roadway segment analysis conducted along San Vicente Road, LOS D operations along the roadway can be maintained with up to 75% of the project traffic added to the roadway system. However, as previously discussed, the intersection of San Vicente Road and Front Street would be unable to serve this level of development and would create spill over onto adjacent streets, such as West Street, that provide an alternate access to San Vicente Road.

US 101 and Moranda Road Interchange Improvement Development Level Trigger

As described previously, the existing freeway ramps at Moranda Road and US 101 are not designed to accommodate existing traffic volumes. The addition of project traffic, as well as background traffic, would compound the need for improvement of the ramps. The US 101 southbound off-ramp to Moranda Road will be the constraint on any further development. Analysis of ramp capacities indicate that LOS D operations can be maintained on the ramps with up to 25% of the project traffic added to the roadway system.

Intersection level of service analysis indicates that with signalization of the ramp termini intersections, up to 50% of the project development traffic can be accommodated; However, even with the signalization of

the intersections, the ramps would be inadequate to serve this level of development.

Traffic Impact Fees

Funding for the above described mitigation measures, as well as others described in the previous section, will be obtained via traffic impact fees imposed upon the project by both the City of Soledad and The Transportation Agency for Monterey County (TAMC). Mitigation of the project impacts would be in the form of payment of traffic impact fees estimated for the project.

Local Intersection Impacts

The above significant impacts will be reduced to a less than significant level through the implementation of one or more of the following actions:

a. The applicant shall construct circulation improvements as specified by the city and outlined above;

b. The applicant shall pay traffic impact fees per the city traffic impact fee ordinance in effect at the time the applicant requests building permits;

c. For any improvement that will not be constructed by the applicant or mitigated through payment of impact fees per city impact fee ordinance, the applicant shall pay a fair share of the improvement

The City's forthcoming traffic impact fee (TIF) program mentioned in item b above is to be adopted August 15, 2008. The City TIF identifies a fee per single-family unit and multi-family unit to be collected from proposed development and used towards identified improvements to the roadway system within and serving the City of Soledad. Mitigation of the project impacts would be in the form of payment of City of Soledad's traffic impact fees estimated for the project. The City of Soledad Impact Fee schedule is included in Appendix E.

Regional Transportation Impacts

The identified freeway segment and interchange ramp improvements cannot be completely funded by a single development. In lieu of one single project absorbing the total cost of freeway widening, a regional development impact fee program has been established for state highways and regional roads within Monterey County. The Transportation Agency for Monterey County (TAMC) implements the fee program based on the 2004 TAMC "Nexus Study for Regional Development Impact Fee." The payment of fees is considered mitigation for project impacts to freeway facilities. This contribution to the regional fund shall be in addition to any other city fees and project mitigation measures. Should the widening of the freeway and improvement of interchanges be deemed infeasible or not part of the fee program, the impact should be considered significant and unavoidable.

Project Area Roadway System

Primary access to the site will be provided via extensions of San Vicente Road, West Street, and Orchard Lane. Each of the roadways will be extended into the project area with connections to a completely new roadway system of collectors and local roads that will serve each of the residential and commercial areas of the project.

Future Roadway Classification

Projected daily volumes and the city's criteria for roadway designation were used to determine the designation of each of the new major roadways. Table 22 presents projected daily volumes along the major roadways of the planned roadway system within the project area. Projected volumes are based on the same trip generation estimates and assignment methodology described earlier in this chapter. Traffic associated with other pending non-residential projects was also included in the projected volumes. Pending projects are described in the following chapter.

Traffic projections indicate that only West Street, between the project boundary and H Street, will meet arterial criteria. San Vicente Road and Orchard Lane will meet collector road criteria throughout their extent. All other roadways will meet criteria for classification as local roadways. All new streets should be designed to meet city standards. As part of the planned golf course, there will be a need to provide golf cart crossings along project roadways. Due to large traffic volumes and vehicle speeds, at-grade golf cart crossings should not be provided along streets classified as collectors or arterials. Figure 13 shows roadway designations for each of the major roadways described above.

Future Intersection Control

With implementation of the future roadways described above, several new intersections will be created. Peak hour signal warrant checks were completed for each of the new intersections. Results indicate that only the intersection of West Street and H Street will meet signal warrants. Projected peak hour volumes at all other intersections within the project area will not be large enough to require signalization. Traffic volumes and signal warrant analysis sheets for each of the new intersections are included in Appendix F.

Transit and Pedestrian Analysis

It can be assumed that some of the project trips could be made by transit. Assuming up to 3% transit mode share, which is probably the highest that could be expected, yields an estimate of 76 AM and 97 PM transit trips during each of the peak hours. This demand along with existing and other future demand for transit service will justify the need for establishing a plan and implementation of a transit system to serve the City of Soledad as a whole.

Pedestrian facilities in the project area will consist primarily of sidewalks along the streets. Sidewalks will be provided along virtually all streets and at intersections within the project area. There are no existing bicycle facilities that can be extended into the project area. The residential uses of the project along with existing and future neighborhoods will justify the need for a continuos bicycle facility system throughout the City of Soledad. A draft City Bike Plan that identifies proposed future bicycle facilities is currently being processed and is expected to be adopted in late 2007. All pedestrian and bicycle lanes of the project should provide for future connection to existing sidewalks and streets as well as planned bicycle facilities.

Table 22
Miravale Site Roadway Segment Volumes

		Project Trips				Cumulative Trips				Future Total Trips				
			AM Peak		PM Peak		AM Peak		PM Peak			Maximum	**Daily**	
Segment	Direction	AM Peak	Tot. Volume	PM Peak	Tot. Volume	AM Peak	Tot. Volume	PM Peak	Tot. Volume	AM Peak	PM Peak	Tot. Volume	**Volume**	**Roadway Designation**
San Vicente Road Between														
Vista de Soledad and Miravale Road	NB	135	561	454	714	21	54	106	202	615	916	916	**9,160**	**Collector**
	SB	426		260		33		96						
Miravale Road and West Street	NB	141	357	257	460	5	13	25	47	370	507	507	**5,070**	**Collector**
	SB	216		203		8		22						
West Street Between														
Cuesta Street and H Street	NB	225	1,087	895	1,355	49	125	249	473	1,212	1,828	1,828	**18,280**	**Arterial**
	SB	862		460		76		224						
H Street and I Street	NB	202	909	743	1,144	23	58	115	218	967	1,362	1,362	**13,620**	**Arterial**
	SB	707		401		35		103						
I Street and J Street	NB	165	661	532	846	18	46	90	171	707	1,017	1,017	**10,170**	**Collector**
	SB	496		314		28		81						
J Street and L Street	NB	162	638	511	816	18	46	90	171	684	987	987	**9,870**	**Collector**
	SB	476		305		28		81						
L Street and Hilltop Road	NB	158	608	486	781	17	44	87	165	652	946	946	**9,460**	**Collector**
	SB	450		295		27		78						
Hilltop Road and S Street	NB	154	484	371	633	12	31	62	118	515	751	751	**7,510**	**Collector**
	SB	330		262		19		56						
S Street and Crest Street	NB	108	398	315	504	7	19	38	72	417	576	576	**5,760**	**Collector**
	SB	290		189		12		34						
Crest Street and Eucalyptus Lane	EB	146	323	221	422	2	5	10	19	328	441	441	**4,410**	**Collector**
	WB	177		201		3		9						
Eucalyptus Lane and San Vicente Road	EB	153	354	247	462	5	13	25	47	367	509	509	**5,090**	**Collector**
	WB	201		215		8		22						
Orchard Road Between														
Terraza Street and H Street	NB	104	524	434	651	11	27	53	101	551	752	752	**7,520**	**Collector**
	SB	420		217		16		48						
H Street and Hilltop Street	NB	87	437	362	543	18	46	90	171	483	714	714	**7,140**	**Collector**
	SB	350		181		28		81						
Hilltop Street and S Street	NB	51	175	135	220	15	38	74	140	213	360	360	**3,600**	**Collector**
	SB	124		85		23		66						
S Street and Crest Street	NB	49	165	126	207	15	38	74	140	203	347	347	**3,470**	**Collector**
	SB	116		81		23		66						
Crest Street Between														
L Street and West Street	NB	35	70	54	102	1	2	3	6	72	108	108	**1,080**	**Local**
	SB	35		48		1		3						
West Street and Orchard Lane	EB	86	363	301	466	8	20	40	76	383	542	542	**5,420**	**Collector**
	WB	277		165		12		36						
Eucalyptus Lane Between														
L Street and West Street	NB	24	31	14	40	4	7	13	27	38	67	67	**670**	**Local**
	SB	7		26		3		14						
Hilltop Road Between														
West Street and Orchard Lane	EB	50	197	161	252	5	13	25	47	210	299	299	**2,990**	**Collector**
	WB	147		91		8		22						
S Street Between														
West Street and Orchard Lane	EB	18	50	42	71	5	13	25	47	63	118	118	**1,180**	**Local**
	WB	32		29		8		22						

Notes:
1. Peak Hour volumes obtained from Trip assignments created for the Miravale Phase III project by Hexagon.
2. Daily volumes estimated by multiplying larger of either the AM or PM peak hour volume on each segment, total of both directions of travel, by 10.
3. Roadway designations based on City of Soledad General Plan, 2005 Existing Roadway and Capacities.

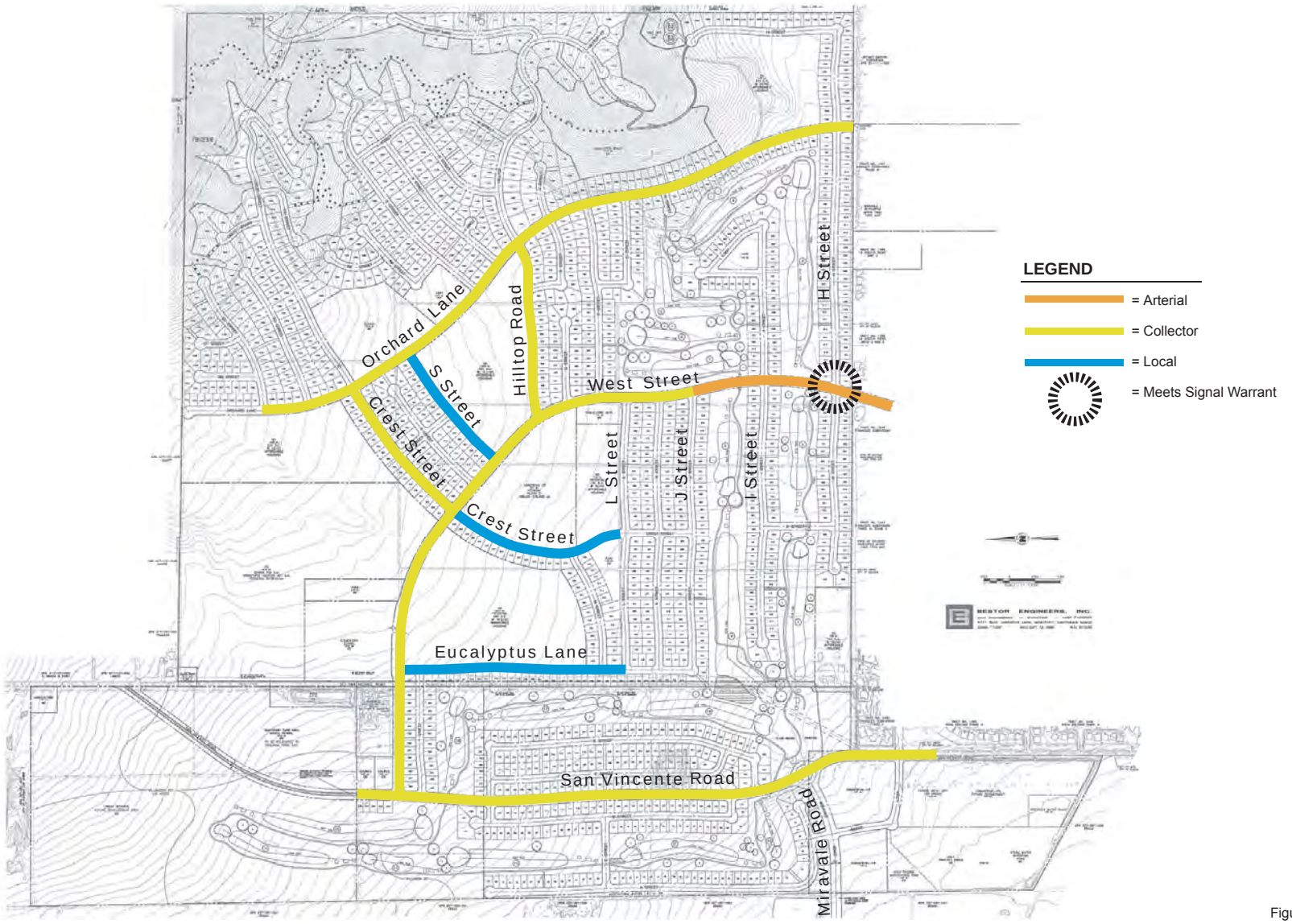


Figure 13

MIRAVALE SITE ROADWAY DESIGNATION

Soledad Miravale

Hexagon
Transportation Consultants, Inc.

5.
Cumulative Growth Conditions

This chapter presents a summary of the traffic conditions that would occur under cumulative conditions with and without the proposed project. It includes descriptions of nearby pending developments and the procedure used to estimate traffic volumes associated with them. This chapter also presents the results of the intersection level of service calculations. The analysis of cumulative growth conditions was conducted at the request of the City of Soledad and is in conformance with the California Environmental Quality Act CEQA.

Future Roadway Network Under Cumulative Conditions

It is assumed in this analysis that the roadway network and intersection configurations under cumulative no project conditions would be the same as described under background conditions with improvements with the exception of the following two intersections:

Moranda Road and Front Street - The improvement consists of the addition of an east leg to the intersection to serve the Soledad Plaza project site.

San Vicente Road and Gabilan Drive - The necessary improvement consists of the addition of a west leg to the intersection to serve the Soledad Plaza project site.

The project mitigation measures described in the previous chapter are included under the cumulative with project conditions analysis. The cumulative with project analysis includes evaluation of intersection levels of service with and without the extension of Gabilan Drive to US 101 as described in the previous chapter.

Cumulative Traffic Volumes

Cumulative traffic volumes include trips associated with three pending developments located within the City of Soledad. City staff provided the list of cumulative developments. The projects are described below.

- *The Village at Soledad* – 139,730 s.f. shopping center, an 84-room hotel, and 1,329 seat cinema located along the eastside of Nestles Road south of Los Coches Drive.

- *Soledad Plaza* – 415,000 s.f. shopping center, located along the westside of San Vicente Road between Moranda Road and Gabilan Road.

- *263Front Street* – 12,200 s.f. retail center and 152 apartments/condominiums, located along the northside of Front Street between West Street and Benito Street.

Traffic volumes for cumulative conditions were estimated by adding traffic associated with pending developments to background traffic volumes for the cumulative without project scenario and the proposed project for the cumulative with project scenario. The added traffic associated with the pending projects was developed based on trip generation estimates and assignments produced by Hexagon. The magnitude of traffic added to the roadway system by each of the pending developments is estimated by multiplying the applicable trip generation rates to the size of the development. The trip generation rates published in the Institute of Transportation Engineers (ITE) manual entitled *Trip Generation*, seventh edition, 2003, were used for this analysis. On the basis of these rates, it is estimated that the pending projects would generate a combined total of 25,938 daily trips, with 702 trips occurring during the AM peak hour and 2,348 occurring during the PM peak hour. The type of land use, size, and trip estimates of each development is presented in Table 23. Cumulative Growth traffic volumes with the project are shown on Figure 14.

Cumulative Conditions Intersection Levels of Service

The results of the intersection level of service analysis under cumulative conditions are summarized in Table 24. The results show that all of the study intersections would operate at an acceptable LOS D or better under cumulative conditions without and with the project:

Cumulative Intersection Signal Warrant Analysis

The peak-hour signal warrant analysis for cumulative conditions showed that the Caltrans peak-hour volume warrant would not be satisfied at any further study intersections than those identified under project conditions. The results of the signal warrant analysis are summarized in Table 25 and the signal warrant analysis sheets are included in Appendix D.

Cumulative Roadway Segment Analysis

Traffic volumes for cumulative conditions on each of the studied roadway segments were developed by adding to background condition volumes the trips associated with each of the pending projects and proposed project. The pending project trips were assigned to the roadway system in the same manner as with the proposed project. The roadway segment analysis indicates that all but one of the studied roadway segments are projected to operate at LOS D or better during both peak hours under cumulative no project conditions. The roadway segment analysis indicates that the addition of project traffic will cause four additional studied roadway segments to deteriorate to LOS E or worse during at least one peak hour under cumulative with project conditions. The degradation of roadway segment levels of service indicate the need for roadway widening. Tables 26 and 27 present the roadway segment analysis.

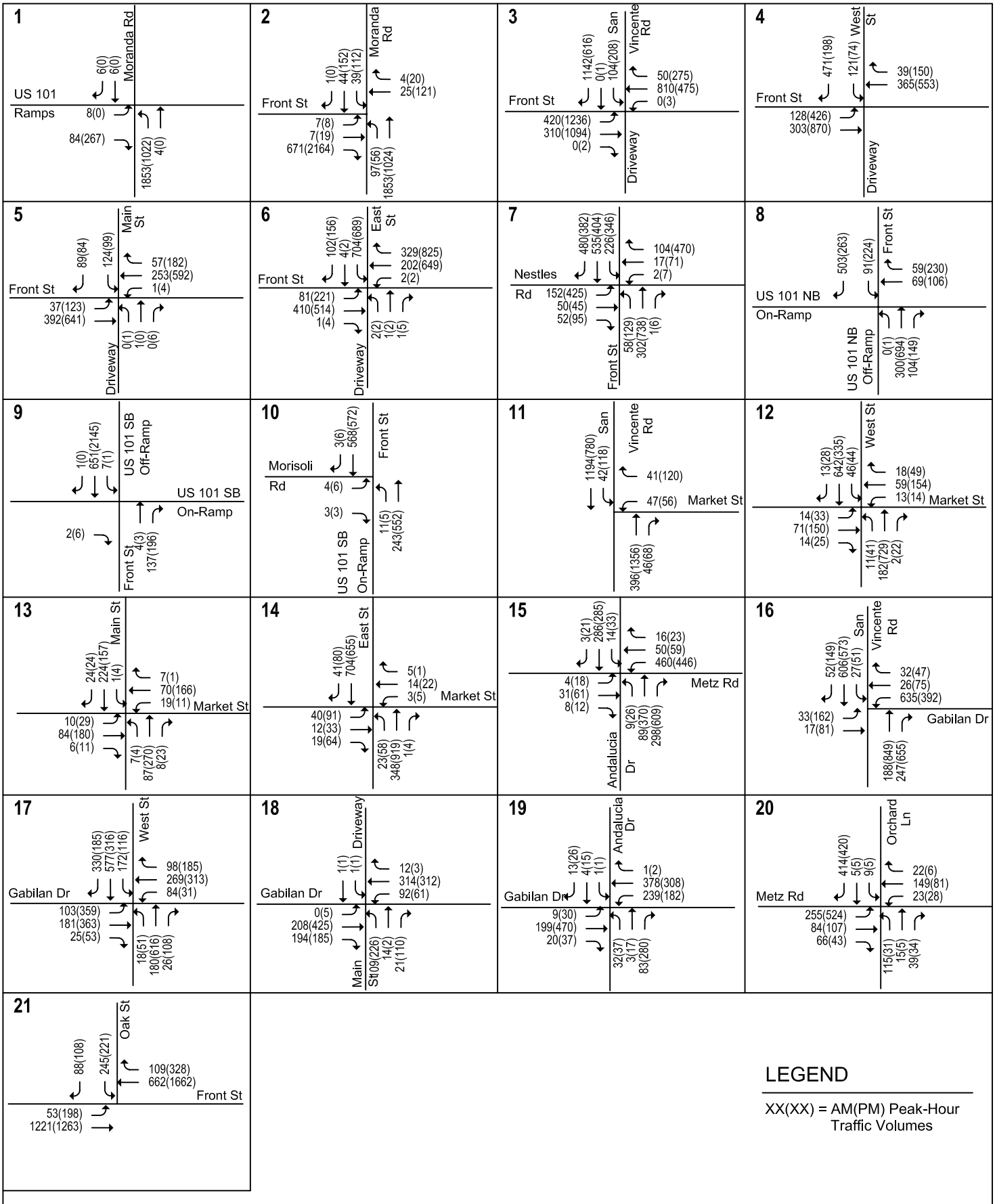
Table 23

Cumulative Project Trip Generation Estimates

		Daily		AM Peak Hour				PM Peak Hour			
Land Use	Size	Rate /a/	Trips	Rate /a/	In	Out	Total	Rate /a/	In	Out	Total
The Village at Soledad											
Shopping Center /d/	139,730 s.f.	42.94	6,000	1.03	88	56	144	3.75	252	272	524
Hotel /e/	84 Rooms	8.17	686	0.56	29	18	47	0.59	26	23	50
Cinema	1,329 seats							0.08	38	68	106
Totals			6,686		116	74	191		316	364	680
Soledad Plaza											
Shopping Center /d/	415,000 s.f.	42.94	17,820	1.03	261	167	427	3.75	747	809	1556
263 Front Street											
Specialty Retail Center /c/	12,200 s.f.	44.32	541	1.35	8	9	16	2.71	15	19	33
Residential /b/	152 units	5.86	891	0.44	11	56	67	0.52	53	26	79
Totals			1,431		19	64	83		68	45	112
Total All Approved Projects			**25,938**		**397**	**305**	**702**		**1,131**	**1,218**	**2,348**

Notes:
/a/ Rates expressed in trips per dwelling units.
/b/ Trip Generation rates for residential condominium/townhouse (ITE Land Use #230) used for this project.
/c/ Trip Generation rates for specialty retail center (ITE Land Use #814) used for this project.
/d/ Trip Generation rates for shopping center (ITE Land Use #820) used for this project.
/e/ Trip Generation rates for hotel (ITE Land Use #310) used for this project.

Source for rates: *ITE Trip Generation, Seventh Edition.*



LEGEND

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Figure 14

CUMULATIVE TRAFFIC VOLUMES

Soledad Miravale

Hexagon
Transportation Consultants, Inc.

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Table 24

Cumulative Conditions Intersection Levels of Service

	Intersection	Intersection Control	Peak Hour	No Project Ave. Delay	No Project LOS	With Project: No Gabilan Extension Ave. Delay	With Project: No Gabilan Extension LOS	With Project: With Gabilan Extension Ave. Delay	With Project: With Gabilan Extension LOS
1	Moranda Road and US 101 NB Ramps	Signal	AM	8	A	14	B	18	B
			PM	15	B	16	B	10	B
2	Moranda Road and Front Street	Signal	AM	10	A	5	A	15	B
			PM	18	B	11	B	14	B
3	San Vicente Road and Front Street	Signal	AM	19	B	13	B	16	B
			PM	20	C	17	B	19	B
4	West Street and Front Street	Signal	AM	11	B	19	B	14	B
			PM	25	C	34	C	13	B
5	Main Street and Front Street	Signal	AM	9	A	23	C	21	C
			PM	24	C	22	C	23	C
6	East Street and Front Street	Signal	AM	20	B	24	C	23	C
			PM	25	C	38	D	32	C
7	Front Street and Nestles Road	Signal	AM	17	B	20	B	21	C
			PM	24	C	42	D	42	D
8	Front Street and US 101 NB Ramps	Signal	AM	20	C	10	A	12	B
			PM	19	B	25	C	23	C
9	Front Street and US 101 SB Ramps	Signal	AM	11	B	7	A	7	A
			PM	21	C	12	B	13	B
10	Front Street and Morisoli Road	TWSC	AM	11	B	14	B	14	B
			PM	14	B	18	C	18	C
11	San Vicente Road and Market Street	Signal	AM	***14***	***B***	8	A	11	B
			PM	***34***	***D***	10	B	11	B
12	West Street and Market Street	Signal	AM	9	A	6	A	10	A
			PM	11	B	9	A	11	B
13	Main Street and Market Street	AWSC	AM	8	A	9	A	8	A
			PM	9	A	11	B	9	A
14	East Street and Market Street	Signal	AM	11	B	5	A	5	A
			PM	34	D	9	A	8	A
15	East Street and North Street/Metz Road	Signal	AM	13	B	16	B	14	B
			PM	15	B	16	B	16	B
16	San Vicente Road and Gabilan Drive	Signal	AM	18	B	21	C	16	B
			PM	19	B	23	C	27	C
17	West Street and Gabilan Drive	Signal	AM	11	B	27	C	30	C
			PM	13	B	39	D	38	D
18	Main Street and Gabilan Drive	Signal	AM	9	A	12	B	10	A
			PM	10	B	16	B	15	B
19	Andalucia Drive and Gabilan Drive	TWSC	AM	12	B	20	B	20	B
			PM	16	C	23	C	23	C
20	Orchard Lane and Metz Road	TWSC	AM	17	C	36	D	18	B
			PM	11	C	32	C	20	B
21	Front Street and Oak Street	TWSC	AM	12	B	12	B	12	B
			PM	26	C	13	B	12	B

Notes:

1. Intersection control based on project with mitigation conditions
   -TWSC = Two-way stop-controlled intersection
   -AWSC = Four-way stop-controlled intersection
2. Significant impacts are shown in **BOLD** and boxed.
3. *Italics* and **BOLD** indicates signal warrant met.

Table 25

Cumulative Intersection Signal Warrant Analysis Summary

Study Number	Intersection Name	Existing Conditions AM	Existing Conditions PM	Background Conditions AM	Background Conditions PM	Project Conditions AM	Project Conditions PM	Cumulative Conditions AM	Cumulative Conditions PM
Existing Unsignalized Intersections									
1	Moranda Road & US 101 NB Ramps	No	No	No	No	No	No	**Yes**	**Yes**
2	Moranda Road & Front Street	No	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
3	San Vicente Road & Front Street	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
4	West Street & Front Street	No	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**
5	Main Street & Front Street	No	No	No	No	No	**Yes**	No	**Yes**
6	East Street & Front Street	No	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
7	Front Street & Nestles Road	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
8	Front Street & US 101 NB Ramps	No	No	No	**Yes**	No	**Yes**	No	**Yes**
9	Front Street & US 101 SB Ramps	No	No	No	No	No	No	No	No
10	Front Street & Morisoli Road	No	No	No	No	No	No	No	No
11	San Vicente Road & Market Street	No	No	No	No	No	No	No	**Yes**
12	West Street & Market Street	No	No	No	No	No	**Yes**	No	**Yes**
13	Main Street & Market Street	No	No	No	No	No	No	No	No
14	East Street & Market Street	No	No	No	No	No	**Yes**	No	**Yes**
15	East Street & North Street/Metz Road	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
16	San Vicente Road & Gabilan Drive	No	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**
17	West Street & Gabilan Drive	No	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**
18	Main Street & Gabilan Drive	No	No	No	No	No	**Yes**	No	**Yes**
19	Andalucia Drive & Gabilan Drive	No	No	No	No	No	**Yes**	No	**Yes**
20	Orchard Street & Metz Road	No	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**
21	Oak Street & Front Street	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**

Notes:
1. Signal warrant analysis based on Caltrans Peak Hour Signal Warrant #11.

Table 26
Cumulative Roadway Segment Analysis (No Project)

				Background Conditions						Cumulative Trips				Cumulative Conditions					
		# Of	Capacity	AM Peak-Hr			PM Peak-Hr			AM Peak-Hr		PM Peak-Hr		AM Peak-Hr			PM Peak-Hr		
Segment	Direction	Lanes	(vph)	Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
Front St																			
Moranda Rd and San Vicente Rd	EB	2	2,400	474	0.198	A	1,254	0.523	A	14	2.95%	56	4.47%	488	0.203	A	1,310	0.546	A
	WB	2	2,400	976	0.407	A	600	0.250	A	43	4.41%	38	6.33%	1,019	0.425	A	638	0.266	A
San Vicente Rd and West St	EB	2	2,400	267	0.111	A	730	0.304	A	55	20.60%	188	25.75%	322	0.134	A	918	0.383	A
	WB	2	2,400	513	0.214	A	353	0.147	A	71	13.84%	196	55.52%	584	0.243	A	549	0.229	A
West St and Main St	EB	1	1,200	253	0.211	A	571	0.476	A	54	21.34%	188	32.92%	307	0.256	A	759	0.633	B
	WB	1	1,200	272	0.227	A	358	0.298	A	71	26.10%	193	53.91%	343	0.286	A	551	0.459	A
Main St and East St	EB	1	1,200	293	0.244	A	503	0.419	A	65	22.18%	169	33.60%	358	0.298	A	672	0.560	A
	WB	1	1,200	337	0.281	A	427	0.356	A	35	10.39%	203	47.54%	372	0.310	A	630	0.525	A
East St and Nestles Rd	EB	1	1,200	683	0.569	A	692	0.577	A	86	12.59%	240	34.68%	769	0.641	B	932	0.777	C
	WB	1	1,200	534	0.445	A	825	0.688	B	48	8.99%	**286**	**34.67%**	582	0.485	A	**1,111**	**0.926**	**E**
Gabilan Dr																			
San Vicente Rd and West St	EB	2	2,400	182	0.076	A	309	0.129	A	29	15.93%	142	45.95%	211	0.088	A	451	0.188	A
	WB	2	2,400	329	0.137	A	231	0.096	A	46	13.98%	131	56.71%	375	0.156	A	362	0.151	A
West St and Andalucia Dr	EB	2	2,400	256	0.107	A	405	0.169	A	21	8.20%	101	24.94%	277	0.115	A	506	0.211	A
	WB	2	2,400	396	0.165	A	344	0.143	A	33	8.33%	93	27.03%	429	0.179	A	437	0.182	A
San Vicente Rd																			
Market St and Gabilan Dr	NB	1	1,200	210	0.175	A	500	0.417	A	71	33.81%	290	58.00%	281	0.234	A	790	0.658	B
	SB	1	1,200	480	0.400	A	298	0.248	A	72	15.00%	273	91.61%	552	0.460	A	571	0.476	A
North of Gabilan Dr	NB	1	1,200	63	0.053	A	139	0.116	A	93	147.62%	467	335.97%	156	0.130	A	606	0.505	A
	SB	1	1,200	129	0.108	A	81	0.068	A	143	110.85%	420	518.52%	272	0.227	A	501	0.418	A
West St																			
Market St and Gabilan Dr	NB	2	2,400	107	0.045	A	261	0.109	A	5	4.67%	23	8.81%	112	0.047	A	284	0.118	A
	SB	2	2,400	221	0.092	A	132	0.055	A	8	3.62%	21	15.91%	229	0.095	A	153	0.064	A
North of Gabilan Dr	NB	2	2,400	151	0.063	A	201	0.084	A	5	3.31%	21	10.45%	156	0.065	A	222	0.093	A
	SB	2	2,400	205	0.085	A	135	0.056	A	7	3.41%	19	14.07%	212	0.088	A	154	0.064	A

Notes:
1. Capacity of roadways based on assumed capacity of 1,200 vphpl and existing lanes on roadways.
2. **BOLD** indictaes significant increase in roadway segment volume and LOS.

Table 27

Cumulative Roadway Segment Analysis (With Project)

				Cumulative No Project Conditions						Project Trips				Cumulative Conditions With Project					
		# Of	Capacity	AM Peak-Hr			PM Peak-Hr			AM Peak-Hr		PM Peak-Hr		AM Peak-Hr			PM Peak-Hr		
Segment	Direction	Lanes	(vph)	Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
Front St																			
Moranda Rd and San Vicente Rd	EB	2	2,400	488	0.203	A	1,310	0.546	A	247	50.61%	**1,034**	**78.93%**	735	0.306	A	**2,344**	**0.977**	**E**
	WB	2	2,400	1,019	0.425	A	638	0.266	A	1,001	98.23%	517	81.03%	2,020	0.842	D	1,155	0.481	A
San Vicente Rd and West St	EB	2	2,400	322	0.134	A	918	0.383	A	107	33.23%	373	40.63%	429	0.179	A	1,291	0.538	A
	WB	2	2,400	584	0.243	A	549	0.229	A	356	60.96%	202	36.79%	940	0.392	A	751	0.313	A
West St and Main St	EB	1	1,200	307	0.256	A	759	0.633	B	140	45.60%	125	16.47%	447	0.373	A	884	0.737	C
	WB	1	1,200	343	0.286	A	551	0.459	A	89	25.95%	159	28.86%	432	0.360	A	710	0.592	A
Main St and East St	EB	1	1,200	358	0.298	A	672	0.560	A	238	66.48%	123	18.30%	596	0.497	A	795	0.663	B
	WB	1	1,200	372	0.310	A	630	0.525	A	59	15.86%	246	39.05%	431	0.359	A	876	0.730	C
East St and Nestles Rd	EB	1	1,200	769	0.641	B	932	0.777	C	**584**	**75.94%**	**301**	**32.30%**	**1,353**	**1.128**	**F**	**1,233**	**1.028**	**F**
	WB	1	1,200	582	0.485	A	1,111	0.926	E	144	24.74%	603	54.28%	726	0.605	B	1,714	1.428	F
Gabilan Dr																	0		
San Vicente Rd and West St	EB	2	2,400	211	0.088	A	451	0.188	A	91	43.13%	339	75.17%	302	0.126	A	790	0.329	A
	WB	2	2,400	375	0.156	A	362	0.151	A	317	84.53%	180	49.72%	692	0.288	A	542	0.226	A
West St and Andalucia Dr	EB	2	2,400	277	0.115	A	506	0.211	A	130	46.93%	92	18.18%	407	0.170	A	598	0.249	A
	WB	2	2,400	429	0.179	A	437	0.182	A	51	11.89%	143	32.72%	480	0.200	A	580	0.242	A
San Vicente Rd																	0		
Market St and Gabilan Dr	NB	1	1,200	281	0.234	A	790	0.658	B	170	60.50%	**711**	**90.00%**	451	0.376	A	**1,501**	**1.251**	**F**
	SB	1	1,200	552	0.460	A	571	0.476	A	**688**	**124.64%**	355	62.17%	**1,240**	**1.033**	**F**	926	0.772	C
North of Gabilan Dr	NB	1	1,200	156	0.130	A	606	0.505	A	130	83.33%	447	73.76%	286	0.238	A	1,053	0.878	D
	SB	1	1,200	272	0.227	A	501	0.418	A	422	155.15%	254	50.70%	694	0.578	A	755	0.629	B
West St																	0		
Market St and Gabilan Dr	NB	2	2,400	112	0.047	A	284	0.118	A	110	98.21%	461	162.32%	222	0.093	A	745	0.310	A
	SB	2	2,400	229	0.095	A	153	0.064	A	446	194.76%	230	150.33%	675	0.281	A	383	0.160	A
North of Gabilan Dr	NB	2	2,400	156	0.065	A	222	0.093	A	219	140.38%	890	400.90%	375	0.156	A	1,112	0.463	A
	SB	2	2,400	212	0.088	A	154	0.064	A	858	404.72%	453	294.16%	1,070	0.446	A	607	0.253	A

Notes:

1. Capacity of roadways based on assumed capacity of 1,200 vphpl and existing lanes on roadways.
2. **BOLD** indictaes significant increase in roadway segment volume and LOS.

Cumulative Freeway Segment Analysis

Traffic volumes for cumulative conditions on each of the studied freeway segments were developed by adding to background condition volumes the trips associated with each of the pending projects and proposed project. The pending project trips were assigned to the freeway system in the same manner as with the proposed project. The freeway segment analysis indicates that all but one of the studied roadway segments are projected to operate at LOS C or better during both peak hours under cumulative no project conditions. The freeway segment analysis indicates that one additional study segment than those identified under project conditions would deteriorate to LOS D or worse during at least one peak hour under cumulative with project conditions.

US 101 –Northbound between Gloria Road and Soledad Prison (AM Peak Hour)

Freeway segment analysis is presented in Tables 28 and 29.

Cumulative Freeway Ramp Analysis

Traffic volumes for cumulative conditions on each of the studied freeway ramps were developed by adding to background condition volumes the trips associated with each of the pending projects and proposed project. The pending project trips were assigned to the freeway ramps in the same manner as with the proposed project. The freeway ramp analysis indicates that no further study ramps than those identified under project conditions would deteriorate in levels of service under cumulative no project and with project conditions. Freeway ramp analysis is presented in Tables 30 and 31.

Table 28

Cumulative Freeway Segment Analysis (No Project)

				Background Conditions						Cumulative Trips				Cumulative Conditions					
				AM Peak-Hour			PM Peak-Hour			AM Peak-Hour		PM Peak-Hour		AM Peak-Hour			PM Peak-Hour		
Segment	Direction	# Of Lanes	Capacity (vph) /a/	Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
US 101																			
North Gonzales and Gonzales-5th Street	Both	4	9,600	4,791	0.499	B	4,903	0.511	B	120	2.50%	204	4.15%	4,911	0.512	B	5,106	0.532	B
	NB	2	4,800	2,863	0.597	C	1,985	0.413	B	76	2.64%	139	7.02%	2,939	0.612	C	2,124	0.443	B
	SB	2	4,800	1,928	0.402	B	2,918	0.608	C	44	2.29%	64	2.21%	1,972	0.411	B	2,982	0.621	C
Gonzales-5th Street and Gloria Road	Both	4	9,600	4,697	0.489	B	4,824	0.503	B	137	2.91%	233	4.83%	4,834	0.504	B	5,057	0.527	B
	NB	2	4,800	2,805	0.584	C	1,957	0.408	B	86	3.08%	159	8.14%	2,892	0.602	C	2,116	0.441	B
	SB	2	4,800	1,892	0.394	B	2,868	0.597	C	50	2.66%	74	2.57%	1,942	0.405	B	2,941	0.613	C
Gloria Road and Soledad Prison	Both	4	9,600	3,853	0.401	B	3,996	0.416	B	154	3.99%	262	6.55%	4,007	0.417	B	4,258	0.444	B
	NB	2	4,800	2,297	0.479	B	1,629	0.339	A	97	4.23%	179	11.00%	2,394	0.499	B	1,808	0.377	B
	SB	2	4,800	1,556	0.324	A	2,367	0.493	B	57	3.64%	83	3.50%	1,613	0.336	A	2,450	0.510	B
Soledad Prison and Camphora	Both	4	9,600	3,681	0.383	B	3,832	0.399	B	162	4.41%	276	7.21%	3,844	0.400	B	4,109	0.428	B
	NB	2	4,800	2,193	0.457	B	1,565	0.326	A	103	4.68%	189	12.08%	2,296	0.478	B	1,754	0.365	B
	SB	2	4,800	1,488	0.310	A	2,267	0.472	B	60	4.02%	87	3.86%	1,548	0.322	A	2,355	0.491	B
Camphora and North Soledad	Both	4	9,600	4,859	0.506	B	5,018	0.523	B	108	2.22%	199	3.97%	4,967	0.517	B	5,217	0.543	B
	NB	2	4,800	2,899	0.604	C	2,041	0.425	B	63	2.17%	92	4.51%	2,962	0.617	C	2,133	0.444	B
	SB	2	4,800	1,960	0.408	B	2,977	0.620	C	45	2.30%	107	3.59%	2,005	0.418	B	3,084	0.643	C
North Soledad and South Soledad	Both	4	9,600	3,954	0.412	B	3,994	0.416	B	105	2.66%	299	7.49%	4,059	0.423	B	4,293	0.447	B
	NB	2	4,800	2,379	0.496	B	1,601	0.334	A	55	2.31%	145	9.06%	2,434	0.507	B	1,746	0.364	B
	SB	2	4,800	1,575	0.328	A	2,393	0.499	B	50	3.17%	154	6.44%	1,625	0.339	A	2,547	0.531	B
South Soledad and Arroyo Seco Road	Both	4	9,600	3,861	0.402	B	3,909	0.407	B	108	2.80%	353	9.03%	3,969	0.413	B	4,262	0.444	B
	NB	2	4,800	2,104	0.438	B	1,780	0.371	B	60	2.85%	171	9.61%	2,164	0.451	B	1,951	0.406	B
	SB	2	4,800	1,757	0.366	B	2,129	0.444	B	48	2.73%	182	8.55%	1,805	0.376	B	2,311	0.481	B
Arroyo Seco Road and North Greenfield	Both	4	9,600	3,703	0.386	B	3,749	0.390	B	103	2.77%	335	8.95%	3,806	0.396	B	4,084	0.425	B
	NB	2	4,800	2,018	0.420	B	1,707	0.356	A	57	2.82%	162	9.52%	2,075	0.432	B	1,869	0.389	B
	SB	2	4,800	1,685	0.351	A	2,042	0.425	B	46	2.71%	173	8.47%	1,731	0.361	B	2,215	0.461	B
North Greenfield and Walnut Avenue	Both	4	9,600	3,187	0.332	A	3,228	0.336	A	92	2.88%	300	9.30%	3,279	0.342	A	3,528	0.367	B
	NB	2	4,800	1,736	0.362	B	1,470	0.306	A	51	2.94%	145	9.89%	1,787	0.372	B	1,616	0.337	A
	SB	2	4,800	1,451	0.302	A	1,757	0.366	B	41	2.81%	155	8.80%	1,492	0.311	A	1,912	0.398	B
Walnut Avenue and Oak Avenue	Both	4	9,600	2,971	0.309	A	3,007	0.313	A	81	2.73%	265	8.81%	3,052	0.318	A	3,272	0.341	A
	NB	2	4,800	1,619	0.337	A	1,369	0.285	A	45	2.78%	128	9.37%	1,664	0.347	A	1,497	0.312	A
	SB	2	4,800	1,352	0.282	A	1,638	0.341	A	36	2.66%	137	8.33%	1,388	0.289	A	1,775	0.370	B
South Greenfield and Oak Avenue	Both	4	9,600	2,455	0.256	A	2,486	0.259	A	70	2.86%	229	9.23%	2,525	0.263	A	2,715	0.283	A
	NB	2	4,800	1,337	0.279	A	1,132	0.236	A	39	2.92%	111	9.82%	1,376	0.287	A	1,243	0.259	A
	SB	2	4,800	1,117	0.233	A	1,354	0.282	A	31	2.79%	118	8.74%	1,149	0.239	A	1,472	0.307	A

Notes:
/a/ Capacity of freeway lanes based on assumed capacity of 2,400 vphpl, as prescribed by the Highway Capacity Manual
/b/ Data provided by Caltrans Data System Unit 2005, Route 101 District 5.

Table 29

Cumulative Freeway Segment Analysis (With Project)

				Cumulative No Project Conditions						Project Trips				Cumulative Conditions With Project					
		# Of	Capacity	AM Peak-Hour			PM Peak-Hour			AM Peak-Hour		PM Peak-Hour		AM Peak-Hour			PM Peak-Hour		
Segment	Direction	Lanes	(vph)	Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
US 101																			
North Gonzales and Gonzales-5th Street	Both	4	9,600	4,911	0.512	B	5,106	0.532	B	1,837	37.40%	1,688	33.07%	6,748	0.703	C	6,795	0.708	C
	NB	2	4,800	2,939	0.612	C	2,124	0.443	B	**1,019**	**34.68%**	1,266	59.62%	**3,958**	**0.825**	**D**	3,390	0.706	C
	SB	2	4,800	1,972	0.411	B	2,982	0.621	C	818	41.46%	422	14.15%	2,790	0.581	C	3,404	0.709	C
Gonzales-5th Street and Gloria Road	Both	4	9,600	4,834	0.504	B	5,057	0.527	B	2,099	43.43%	1,930	38.16%	6,933	0.722	C	6,987	0.728	C
	NB	2	4,800	2,892	0.602	C	2,116	0.441	B	**1,165**	**40.28%**	1,447	68.39%	**4,056**	**0.845**	**D**	3,563	0.742	C
	SB	2	4,800	1,942	0.405	B	2,941	0.613	C	934	48.11%	482	16.40%	2,877	0.599	C	3,424	0.713	C
Gloria Road and Soledad Prison	Both	4	9,600	4,007	0.417	B	4,258	0.444	B	2,362	58.94%	2,171	50.98%	6,369	0.663	C	6,429	0.670	C
	NB	2	4,800	2,394	0.499	B	1,808	0.377	B	**1,310**	**54.73%**	1,628	90.05%	**3,705**	**0.772**	**C**	3,436	0.716	C
	SB	2	4,800	1,613	0.336	A	2,450	0.510	B	1,051	65.18%	543	22.15%	2,664	0.555	C	2,993	0.624	C
Soledad Prison and Camphora	Both	4	9,600	3,844	0.400	B	4,109	0.428	B	2,493	64.86%	2,291	55.77%	6,336	0.660	C	6,400	0.667	C
	NB	2	4,800	2,296	0.478	B	1,754	0.365	B	1,383	60.25%	1,719	97.98%	3,679	0.766	C	3,473	0.723	C
	SB	2	4,800	1,548	0.322	A	2,355	0.491	B	1,110	71.69%	573	24.33%	2,657	0.554	C	2,927	0.610	C
Camphora and North Soledad	Both	4	9,600	4,967	0.517	B	5,217	0.543	B	1,456	29.31%	1,809	34.68%	6,423	0.669	C	7,026	0.732	C
	NB	2	4,800	2,962	0.617	C	2,133	0.444	B	**1,168**	**39.43%**	603	28.27%	**4,130**	**0.860**	**D**	2,736	0.570	C
	SB	2	4,800	2,005	0.418	B	3,084	0.643	C	288	14.36%	**1,206**	**39.11%**	2,293	0.478	B	**4,290**	**0.894**	**D**
North Soledad and South Soledad	Both	4	9,600	4,059	0.423	B	4,293	0.447	B	374	9.21%	465	10.83%	4,433	0.462	B	4,758	0.496	B
	NB	2	4,800	2,434	0.507	B	1,746	0.364	B	250	10.27%	189	10.82%	2,684	0.559	C	1,935	0.403	B
	SB	2	4,800	1,625	0.339	A	2,547	0.531	B	124	7.63%	276	10.84%	1,749	0.364	B	2,823	0.588	C
South Soledad and Arroyo Seco Road	Both	4	9,600	3,969	0.413	B	4,262	0.444	B	416	10.48%	517	12.13%	4,385	0.457	B	4,779	0.498	B
	NB	2	4,800	2,164	0.451	B	1,951	0.406	B	82	3.79%	345	17.68%	2,246	0.468	B	2,296	0.478	B
	SB	2	4,800	1,805	0.376	B	2,311	0.481	B	334	18.50%	172	7.44%	2,139	0.446	B	2,483	0.517	B
Arroyo Seco Road and North Greenfield	Both	4	9,600	3,806	0.396	B	4,084	0.425	B	395	10.38%	491	12.03%	4,201	0.438	B	4,575	0.477	B
	NB	2	4,800	2,075	0.432	B	1,869	0.389	B	78	3.75%	328	17.53%	2,153	0.449	B	2,197	0.458	B
	SB	2	4,800	1,731	0.361	B	2,215	0.461	B	317	18.34%	163	7.38%	2,048	0.427	B	2,378	0.495	B
North Greenfield and Walnut Avenue	Both	4	9,600	3,279	0.342	A	3,528	0.367	B	354	10.78%	439	12.46%	3,632	0.378	B	3,967	0.413	B
	NB	2	4,800	1,787	0.372	B	1,616	0.337	A	70	3.90%	293	18.15%	1,857	0.387	B	1,909	0.398	B
	SB	2	4,800	1,492	0.311	A	1,912	0.398	B	284	19.03%	146	7.65%	1,775	0.370	B	2,058	0.429	B
Walnut Avenue and Oak Avenue	Both	4	9,600	3,052	0.318	A	3,272	0.341	A	312	10.22%	388	11.85%	3,364	0.350	A	3,659	0.381	B
	NB	2	4,800	1,664	0.347	A	1,497	0.312	A	62	3.70%	259	17.28%	1,726	0.360	A	1,756	0.366	B
	SB	2	4,800	1,388	0.289	A	1,775	0.370	B	251	18.05%	129	7.27%	1,638	0.341	A	1,904	0.397	B
South Greenfield and Oak Avenue	Both	4	9,600	2,525	0.263	A	2,715	0.283	A	270	10.71%	336	12.38%	2,795	0.291	A	3,051	0.318	A
	NB	2	4,800	1,376	0.287	A	1,243	0.259	A	53	3.87%	224	18.04%	1,430	0.298	A	1,468	0.306	A
	SB	2	4,800	1,149	0.239	A	1,472	0.307	A	217	18.90%	112	7.60%	1,366	0.285	A	1,584	0.330	A

Notes:
/a/ Capacity of freeway lanes based on assumed capacity of 2,400 vphpl, as prescribed by the Highway Capacity Manual
/b/ Data provided by Caltrans Data System Unit 2005, Route 101 District 5.

Table 30

Cumulative Freeway Ramp Analysis (No Project)

					Background Conditions						Cumulative Trips				Cumulative Conditions					
					AM Peak-Hour			PM Peak-Hour			AM Peak-Hour		PM Peak-Hour		AM Peak-Hour			PM Peak-Hour		
Interchange	Direction	# Of Lanes	Type	Capacity (vph)	Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
US 101																				
Camphora Road	SB to Camphora Road	1	Diagonal	1,500	24	0.016	A	30	0.020	A	0	0.00%	0	0.00%	24	0.016	A	30	0.020	A
	NB from Camphora Road	1	Diagonal	1,500	40	0.027	A	32	0.021	A	0	0.00%	0	0.00%	40	0.027	A	32	0.021	A
	SB from Camphora Road	1	Diagonal	1,500	88	0.059	A	115	0.077	A	2	2.27%	5	4.35%	90	0.060	A	120	0.080	A
	NB to Camphora Road	1	Diagonal	1,500	96	0.064	A	80	0.053	A	3	3.13%	5	6.25%	99	0.066	A	85	0.057	A
Moranda Road	SB to Moranda Road	1	Diagonal	1,500	408	0.272	A	1107	0.738	C	21	5.15%	74	6.68%	429	0.286	A	1181	0.787	D
	NB from Moranda Road	1	Loop	1,500	877	0.585	C	482	0.321	A	48	5.47%	59	12.24%	925	0.617	C	541	0.361	B
	SB from Moranda Road	1	Loop	1,500	52	0.035	A	42	0.028	A	25	48.08%	121	288.10%	77	0.051	A	163	0.109	A
	NB to Moranda Road	1	Loop	1,500	37	0.025	A	86	0.057	A	39	105.41%	112	130.23%	76	0.051	A	198	0.132	A
Front Street	SB to Front Street	1	Loop	1,500	162	0.108	A	283	0.189	A	25	15.43%	33	11.66%	187	0.125	A	316	0.211	A
	NB from Front Street	1	Loop	1,500	322	0.215	A	216	0.144	A	15	4.66%	33	15.28%	337	0.225	A	249	0.166	A
	SB from Front Street	1	Diagonal	1,500	281	0.187	A	376	0.251	A	23	8.19%	61	16.22%	304	0.203	A	437	0.291	A
	NB to Front Street	1	Diagonal	1,500	317	0.211	A	508	0.339	A	21	6.62%	60	11.81%	338	0.225	A	568	0.379	B
Arroyo Seco Road	SB to Arroyo Seco Road	1	Diagonal	1,500	75	0.050	A	93	0.062	A	2	2.67%	9	9.68%	77	0.051	A	102	0.068	A
	NB from Arroyo Seco Road	1	Diagonal	1,500	91	0.061	A	76	0.051	A	3	3.30%	9	11.84%	94	0.063	A	85	0.057	A

Notes:
1. Capacity for all ramps based on assumed capacity of 1,500 vphpl, as prescribed by the Highway Capacity Manual

Table 31

Cumulative Freeway Ramp Analysis (With Project)

					Cumulative No Project Conditions						Project Trips				Cumulative With Project Conditions					
					AM Peak-Hour			PM Peak-Hour			AM Peak-Hour		PM Peak-Hour		AM Peak-Hour			PM Peak-Hour		
Interchange	Direction	# Of Lanes	Type	Capacity (vph)	Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
US 101																				
Camphora Road	SB to Camphora Road	1	Diagonal	1,500	24	0.016	A	30	0.020	A	0	0.00%	0	0.00%	24	0.016	A	30	0.020	A
	NB from Camphora Road	1	Diagonal	1,500	40	0.027	A	32	0.021	A	0	0.00%	0	0.00%	40	0.027	A	32	0.021	A
	SB from Camphora Road	1	Diagonal	1,500	90	0.060	A	120	0.080	A	14	15.56%	60	50.00%	104	0.069	A	180	0.120	A
	NB to Camphora Road	1	Diagonal	1,500	99	0.066	A	85	0.057	A	58	58.59%	30	35.29%	157	0.105	A	115	0.077	A
Moranda Road	SB to Moranda Road	1	Diagonal	1,500	429	0.286	A	1181	0.787	D	230	53.61%	**965**	**81.71%**	659	0.439	B	**2146**	**1.431**	**F**
	NB from Moranda Road	1	Loop	1,500	925	0.617	C	541	0.361	B	**935**	**101.08%**	482	89.09%	**1860**	**1.240**	**F**	1023	0.682	C
	SB from Moranda Road	1	Loop	1,500	77	0.051	A	163	0.109	A	67	87.01%	34	20.86%	144	0.096	A	197	0.131	A
	NB to Moranda Road	1	Loop	1,500	76	0.051	A	198	0.132	A	16	21.05%	69	34.85%	92	0.061	A	267	0.178	A
Front Street	SB to Front Street	1	Loop	1,500	187	0.125	A	316	0.211	A	58	31.02%	241	76.27%	245	0.163	A	557	0.371	B
	NB from Front Street	1	Loop	1,500	337	0.225	A	249	0.166	A	234	69.44%	121	48.59%	571	0.381	B	370	0.247	A
	SB from Front Street	1	Diagonal	1,500	304	0.203	A	437	0.291	A	267	87.83%	138	31.58%	571	0.381	B	575	0.383	B
	NB to Front Street	1	Diagonal	1,500	338	0.225	A	568	0.379	B	66	19.53%	276	48.59%	404	0.269	A	844	0.563	C
Arroyo Seco Road	SB to Arroyo Seco Road	1	Diagonal	1,500	77	0.051	A	102	0.068	A	17	22.08%	9	8.82%	94	0.063	A	111	0.074	A
	NB from Arroyo Seco Road	1	Diagonal	1,500	94	0.063	A	85	0.057	A	4	4.26%	17	20.00%	98	0.065	A	102	0.068	A

Notes:
1. Capacity for all ramps based on assumed capacity of 1,500 vphpl, as prescribed by the Highway Capacity Manual

6.
Year 2030 Conditions

This chapter presents the long-term traffic impacts on the transportation system associated with the proposed development as well as land use growth and transportation improvements within the entire City of Soledad. The purpose of this analysis is to evaluate the long-term traffic impacts on the transportation system associated with the proposed development.

Year 2030 Traffic Conditions

Year 2030 traffic volumes were developed by Omni Means Engineers & Planning Consultants. The traffic forecasts for Year 2030 were produced using the Association of Monterey Bay Area Governments (AMBAG) Regional Traffic Model. The 2030 model includes land use growth and transportation improvements associated with buildout of all General Plans within the AMBAG region and 30 year through-traffic growth on major regional facilities.

Model Land Use Adjustments

The recently adopted 2005 Soledad General Plan is not accounted for in the land use assumptions contained in the AMBAG model. Additionally, the proposed Miravale Phase III land uses are of greater intensity than those assumed in the General Plan. Therefore, Omni Means and AMBAG adjusted the land uses contained in the model to include the adopted General Plan and Miravale Phase III land uses. The roadway network contained in the AMBAG model for the City of Soledad was expanded to include the expansion of the street network to serve future land uses. Year 2030 traffic volumes are presented in the memo produced by Omni Means, dated March 27, 2007 and contained in Appendix G.

Though the Year 2030 forecasts reflect approximately 23 years of development growth, the forecasts do not show significant increases in traffic volumes on US 101 and its ramps within the City of Soledad. The lack of volume increases on the regional facilities is primarily due to significant changes in land uses within Soledad that are being represented in the model. There currently is very little land uses besides residential within Soledad. As such, existing traffic volumes on the regional facilities reflect the unbalanced land uses within Soledad where trips originate within Soledad due to its substantial residential development and have destinations outside of Soledad in areas that contain industrial/commercial

(employment) land uses. The model reflects the future addition of a significant amount of industrial/commercial (employment) within Soledad thus creating a more balanced land use scenario within the City of Soledad. The future balance of land uses will internalize many trips in Soledad. Additionally, several new roadways that will be constructed to serve future development will provide for enhanced connectivity to US 101, specifically the Gloria/Camphora interchange.

Miravale Phase III Project Trips

Peak hour project trips associated with the proposed Miravale project were also produced as part of the forecasts completed by Omni Means and are also shown in Appendix G. The Year 2030 Miravale Phase III project trips differ from those presented in Chapter 5 due to changes in land uses and the transportation system as described above. It is expected that the development of more balanced land uses (employment vs. housing) will internalize many of the project trips within Soledad. The near-term project trip assignment and analysis presented in the Chapter 5 depicts the existing unbalanced land use scenario. The Year 2030 projections and project trip assignment assumes a more balanced land use with project trip destinations within Soledad and the utilization of new and enhanced connections to US 101.

Year 2030 Level of Service Analysis

Level of service analysis was conducted for all freeway segments and interchange ramps within the City of Soledad. The traffic model is intended to provide projections for interregional facilities, and may project future forecasts that are significantly different than existing and expected future traffic volumes on city-level roadways. Therefore, no intersection analysis is presented. The freeway and ramp analysis consists of an evaluation of volume-to-capacity of each of the facilities.

Freeway Segment Analysis

Year 2030 conditions freeway segment analysis indicates that one freeway segment is projected to operate at LOS D conditions. Table 32 presents Year 2030 conditions on freeway segments. The table shows that the Miravale project will add between 250 and 770 vehicles to the freeway segments during the AM peak and 200-770 vehicles during the PM peak.

Interchange Ramp Analysis

Year 2030 conditions interchange ramp analysis indicates that one freeway ramp is projected to operate at LOS D conditions. Table 33 presents Year 2030 interchange ramp conditions. The table shows that the Miravale project will add between 30 and 770 vehicles to the identified ramps during the peak hours.

Year 2030 Freeway Facility Impacts and Mitigation Measures

Long-term traffic analysis of the proposed development levels for the project as well as long-term land use growth and transportation improvements within the entire City of Soledad indicate that the development levels will have an adverse impact on the major regional facilities serving Soledad. The proposed project as well as other development projects within the City of Soledad will be required to contribute to the regional development impact fee program as described under near-term project conditions.

Table 32
Year 2030 Freeway Segment Analysis

Segment	Direction	# Of Lanes	Capacity (vph)	Year 2030 Conditions AM Peak-Hour Volume	AM Peak-Hour V/C	AM Peak-Hour LOS	Year 2030 Conditions PM Peak-Hour Volume	PM Peak-Hour V/C	PM Peak-Hour LOS	Miravale Phase III Project Trips AM Peak-Hour Volume	AM Peak-Hour Increase	Miravale Phase III Project Trips PM Peak-Hour Volume	PM Peak-Hour Increase
US 101													
Soledad Prison and Camphora	NB	2	4,800	**4,170**	**0.869**	**D**	2,920	0.608	C	**770**	**18%**	150	5%
	SB	2	4,800	2,920	0.608	C	**4,170**	**0.869**	**D**	150	5%	**770**	**18%**
Camphora and North Soledad	NB	2	4,800	3,300	0.688	C	2,310	0.481	B	250	8%	50	2%
	SB	2	4,800	2,190	0.456	B	3,130	0.652	C	0	0%	0	0%
North Soledad and South Soledad	NB	2	4,800	2,760	0.575	C	1,930	0.402	B	40	1%	200	10%
	SB	2	4,800	1,880	0.392	B	2,690	0.560	C	0	0%	0	0%
South Soledad and Arroyo Seco Road	NB	2	4,800	2,750	0.573	C	1,930	0.402	B	60	2%	320	17%
	SB	2	4,800	1,930	0.402	B	2,750	0.573	C	320	17%	60	2%
Arroyo Seco Road and North Greenfield	NB	2	4,800	2,700	0.563	C	1,890	0.394	B	60	2%	290	15%
	SB	2	4,800	1,890	0.394	B	2,700	0.563	C	290	15%	60	2%

Notes:
1. Capacity of freeway lanes based on assumed capacity of 2,400 vphpl, as prescribed by the Highway Capacity Manual
2. Year 2030 traffic volumes based on projections produced by Omni Means, March 27, 2007
3. Miravale Phase III project trips based on Year 2030 projections produced by Omni Means, Miravale III Future Traffic Volume, March 27, 2007

Table 33

Year 2030 Freeway Ramp Analysis

Interchange	Direction	# Of Lanes	Type	Capacity (vph)	Year 2030 Conditions						Miravale Phase III Year 2030 Project Trips			
					AM Peak-Hour			PM Peak-Hour			AM Peak-Hour		PM Peak-Hour	
					Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	Increase
US 101														
Camphora Road	SB to Camphora Road	1	Diagonal	1,500	900	0.600	C	**1290**	**0.860**	**D**	150	17%	**770**	**60%**
	NB from Camphora Road	1	Diagonal	1,500	970	0.647	C	680	0.453	B	520	54%	100	15%
	SB from Camphora Road	1	Diagonal	1,500	180	0.120	A	250	0.167	A	0	0%	0	0%
	NB to Camphora Road	1	Diagonal	1,500	100	0.067	A	70	0.047	A	0	0%	0	0%
Moranda Road	SB to Moranda Road	1	Diagonal	1,500	390	0.260	A	550	0.367	B	0	0%	0	0%
	NB from Moranda Road	1	Loop	1,500	830	0.553	C	580	0.387	B	250	30%	50	9%
	SB from Moranda Road	1	Loop	1,500	80	0.053	A	110	0.073	A	0	0%	0	0%
	NB to Moranda Road	1	Loop	1,500	290	0.193	A	200	0.133	A	40	14%	200	100%
Front Street	SB to Front Street	1	Loop	1,500	220	0.147	A	320	0.213	A	0	0%	0	0%
	NB from Front Street	1	Loop	1,500	360	0.240	A	250	0.167	A	0	0%	20	8%
	SB from Front Street	1	Diagonal	1,500	270	0.180	A	380	0.253	A	320	119%	60	16%
	NB to Front Street	1	Diagonal	1,500	350	0.233	A	250	0.167	A	30	9%	140	56%
Arroyo Seco Road	SB to Arroyo Seco Road	1	Diagonal	1,500	110	0.073	A	150	0.100	A	30	27%	10	7%
	NB from Arroyo Seco Road	1	Diagonal	1,500	150	0.100	A	110	0.073	A	10	7%	30	27%

Notes:

1. Capacity of freeway lanes based on assumed capacity of 1,500 vphpl for all ramps, as prescribed by the Highway Capacity Manual
2. Year 2030 traffic volumes based on projections produced by Omni Means, March 27, 2007
3. Miravale Phase III project trips based on Year 2030 projections produced by Omni Means, Miravale III Future Traffic Volume, March 27, 2007

7. Conclusions

The potential impacts of the project were evaluated in accordance with the standards set forth by the City of Soledad. The study included the analysis of AM and PM peak-hour traffic conditions for 19 unsignalized intersections, 11 roadway segments, and 11 freeway segments.

Based on the intersection level of service analysis, the project is projected to have an adverse impact on 9 of the study intersections. In addition, the peak-hour signal warrant analysis showed that the Caltrans peak-hour volume warrant would be satisfied at two additional study intersections under project conditions.

Project Impacts

Intersection Impacts

Each of the proposed mitigation measures is presented below:

Several of the identified impacts involve significant physical improvements to not only intersection configurations, but also roadway widening. In some cases, the improvements identified below will be undesirable due to the need for right-of-way acquisition and/or create inconsistency with the City's General Plan. The evaluation of necessary mitigation measures revealed that several of the project impacts could be mitigated with the construction of an extension of Gabilan Drive that will provide an alternate route to US 101. The City's General Plan calls for the extension of Gabilan Drive to US 101 as a four-lane divided arterial. The Gabilan Drive extension will provide for a more direct route to the project area and alleviate identified impacts at several intersections. Therefore, it is recommended that rather than the project implementing undesirable roadway widening, that it instead contribute its fair-share towards the construction costs of the extension of Gabilan Drive to US 101 and widening of San Vicente Road from the project south to the Gabilan Drive extension.

(1) Moranda Road and US 101 NB Ramps - The necessary improvement to mitigate the project impact at this intersection will consist of the signalization of the intersection and the addition of a second northbound left-turn lane, Moranda Road to northbound US 101. The implementation of these improvements will require that the northbound US 101 on-ramp be widened to receive the two lanes. With the construction of the Gabilan Drive extension to US 101, the improvements described above would not be necessary. Instead, improvements associated with the Gabilan Drive extension would be made at the intersection to serve the new movements created by the extension. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101. The volume of vehicles bound for northbound US 101 indicate the need for the reconfiguration/reconstruction of the US 101 interchange at Moranda Road/Front Street to provide more efficient access to the project site and north Soledad in general.

(2) Moranda Road and Front Street - The improvement necessary to mitigate the project impact at this intersection will consist of the addition of a second northbound through lane and eastbound free-right-turn lane. The implementation of this improvement will require that northbound Front Street be widened to two lanes. The roadway segment analysis also indicates the need for widening of Front Street between Moranda Road and San Vicente Road.

With the construction of the Gabilan Drive extension to US 101, the improvements described above would not be necessary. Instead, improvements associated with the Gabilan Drive extension would be made at the intersection. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(3) San Vicente Road and Front Street - The improvement necessary to mitigate the project impact at this intersection will consist of the addition of two eastbound left-turn lanes and southbound free-right-turn lane. The implementation of this improvement will require that northbound Front Street be widened to two lanes and northbound San Vicente Road be widened to three lanes. The improvements described above will require a significant amount of right-of-way acquisition and will not blend well with surrounding land uses.

With the construction of the Gabilan Drive extension to US 101, the improvements described above would not be necessary. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(4) West Street and Front Street - The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection with protected left-turn phasing on Front Street.

(5) Main Street and Front Street - The necessary improvements consist of the signalization of the intersection with protected left-turn phasing along Front Street.

With the construction of the Gabilan Drive extension to US 101, the signalization of this intersection would not be necessary. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(7) Front Street and Nestles Road - The necessary improvements consist of the addition of a second eastbound left-turn lane in combination with improvements proposed to mitigate project impacts at the intersection of Oak Street and Front Street.

(9) Front Street and US 101 SB Ramps - The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection and addition of a second lane on the off-ramp. The improvement will require the widening of southbound Front Street to two lanes. The volume of

vehicles exiting southbound US 101 at Front Street indicate the need for widening of Front Street, between US 101 and Moranda Road, to two lanes southbound and/or reconfiguration/reconstruction of the US 101 interchange at Moranda Road/Front Street to provide more efficient access to the project site and north Soledad in general.

(11) San Vicente Road and Market Street - The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection and widening of San Vicente Road to accommodate two lanes in each direction.

With the construction of the Gabilan Drive extension to US 101, the signalization of the intersection and widening of San Vicente Road would not be necessary. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(12) West Street and Market Street - The necessary improvements consist of the signalization of the intersection.

With the construction of the Gabilan Drive extension to US 101, the signalization of this intersection would not be necessary. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(14) East Street and Market Street - The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection.

(16) San Vicente Road and Gabilan Drive - The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection and addition of a second westbound left-turn lane, exclusive northbound right-turn lane, and southbound left-turn lane. The improvement will require the widening of southbound San Vicente Road to accommodate the dual left-turn lanes from Gabilan.

With the construction of the Gabilan Drive extension to US 101, the improvements described above would not be necessary. Instead, improvements associated with the Gabilan Drive extension would be made at the intersection to serve the new movements. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(17) West Street and Gabilan Drive - The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection and addition of exclusive left-turn lanes with protected phasing on all approaches.

(18) Main Street and Gabilan Drive - The necessary improvements consist of the signalization of the intersection with protected left-turn phasing along Gabilan Drive.

With the construction of the Gabilan Drive extension to US 101, the signalization of this intersection would not be necessary. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(19) Andalucia Drive and Gabilan Drive - The necessary improvements consist of the signalization of the intersection with protected left-turn phasing along Gabilan Drive.

(20) Orchard Lane and Metz Road - The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection with protected left-turn phasing on Metz Road and split phasing on Orchard Lane.

(21) Front Street and Oak Street - The necessary improvements to mitigate project impacts at this intersection consist of the widening of Front Street to four lanes between Nestles Road and Oak Street. A second eastbound left-turn lane will also be needed at the intersection of Nestles Road and Front Street as part of the improvements at this intersection.

Freeway Segment Impacts

The results of the freeway segment analysis showed that four freeway segments are projected to operate at LOS D under project conditions.

US 101 – Northbound North of Gonzales-5th Street (AM Peak Hour)
US 101 – Northbound between Gonzales-5th Street to Gloria Road (AM Peak Hour)
US 101 – Northbound between Camphora Road and North Soledad (AM Peak Hour)
US 101 – Southbound between North Soledad and Camphora Road (PM Peak Hour)

The remaining segments are projected to operate at LOS C or better. The addition of project traffic will worsen conditions on each of the segments projected to operate at LOS D.

Freeway Ramp Impacts

The freeway ramp analysis indicates that two of the studied freeway ramps are projected to operate at LOS F under project conditions.

Moranda Road Interchange – Southbound US 101 off-ramp to Moranda Road (PM Peak Hour)
Moranda Road Interchange – Northbound US 101 on-ramp from Moranda Road (AM Peak Hour)

The existing ramp configurations are inadequate to serve existing traffic volumes. The ramps at both the Moranda Road and Front Street interchanges with US 101 were constructed years ago and not designed to accommodate existing traffic volumes. The existing ramp alignments are inadequate to feed the large ramp volumes onto the mainline that also has seen increased volumes. The project traffic will worsen conditions on each of the ramps.

Traffic Mitigation Triggers

The large size of the proposed project will require that construction of the project be phased over the next ten years. As such, it is necessary to phase mitigation costs/fees along with the development of the project in order to ensure the financial feasibility of the initial development activities. The two major roadway improvements, Gabilan Extension and reconstruction of the US 101Moranda Road interchange, proposed as mitigation measures for the proposed project will require substantial funding that cannot be provided at the initial stages of this development nor completely by the proposed development alone. Therefore, triggers were determined for the two major roadway improvement projects.

Gabilan Extension Development Level Trigger

Analysis was conducted at intersections and roadway segments along San Vicente Road to determine at what development level the extension of Gabilan Drive needed to be implemented to support project traffic. The traffic analysis indicated that the most critical point of constraint is the intersection of San Vicente Road and Front Street. The capacity of the eastbound left-turn movement, Front Street to San Vicente, during the PM peak hour is the critical movement at the intersection. Under background

conditions, the intersection was shown to meet traffic signal warrants. Analysis indicates that with the installation of a signal at the intersection, acceptable levels of service, LOS D, will be maintained at the intersection with up to 50% of the project development traffic added to the roadway system. It should be noted, that though intersection levels of service may be acceptable, the number of left-turning vehicles under background conditions (545 during the PM peak hour) indicates the need for a second left-turn lane and subsequent widening of San Vicente Road to receive the two left-turn lanes. With 50% of the project development traffic added to the roadway system, an additional 350 trips would be added to the left-turn movement during the PM peak hour.

Based on roadway segment analysis conducted along San Vicente Road, LOS D operations along the roadway can be maintained with up to 75% of the project traffic added to the roadway system. However, as previously discussed, the intersection of San Vicente Road and Front Street would be unable to serve this level of development and would create spill over onto adjacent streets, such as West Street, that provide an alternate access to San Vicente Road.

US 101 and Moranda Road Interchange Improvement Development Level Trigger

The existing freeway ramps at Moranda Road and US 101 are not designed to accommodate existing traffic volumes. The addition of project traffic, as well as background traffic, would compound the need for improvement of the ramps. The US 101 southbound off-ramp to Moranda Road will be the constraint on any further development. Analysis of ramp capacities indicate that LOS D operations can be maintained on the ramps with up to 25% of the project traffic added to the roadway system.

Intersection level of service analysis indicates that with signalization of the ramp termini intersections, up to 50% of the project development traffic can be accommodated; However, even with the signalization of the intersections, the ramps would be inadequate to serve this level of development.

Traffic Impact Fees

Funding for the above described mitigation measures, as well as others described in the previous section, will be obtained via traffic impact fees imposed upon the project by both the City of Soledad and The Transportation Agency for Monterey County (TAMC). Mitigation of the project impacts would be in the form of payment of traffic impact fees estimated for the project.

Local Intersection Impacts

The above significant impacts will be reduced to a less than significant level through the implementation of one or more of the following actions:

a. The applicant shall construct circulation improvements as specified by the city and outlined above;

b. The applicant shall pay traffic impact fees per the city traffic impact fee ordinance in effect at the time the applicant requests building permits;

c. For any improvement that will not be constructed by the applicant or mitigated through payment of impact fees per city impact fee ordinance, the applicant shall pay a fair share of the improvement

The City's forthcoming traffic impact fee (TIF) program mentioned in item b above is to be adopted August 15, 2008. The City TIF identifies fees per single-family unit and multi-family unit to be collected from proposed development and used towards identified improvements to the roadway system within and

serving the City of Soledad. Mitigation of the project impacts would be in the form of payment of City of Soledad's traffic impact fees estimated for the project. The City of Soledad Impact Fee schedule is included in Appendix E.

Regional Transportation Impacts

The identified freeway segment and interchange ramp improvements cannot be completely funded by a single development. In lieu of one single project absorbing the total cost of freeway widening, a regional development impact fee program has been established for state highways and regional roads within Monterey County. The Transportation Agency for Monterey County (TAMC) implements the fee program based on the 2004 TAMC "Nexus Study for Regional Development Impact Fee." The payment of fees is considered mitigation for project impacts to freeway facilities. This contribution to the regional fund shall be in addition to any other city fees and project mitigation measures. Should the widening of the freeway and improvement of interchanges be deemed infeasible or not part of the fee program, the impact should be considered significant and unavoidable.

Project Area Roadway System

Primary access to the site will be provided via extensions of San Vicente Road, West Street, and Orchard Lane. Each of the roadways will be extended into the project area with connections to a completely new roadway system of collectors and local roads that will serve each of the residential and commercial areas of the project.

Future Roadway Classification

Projected daily volumes and the city's criteria for roadway designation were used to determine the designation of each of the new major roadways. Projected volumes are based on the same trip generation estimates and assignment methodology described earlier in this chapter. Traffic associated with other pending non-residential projects was also included in the projected volumes.

Traffic projections indicate that only West Street, between the project boundary and J Street, will meet arterial criteria. San Vicente Road and Orchard Lane will meet collector road criteria throughout their extent. All other roadways will meet criteria for classification as local roadways. All new streets should be designed to meet city standards. As part of the planned golf course, there will be a need to provide golf cart crossings along project roadways. Due to large traffic volumes and vehicle speeds, at-grade golf cart crossings should not be provided along streets classified as collectors or arterials.

Future Intersection Control

With implementation of the future roadways described above, several new intersections will be created. Peak hour signal warrant checks were completed for each of the new intersections. Results indicate that only the intersection of West Street and H Street will meet signal warrants. Projected peak hour volumes at all other intersections within the project area will not be large enough to require signalization.

Transit and Pedestrian Analysis

It can be assumed that some of the project trips could be made by transit. Assuming up to 3% transit mode share, which is probably the highest that could be expected, yields an estimate of 76 AM and 97

PM transit trips during each of the peak hours. This demand along with existing and other future demand for transit service will justify the need for establishing a plan and implementation of a transit system to serve the City of Soledad as a whole.

Pedestrian facilities in the project area will consist primarily of sidewalks along the streets. Sidewalks will be provided along virtually all streets and at intersections within the project area. There are no existing bicycle facilities that can be extended into the project area. The residential uses of the project along with existing and future neighborhoods will justify the need for a continuos bicycle facility system throughout the City of Soledad. A draft City Bike Plan that identifies proposed future bicycle facilities is currently being processed and is expected to be adopted in late 2007. All pedestrian and bicycle lanes of the project should provide for future connection to existing sidewalks and streets as well as planned bicycle facilities.

Year 2030 Long-Term Analysis

Long-term traffic analysis of the proposed development levels for the project as well as long-term land use growth and transportation improvements within the entire City of Soledad indicate that the development levels will have an adverse impact on the major regional facilities serving Soledad. The proposed project as well as other development projects within the City of Soledad will be required to contribute to the regional development impact fee program as described under near-term project conditions.

APPENDIX B

DRAFT CITY OF SOLEDAD MIRAMONTE SPECIFIC PLAN

Draft

CITY OF SOLEDAD

Miramonte Specific Plan







Prepared by

EMC Planning Group

August 16, 2017

Draft

CITY OF SOLEDAD

Miramonte Specific Plan

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1.0

INTRODUCTION

Section 1.0 of the Miramonte Specific Plan ("specific plan") provides a summary of the specific plan, a detailed project description, a description of the existing conditions and constraints, the relationship of the specific plan to applicable legislation, and a discussion regarding consistency of the specific plan with the City of Soledad General Plan (general plan).

Section 1.0 is organized into the following subsections:

1.1 Vision for the Miramonte Specific Plan Area

1.2 Purpose of the Specific Plan

1.3 Plan Summary

1.4 Authority and Specific Plan Requirements

1.5 Relationship to Existing Plans and Policies

1.6 Specific Plan Process

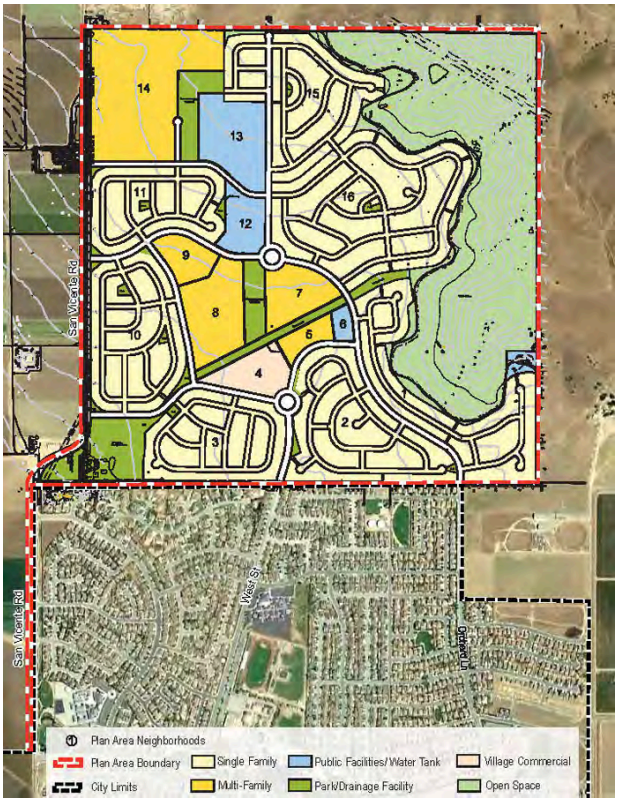
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1.8 General Plan Conformance

1.9 Using the Specific Plan

1.1 Vision for the Miramonte Specific Plan Area

The Miramonte Specific Plan provides an opportunity to enhance Soledad's image as an attractive residential city through the creation of diverse and attractive residential neighborhoods



centered on parks and a commercial center. The specific plan provides for neighborhood-oriented development with ample parks and open space to promote outdoor recreation and leisure. It provides safe pedestrian and bicyclist routes to the specific plan area's (plan area's) elementary school and middle school parks, and to neighborhood shopping. The development within the plan area will offer an array of housing types intended to be affordable to Soledad's current and future workforce, including its teachers, police and firefighters, and the Soledad Prison employees. The specific plan and development



of the plan area will play an important role in the growth and evolution of the city, and will contribute significantly to the housing supply for the city and the Monterey region.

1.2 Purpose of the Specific Plan

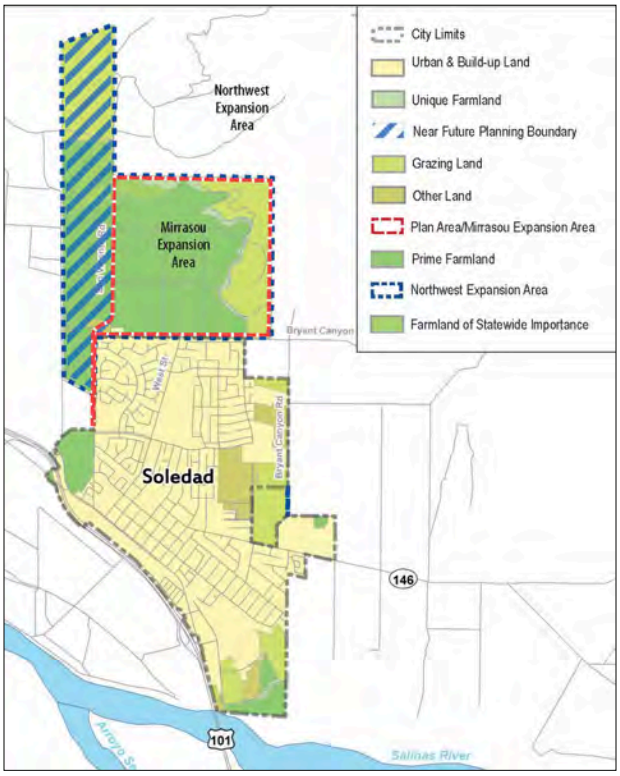
The purpose of the specific plan is to systematically implement the Soledad General Plan (General Plan) land use and development provisions pertaining to the General Plan designated Mirrasou Specific Plan Area in an orderly and comprehensive manner. The specific plan also provides information relevant to expansion of the city's Sphere of Influence. The specific plan accomplishes these purposes through the establishment of land use, infrastructure, public services, financing provisions, and programs to direct future development of the area. The specific plan provides a balance between growth, public infrastructure, and services, and provides for financing mechanisms to ensure that the development pays its fair share of capital costs and on-going maintenance requirements. Additionally, phasing parameters, outlined in Section 6.0, ensure that infrastructure and services are in place as needed for each phase of development.

The specific plan includes project zoning, development standards, and design guidelines that implement the vision for the plan area, land use provisions, and the General Plan's goals, policies and standards relating to the southern portion of the Mirrasou Specific Plan Area. The specific plan is intended to be used by applicants in designing and formulating their development plans, and by the city in reviewing and approving development applications in the plan area.

1.3 Plan Summary

Specific Plan Area Location

The plan area is located east of U.S. Highway 101 on the northern edge of the City of Soledad (city) approximately 35 miles southeast of the Monterey Peninsula and 85 miles southeast of San Jose (see Figure 1-1, Plan Area Location). The City of Gonzales is located nine miles to the north and the City of Greenfield is located nine miles south of the plan area along U.S. Highway 101. The approximate 647-acre project site consists of six parcels: Assessors Parcels Numbers (APN) 417-151-082, 417-151-084, 417-151-089, 417-151-090, 417-151-091, and 417-151-092. Portions of the following parcels





0 20 miles

Source: ESRI 2017

Figure 1-1

Specific Plan Area Location

Miramonte Specific Plan

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will be dedicated for expansion of the San Vicente Road right-of-way and the park/drainage facility: 257-081-005, 257-091-009, and 257-091-012. The boundaries of the specific plan are shown in Figure 1-2, Specific Plan Area.

Existing Site Features

The plan area consists primarily of agricultural land used for vineyards and row crops, and grazing. The topography is comprised of a natural slope from the southwest corner of the plan area to the northeast, with steeper slopes located at the eastern boundary. The majority of the plan area ranges in elevation between approximately 180 and 600 feet above mean sea level. A cluster of farm buildings and associated trees are located at the southwestern corner of the plan area, and the remains of a row of eucalyptus trees, which were cut down in early 2017, line the side of San Vicente Road. Two pumping houses and equipment are located along southern boundary. A reservoir is located near the northeast corner of the plan area, and a water tank is located along the eastern boundary. Dirt access roads run at various locations within the plan area. The plan area is otherwise vacant of structures and other physical features. Figure 1-3, Aerial Photograph – Property Characteristics, presents the plan area property characteristics.

Specific Plan Objectives

The specific plan proposes a mix of uses be developed on currently undeveloped land designated for future build-out by the City of Soledad 2005 General Plan. The plan objectives are as follows:

- Provide a mixed-use development of housing, parks, schools, fire and/or police sub-station, and neighborhood commercial uses to serve the local area and provide a balance of uses;
- Preserve the scenic hills above the 400-foot elevation contour as open space for passive recreational use, with directed public access, space for infrastructure to serve the plan area, alternative energy, a community room or clubhouse, and gracing;



- Provide a range of moderate-income housing types on a variety of lots for the existing and future residents of Soledad;
- Provide housing for senior citizens and farmworkers;
- Reserve land for commercial development to allow for future economic growth within the city and assist in maintaining a local jobs/housing balance and reducing vehicle trips;



- Provide complete streets to serve the plan area and connect to the surrounding road network, directing most trips by way of San Vicente Road;
- Provide interconnected public parklands to serve the recreational needs of the development and surrounding community;

- Support the local economy by increasing income within the plan area through permits, fees, property taxes, and job creation.
- Provide a storm water drainage system that retains post-development runoff within the plan area and aids in recharging the groundwater basin; and



Land Use and Circulation Description

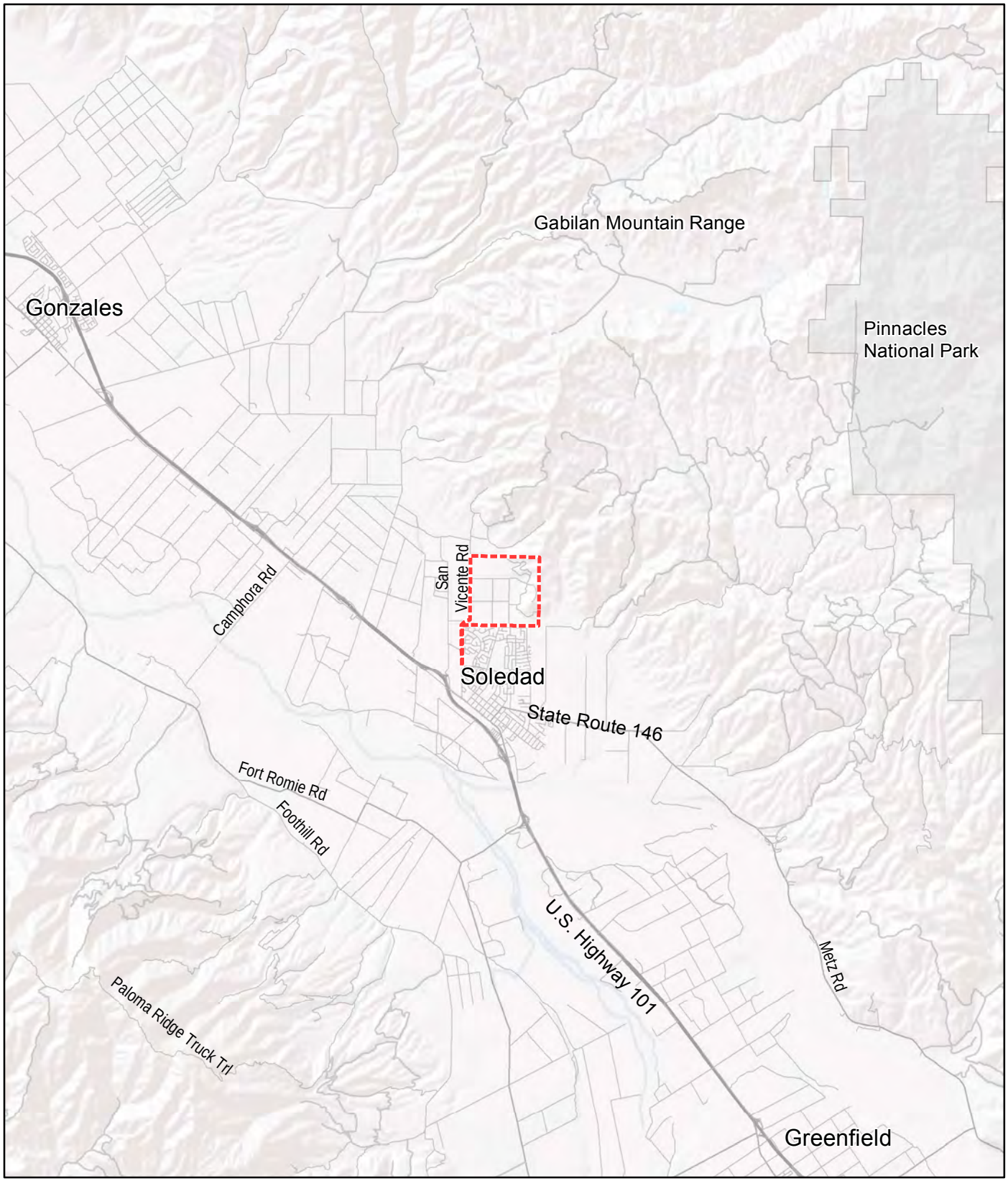
The specific plan proposes a mixed-use development consisting of approximately 1,353 low density residential units, 507 medium density residential units, 132 senior housing units, 400 farmworker housing units, between 75,000 and 120,000 square feet of retail commercial space, open space, and parks. Land uses are arranged around a core area of neighborhood commercial and higher density residential uses. Some parcels within the core area provide a mixed use opportunity. The specific plan accommodates a variety of residential types, including apartments, townhouses, and detached homes on small and large lots. The specific plan also proposes two school sites (one elementary school and one middle school), a fire/police substation, paved pathways, and a trail system within the hillside open space. The specific plan land use diagram is shown in Figure 1-4, Miramonte Specific Plan Land Use Diagram, and the proposed land uses are summarized in Table 1-1, Land Use Summary.

Future development entitlements may include, but are not be limited to, a sphere of influence amendment, annexation, general plan amendment and specific plan adoption, zone changes (including pre-zoning and zoning), a tentative subdivision map, development agreement(s), improvement plans and final map(s), and architectural and/or site plan review. These entitlements are discussed in more detail in Section 6: Implementation.

Table 1-1 Land Use Summary

Land Use	Zone(s)	Acreage	Residential Units	Commercial Square Feet
Low Density Family Residential	MMSP-R-1	295.3	1,353	
Medium Density Residential	MMSP-R-V	31.3	507	
Senior Housing	MMSP-R-V	6.6	132	
Farmers' Village	MMSP-R-V/MMSP-MU	42.6	400	0 – 20,000
Neighborhood Commercial	MMSP-C-V/MMSP-MU	9.0		75,000 – 100,000
Schools and Public Facilities	MMSP-R-1, PF	28.7		
Parks and Open Space	PF, OS	189.6		
Collector Streets		29.8		
San Vicente Road		14.1		
Total		**647.0**	**2,392**	**75,000 – 120,000**

Source: EMC Planning Group 2017



Source: Esri 2017

Figure 1-2

Specific Plan Area

Miramonte Specific Plan

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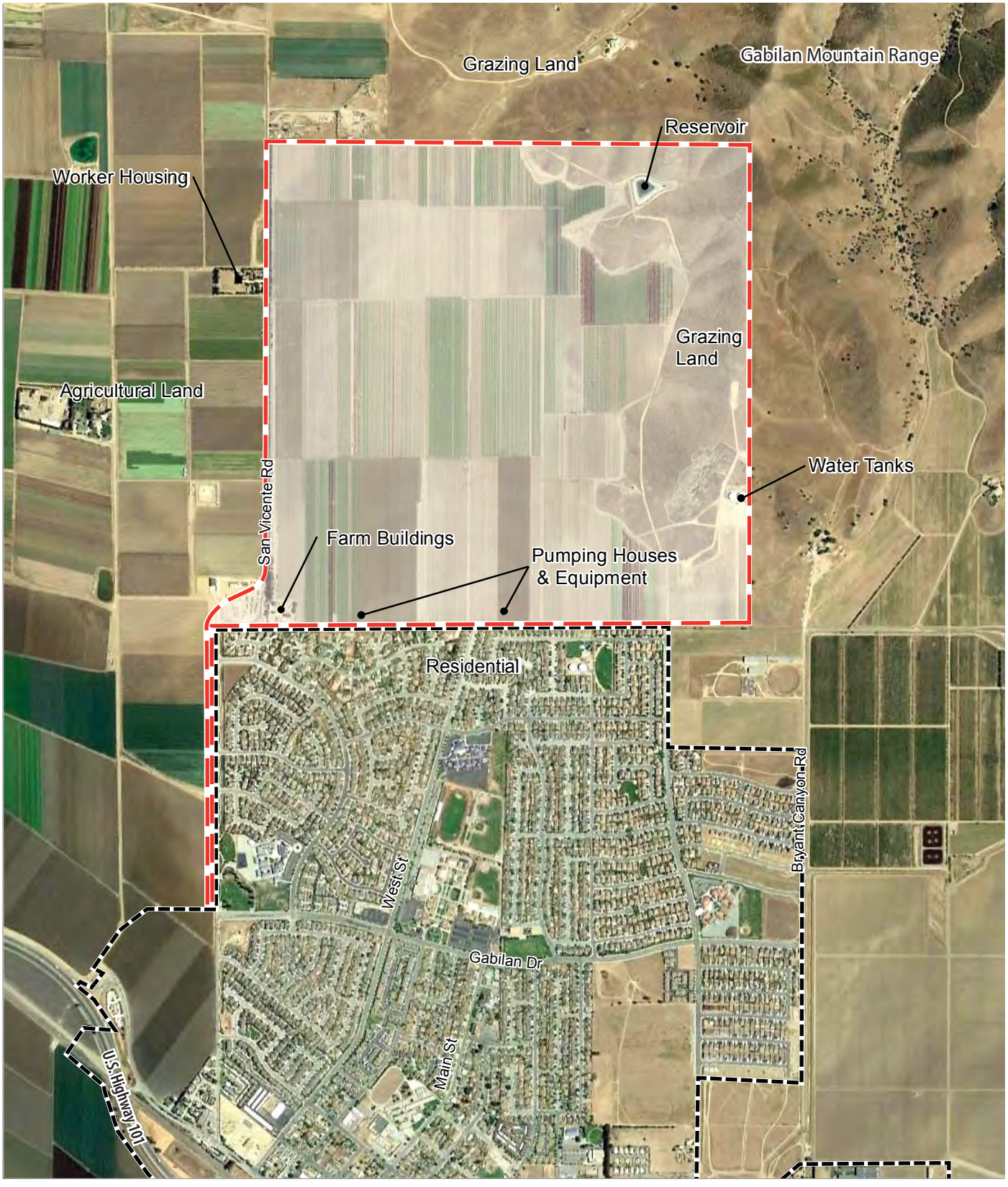
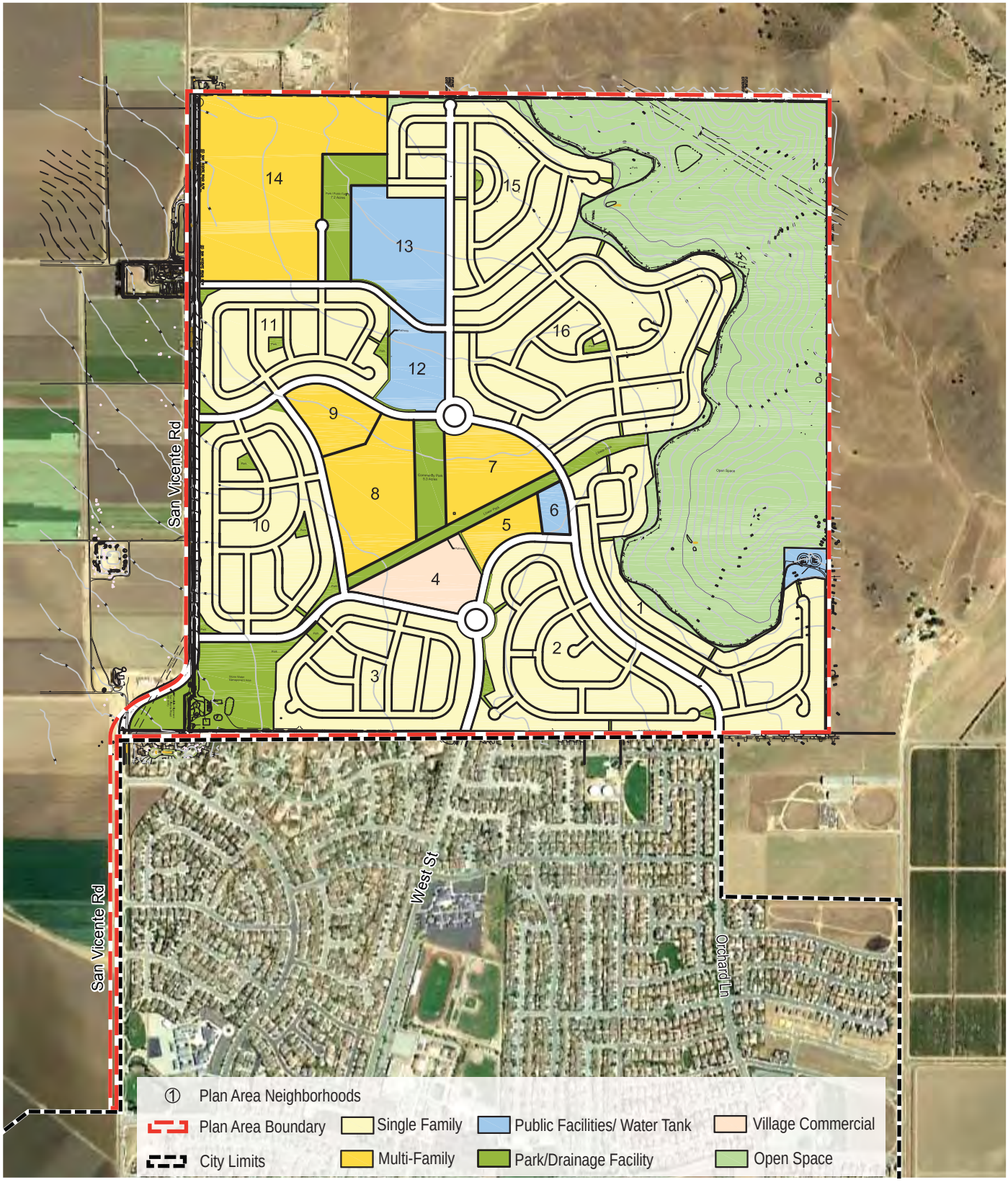


Figure 1-3

Aerial Photograph-Property Characteristics

Miramonte Specific Plan

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Source: Google Earth 2017

Figure 1-4

Miramonte Specific Plan Land Use Diagram

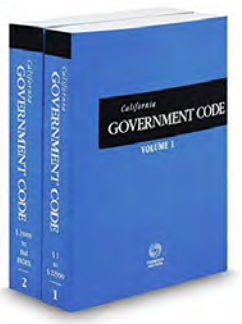
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The plan area will be served by a series of collector streets that tie into the city's existing collector and arterial street system. Local streets and bicycle paths will provide access to residential areas, the neighborhood commercial area, parks, and schools.

Projected Population

Based on the anticipated mix of land uses, a population projection has been developed. The population projection uses U.S. Census Bureau data for Soledad for the low density and medium density housing, and custom estimates for the specialty housing for senior and farmworker housing. Table 1-2, Population Estimate, provides the estimated population for the buildout of the plan area.

1.4 Authority and Specific Plan Requirements



Specific plans are authorized by California Government Code Sections 65450 through 65457. This law authorizes adoption of a specific plan for the systematic implementation of an area covered by a local general plan. The specific plan implements the goals and policies of the general plan, serves as an extension of the general plan, and can be used as both a policy and a regulatory document.

The purpose of the specific plan is to implement the vision of the general plan by providing goals, policies, programs, development standards, and design guidelines to direct future development within a plan area.

Specific plans must be consistent with the applicable elements of the general plan. The following excerpt identifies the content requirements for specific plans defined in Government Code Section 65451).

Section 65451. Content of specific plans

(a) A specific plan shall include a text and a diagram or diagrams that specify all of the following in detail:

(1) The distribution, location, and extent of the uses of land, including open space, within the area covered by the plan.

(2) The proposed distribution, location, and extent and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential

Table 1-2 Population Estimate

Land Use	Units	Persons per Unit	Population
Low Density Residential	1,353	3.5	4,736
Medium Density Residential	507	3.3	1,673
Senior Housing	132	1.7	224
Farmers' Village	400	8.0	3,200
Total	2,392	--	9,833

SOURCE: EMC Planning Group 2017, United States Census Bureau 2015, Larson 2015, The Paul Davis Partnership 2017.

NOTE: Low and medium density residential is based on U.S. Census Bureau data; Medium density residential includes land designated as Affordable Housing. Senior housing based on 70% couples and 30% singles; Farmers' Village based on Tanimura & Antle farmworker housing in Spreckels and proposed farmworker housing in Castroville.

facilities proposed to be located within the area covered by the plan and needed to support the land uses described in the Plan.

(3) Standards and criteria by which development will proceed, and standards for the conservation, development, and utilization of natural resources, where applicable.

(4) A program of implementation measures including regulations, programs, public works projects, and financing measures necessary to carry out paragraphs 1), 2), and 3) above.

(b) The specific plan shall include a statement of the relationship of the specific plan to the general plan.

Furthermore, California Government Code Section 65453 and Section 65454 reads as follows:

Section 65453. Adoption/amendment procedure

(a) A specific plan shall be prepared, adopted, and amended in the same manner as a general plan, except that a specific plan may be adopted by resolution or by ordinance and may be amended as often as deemed necessary by the legislative body.

(b) A specific plan may be repealed in the same manner as it is required to be amended.

Section 65454. Consistency with the General Plan

No specific plan may be adopted or amended unless the proposed plan or amendment is consistent with the
General Plan.

This specific plan has been prepared pursuant to state law and complies with all requirements.

1.5 Relationship to Existing Plans and Policies

The specific plan is a tool for implementing the general plan. It is both a component of a general plan, as the general plan is amended to incorporate the specific plan area and designation, and a separately adopted general plan implementation document. The specific plan effectively provides a link between implementing policies of the general plan and individual development proposals within a defined area.

The Miramonte Specific Plan includes precise design standards and guidelines for the development of land which supersede the city's existing Zoning Code, Public Works Standards, and other applicable regulations for the plan area. Where the specific plan is silent, city codes effective upon the date of complete development entitlement applications shall apply. This specific plan has been adopted by the City Council by ordinance.

1.6 The Miramonte Specific Plan Process

In 2016 the City of Soledad received an application initiated by Nader Agha for a proposed specific plan and related vesting tentative map (the Miramonte Subdivision) for the Mirrasou Specific Plan Area identified in the 2005 General Plan. The proposed Miramonte Subdivision vesting tentative map is shown as Figure 1-5, Miramonte Subdivision Vesting Tentative Map. The proposed Miramonte subdivision is a revision to a previously proposed and similar project on approximately 920-acres for which an Environmental Impact Report (EIR) was prepared and certified by the City of Soledad City Council in 2010 (Miravale III Specific Plan). The Miravale III Specific Plan project was not approved. The Miravale III Specific Plan included portions of the Mirrasou Specific Plan Area, San Vicente West Specific Plan Area and the Northwest Expansion Area identified in the city's 2005 General Plan.

The city undertook an update to the previously-prepared specific plan. After review of the Miramonte Subdivision vesting tentative map by the city's traffic engineer and planning staff, modifications were made to the project design to improve internal circulation, including a more direct connection to San Vicente Drive from the southern portion of the plan area and secondary access connections for two of the neighborhoods. The revisions suggested for inclusion in the Miramonte Specific Plan and for the Miramonte Subdivision vesting tentative map are summarized on Figure 1-6, Miramonte Subdivision Proposed Vesting Tentative Map Revisions. This refined land use diagram, as shown previously on Figure 1-4, Miramonte Specific Plan Land Use Diagram, is the controlling map for development within the plan area.

1.7 Environmental Review - CEQA

An addendum to the certified Miravale III Specific Plan Final EIR has been prepared in accordance with the California Environmental Quality Act (CEQA) for the City of Soledad. The EIR Addendum evaluates the Miramonte Specific Plan as described above, against the Miravale III Specific Plan Final EIR. The evaluation provides the justification for the CEQA findings necessary to use the previously-certified EIR as the CEQA document for the currently proposed specific plan. The EIR Addendum addresses potential environmental effects from implementation of the Miramonte Specific Plan and once certified is intended to serve as a project and program EIR document for all of the Miramonte planning area. The EIR Addendum applies to future development projects, tentative maps and other discretionary applications processed pursuant to the adopted specific plan.



Upon filing of development applications, the city shall make a specific plan consistency determination. Applications determined to be consistent with this specific plan may rely on the certified EIR and EIR Addendum, or may be determined to be exempt from or limited in additional environmental review required pursuant to CEQA. Where an application is deemed to be inconsistent with this specific plan, subsequent environmental review and a specific plan amendment may be required.

1.8 General Plan Conformance

State law requires that no specific plan may be adopted or amended unless the proposed plan or amendment is consistent with the jurisdiction's General Plan (Government Code Section 66454). The City of Soledad's General Plan Land Use Diagram designates areas adjacent to the city where it will eventually grow and extend public services over the next twenty or more years. These areas are designated "Expansion Area/Specific Plan Required" (expansion area). There are five designated expansion areas: North Entry Commercial Specific Plan Area, San Vicente West Specific Plan Area, Mirrasou Specific Plan Area, Miravale II Expansion Area, and the Northwest Expansion Area. The area encompassed by this specific plan is primarily within the Mirrasou Specific Plan Area. Approximately1.28 acres of the specific plan are within the Northwest Expansion Area and approximately 9.71 acres are within the San Vicente West Expansion Area. Approximately 2.05 acres are located outside any expansion area. A specific plan is required by the city in advance of annexation, entitlement approvals, and development. It is noted that the Miramonte Specific Plan is for a portion of the Mirrasou Specific Plan Area; the Mirrasou Specific Plan Area consists of 1,165 acres, of which 650 are considered developable and the specific plan area within the Mirrasou Specific Plan Area encompasses 633.8 acres, of which 483.4 are developable.

Table 1-3, General Plan Development Potential, below, provides a summary of the General Plan "holding capacity," which is the number of dwelling units, commercial and industrial floor space, etc., that can be accommodated based on the amount of land designated for these uses.

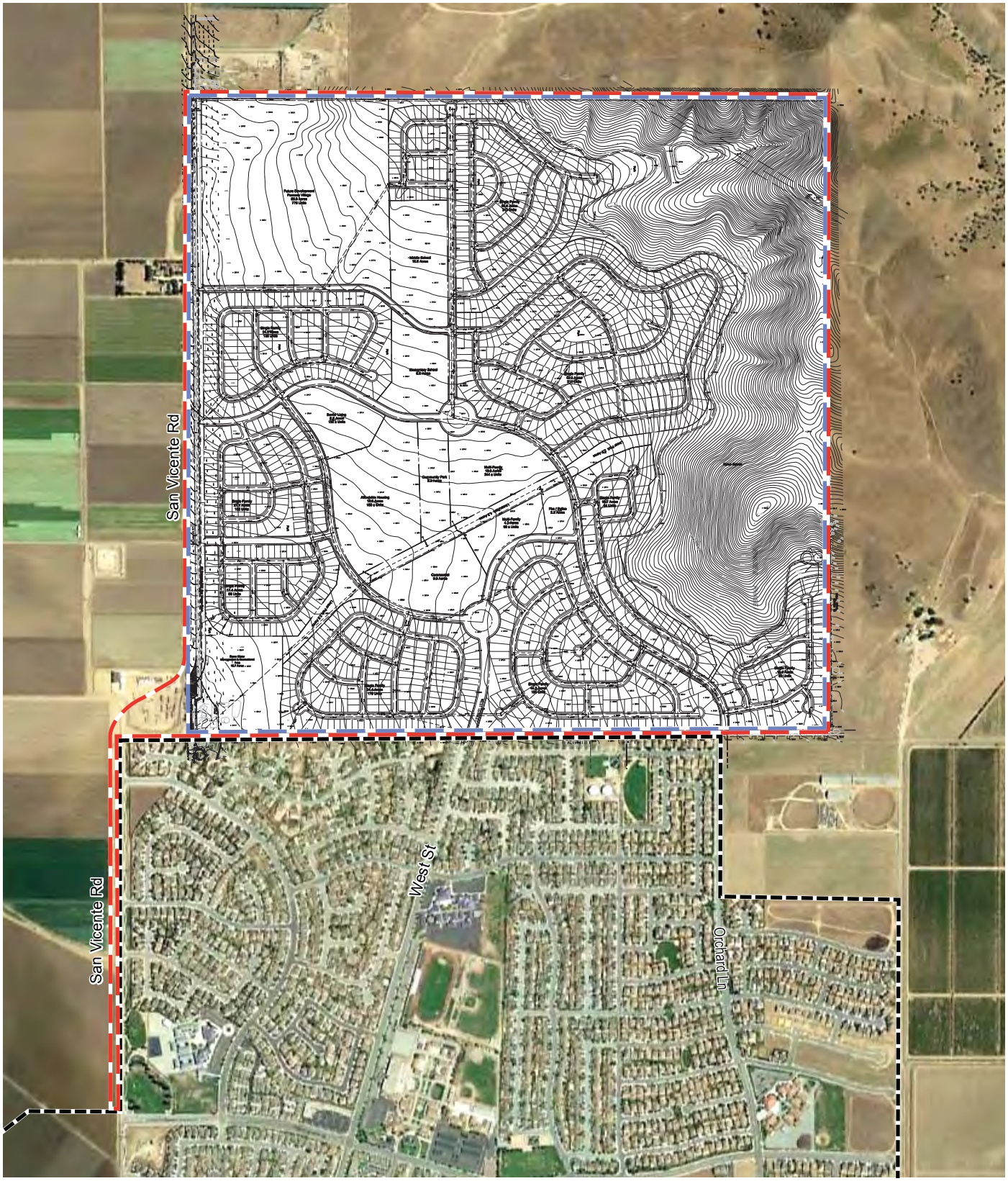
Table 1-3 General Plan Development Potential

Land Use	Within City Limits	Within Expansion Areas	Total*
Residential	4,254 dwelling units	10,317 dwelling units	14,571 dwelling units
Commercial	951,351 square feet	2,554,680 square feet	3,506,030 square feet
Parks and Open Space	278	429 acres park and 515 acres open space	707 acres park and 515 acres open space

Source: City of Soledad General Plan 2005, Table 11-1

* May vary from original 2005 source table due to rounding, or addition errors in source table

The specific plan land uses are illustrated in Figure 1-4, Miramonte Specific Plan Land Use Diagram, and summarized in Table 1-4 below. The city's general plan considers these locations to be illustrative only, and, instead, establishes development objectives for each specific plan area that must be met, and these are noted also by Table 1-4, General Plan Land Use Consistency. The Miramonte Specific Plan Area is approximately 55 percent of the overall Mirrasou Specific Plan Area.

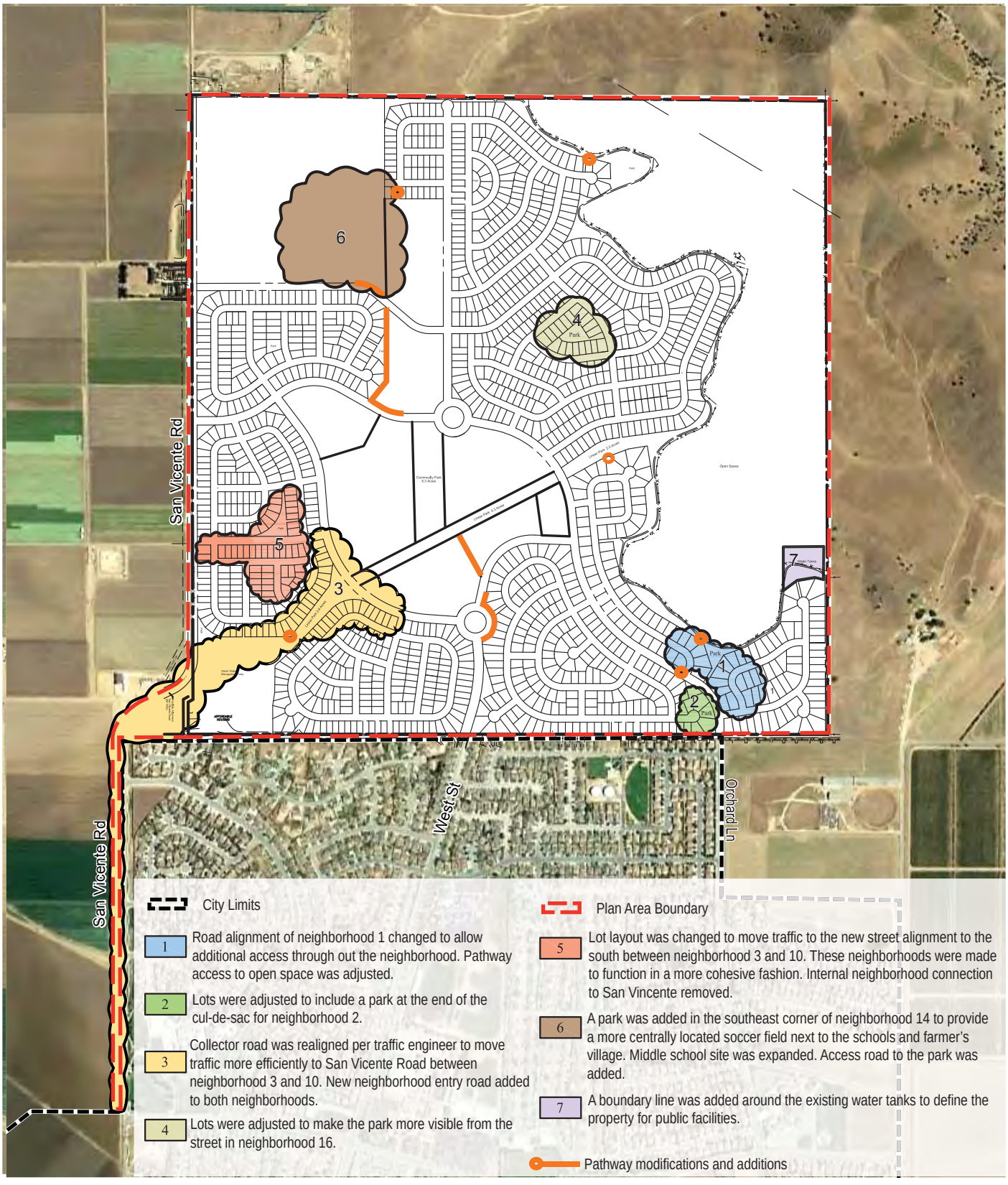


Source: Google Earth 2017, Bestor Engineers, Inc. 2017

Figure 1-5

Miramonte Subdivision Vesting Tentative Map

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Source: Google Earth 2017, Bestor Engineers, Inc. 2017

Figure 1-6

Miramonte Subdivision Proposed Vesting Tentative Map Revisions

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Table 1-4 General Plan Land Use Consistency

Land Use	General Plan Total Expansion Area Development Potential	Mirrasou Specific Plan Area Development Potential	Miramonte Specific Plan Development Potential
Residential	10,317 dwelling units	1,867 dwelling units	2,392 dwelling units
Commercial	2,554,680 square feet	100,000 square feet	75,000 to 120,000 square feet
Parks and Open Space	302 acres park and 515 acres open space	50* acres park and 515 acres open space	39.2 acres park and 150.4 acres open space

Source: City of Soledad General Plan 2005, page 11-19 and Table 11-1

Note: Acreage is incorrectly listed on Soledad General Plan 2005, Table 11-1

As shown in Table 1-4, General Plan Land Use Consistency, the specific plan exceeds the residential unit allowance as provided in the Mirrasou Specific Plan Area by 525 units, although 400 of the additional units are envisioned as farm worker accommodations. The city's general plan has identified a total development potential of 10,317 dwelling units within its five expansion areas; 6,500 of these units were identified within the Northwest Expansion Area, adjacent to the western boundary of the Mirrasou Specific Plan Area. The Miramonte Specific Plan represents the full residential buildout potential for the Mirrasou Specific Plan Area as well as 525 units of the identified residential potential of the Northwest Expansion Area. The specific plan effectively consolidates growth into a smaller geographic area, effectively preserving agricultural land and open space. For consistency, a general plan amendment is required to identify a reduced development potential of 525 units in the Northwest Expansion Area.

Because it does not encompass the entire Mirrasou Specific Plan Area, the specific plan also provides less than the expansion area target amount of parkland and open space. Most of the open space within the Mirrasou Specific Plan Area would be provided to the north of the plan area, where there is more than twice as much hillside land above the 400-foot elevation. The city's general plan has a goal of parks-to-population ratio goal of five acres per 1,000 residents (Goal 2 of the parks and recreation chapter). Policy PR-Ia of the general plan requires three acres per 1,000 residents. Considering the general plan target of five acres of open space and parkland per 1,000 residents target, the specific plan would need to provide approximately 50 acres of parkland (9,833 estimated residents x 5.0 acres). The specific plan provides for 150.4 acres of open space and approximately 39.2 acres of park for a total of 189.6 acres.

1.9 Using the Specific Plan

Specific Plan Organization

The specific plan guides the form and timing of growth within the plan area. Detailed concepts, development standards, and design guidelines are provided to ensure that all projects within the plan area are consistent with the goals of the specific plan.



The specific plan is divided into the following sections:

Section 1 – Introduction – In addition to identifying the vision, purpose and authority of the Miramonte Specific Plan, the introduction provides a summary of the specific plan, describes the planning process, and explains how the specific plan will be used.

Section 2 – Land Use – Establishes land uses, development standards, and design guidelines for future residences and commercial ventures, and addresses the issue of affordable housing. Neighborhood character and features are discussed in this section as well. This section also presents information regarding the necessary Monterey County Local Agency Formation Commission (LAFCO) boundary amendments, including a sphere of influence amendment and annexation.

Section 3 – Circulation –Includes the circulation concept and guidelines required to support the proposed neighborhood design. Each street type is individually described and illustrated within this section. Information on pedestrian, bicycle, and transit provisions is also presented.

Section 4 – Parks and Recreation –Opportunities for parks and recreation within the plan area are identified and described in this section. Corresponding design elements to guide development of these passive / active recreation areas can also be found in this section.

Section 5 – Public Facilities and Services – This section describes the types of facilities and services that will be needed to serve the plan area residents including water, wastewater, storm drainage, sewer, fire, police, and schools.

Section 6 – Implementation - Addresses the implementation challenges and phasing parameters of the specific plan. Timing and funding of public facilities and the maintenance of future development are also addressed in this section.

Controlling Documents

The specific plan and the Development Agreements for properties within the plan area are the controlling documents for future development. If the specific plan is silent on a matter addressed by the General Plan, then the General Plan shall govern. Similarly, where the specific plan is silent on a matter addressed by other various city plans or ordinances, the relevant plan or ordinance shall govern. However, where there are differences between the specific plan provisions and the General Plan or city ordinances, the specific plan and/or Development Agreement(s) shall take precedence.

Implementing the Specific Plan

Upon adoption, the specific plan will be the primary tool in the review and approval process of the precise development proposal such as tentative subdivision maps, site plans, improvement plans, and final map(s) within the established plan area boundary. The specific plan includes a set of goals, policies, and standards that establish development regulations within the plan area. Responsibility for interpretation of the goals, policies, and standards of the specific plan lies with the City of Soledad. The specific plan's goals, policies, and standards shall be utilized in conjunction with the city's General Plan and where necessary the zoning and subdivision codes during the project approval process.

Along with the accompanying Development Agreement, the Miramonte Specific Plan will be implemented through the use of the City of Soledad's subdivision, conditional use permit and site plan review processes. Individual projects shall be developed consistent with the land use designations and circulation plans shown in the specific plan's land use and circulation plans, and with the policies and implementation measures contained in the specific plan. Requests for modifications to the land uses or zoning standards identified in the specific plan are subject to review and approval by the city, provided they are in substantial conformance with city goals and the goals of the specific plan. Tentative subdivision map(s) must be consistent with the requirements of this specific plan. Tentative map(s), site plans, and conditions of approval shall incorporate the infrastructure, public facility, financing and development standards and requirements of the specific plan. The specific plan identifies the procedural implementation measures for development of the plan area in Section 6.0.

Variations and Amendment of Specific Plan

Minor variations to the specific plan may be approved by the Community Development Director or Planning Commission upon referral. Such variations may include minor changes to land use and zoning district boundaries related to adjustments to interior roadway alignments and infrastructure as a result of more detailed engineering information. Variations may be approved by the Planning Director or, at their discretion, by the Planning Commission through the Planning Director's referral or, in the event of denial by the Community Development Director, through appeal by the applicant.

Amendments to the specific plan will require review and recommendation by the City of Soledad Planning Commission and approval by the city Council. Pursuant to California Government Code, Section 65453, there is no limit to the number of times the specific plan may be amended in any year.

Severability Clause

In the event that a California or Federal Court of competent jurisdiction holds any regulation, condition, program, or portion of this plan invalid or unconstitutional, such portions shall be deemed separate, distinct, and independent provisions, and the invalidity of such provisions shall not affect the validity of the remaining provisions thereof.

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2.0

LAND USE

The Miramonte Specific Plan's land use goals and policies shape the character of development within the plan area. The land use designations for the plan area, along with permitted uses, intensities of use, design guidelines, and development standards are established in this section.

Section 2.0 is organized into the following subsections:

2.1 Land Use Goals and Policies

2.2 LAFCO Boundary Amendments

2.3 Land Use Concept

2.4 Zoning Districts

2.5 Visual Elements

2.1 Land Use Goals and Policies

The following goals establish the framework for the specific plan's Land Use Plan (Figure 1-4, Miramonte Specific Plan Land Use Diagram). All specific plan goals and policies are included for ease of reference in Appendix A of this plan.

Land Use Goals

LU – 1 Include the plan area within the city's sphere of influence and city limits prior to the city accepting development plans (i.e. improvement plans, final maps, site plans, etc.).

LU – 2 Protect open space and agricultural areas by encouraging more dense development, reducing the geographic extent of the Mirrasou Specific Plan Area, and reducing the residential development potential of the Northwest Expansion Area.

LU – 3 Provide a range of land uses and facilities that meet the needs of plan area residents, that are economically beneficial to the city, and can be developed into an integrated and cohesive residential and recreation-oriented community centered around parks, trails, schools, and shopping and embracing and connecting to the hillside open spaces to the east.

LU – 4 Create new, attractive residential neighborhoods that are in close proximity to parks, open spaces, schools, and neighborhood commercial, and provide a variety of housing types and densities within low, medium, and high density neighborhoods to serve a range of housing needs and income levels, including low income levels, of the broader Soledad community and region.

LU – 5 Provide adequate open space, parks and recreational facilities that are centrally located and linked throughout the plan area, to meet the needs of the plan area residents and the community.

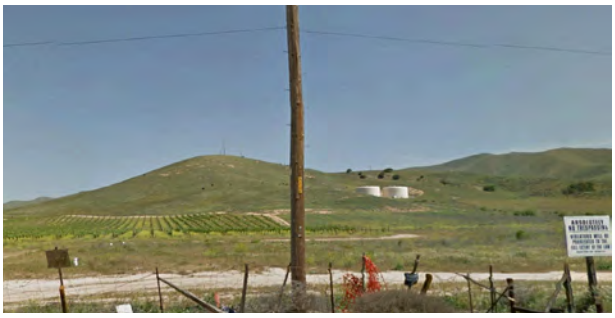
LU – 6 Include land uses that serve the local population and provide employment opportunities for residents of the plan area and immediate surrounding communities. And locate shopping, employment centers, recreation, and parks within walking distance from the homes that use these specific plan components.

LU – 7 Provide public facilities, infrastructure, and services commensurate with new development so as to adequately meet the needs of all development and future residents in the plan area in a manner that is financially self-supporting.

LU – 8 Provide an integrated storm drainage and open space system that incorporates best management practices to adequately control storm flooding problems, protect water quality, and provide park space.



LU – 9 Protect the scenic vistas of the hills above Soledad through careful siting and design standards that minimize grading and visibility of new hillside development, and keep development, unless otherwise specified herein, below the 400-foot elevation contour.



Land Use Policies

LU – A Utilize the development potential of the Mirrasou Specific Plan Area and reduce the development potential of the Northwest Expansion Area by 525 units.

LU – B Apply to LAFCO for inclusion in the city's sphere of influence and annex land in anticipation of development.

LU – C Incorporate affordable housing within the plan area, including housing for senior citizens, agricultural workers, and low and very low income households. Consistent with the Inclusionary Ordinance, provide at least six percent of units for very low income households, six percent for low income households, and eight percent for moderate income households. Of the total affordable units proposed for the plan area, 39 percent should be affordable to very low income households, 19 percent to low income households, and 42 percent to moderate income households; and 30 percent of medium density housing units should be available as rentals.

LU – D Commercial buildings should be placed at or near the front setback and oriented toward the street to define and enliven the street. Commercial buildings and multifamily residential buildings should be oriented towards streets and where possible should not back onto parks, trails, plazas, or other public spaces. The "front" facade and building entrances and windows should wrap around all public elevations of the buildings. Where buildings do back onto public spaces, care must be taken to present a finished



architectural design, and utilities, loading areas, trash receptacles, service doors, and similar must be integrated or screened in these areas.

LU – E Garages and parking lots should be de-emphasized and moved back from the street and/or out of direct view.

LU – F Climatic factors, such as prevailing winds, shade trees, window and door orientation, and the positioning of buildings on the site should all be coordinated to maximize energy conservation.

LU – G Landscaping should be installed between the street and the sidewalk buffering the sidewalk from traffic and providing a pedestrian scale to walkways and a landscaped parkway along the street edge. Breaks should be provided to allow pedestrian access from on-street parking spaces. Ample street trees should be provided.

LU – H Major and minor gateways should be



designed to provide a consistent feel of arrival. Use of water, stone, and living landscape materials, along with signs and public art will provide for dynamic gateways within the plan area. Each residential neighborhood should be distinct, with neighborhood gateways that are unique to the neighborhood, but consistent with the overall specific plan character.

LU – I Residential buildings should provide an attractive architecture that emphasizes welcoming facades on all street- and public-facing elevations. Architecture and landscape should combine for a unified character within each neighborhood.

LU – J Concurrent with recordation of a final subdivision map, developers shall provide compensation for conversion of Prime Farmland or Farmland of Statewide Importance to urban uses using one of four methods, at the discretion of the city:

a) provide the in-kind direct purchase/acquisition of an agricultural mitigation easement at a 1:1 ratio and dedicate the easement to an agricultural land trust or other qualifying entity; and/or

b) if available, purchase agricultural banked mitigation credits at a 1:1 ratio from a qualifying entity; and/or

c) pay an in-lieu mitigation fee, which amount shall be determined by the city prior to project approval. The amount of the fee should reasonably be expected to lead to the reservation of agricultural land. Said fee shall be kept by the city in a fund established specifically for agricultural land mitigation purposes; and/or

d) implement other innovative approaches as approved by the city that results in the preservation of agricultural land within areas targeted by the city.

2.2 LAFCO Boundary Amendments

As of adoption of the specific plan, the plan area is not within the city's sphere of influence boundary nor is it within the city limits. The plan area is within the urban growth boundary,

and development of the area is anticipated by the city's general plan and in a memorandum of understanding between Monterey County (county) and the city. LAFCO approval will be required to amend these boundaries prior to development. Figure 2-1, City of Soledad Existing and Proposed City Limits and Figure 2-2, City of Soledad Existing and Proposed Sphere of Influence, shows the existing and specific plan-proposed sphere of influence and city limit lines in the vicinity of the plan area.

Cortese Knox Hertzberg Act

The Cortese Knox Hertzberg Local Government Reorganization Act of 2000 establishes procedures for local government changes of organization, including city incorporations, annexations to a city or special district, and city and special district consolidations. Upon application by petition or city council resolution, approval of boundary changes is considered by local agency formation commissions.

Monterey County Local Agency Formation Commission

Monterey County LAFCO is the agency that oversees boundary changes within Monterey County. LAFCO's mission is to encourage orderly growth of local government agencies, preserve agricultural lands and open space, and discourage urban sprawl. The city will submit an application to LAFCO for amendment of the city's sphere of influence boundary and annexation of territory to include the plan area boundary.

Government Code Section 56300 requires that LAFCO establish written policies and procedures and exercise its powers consistent with these policies and procedures. The State Legislature's intent is for these policies and procedures to encourage planned, well-ordered, efficient urban development patterns with appropriate consideration of preserving open-space and agricultural lands within those patterns.

Sphere of Influence Policies

LAFCO will generally apply the following policy guidelines in consideration of sphere of influence determinations with consideration given to the particular local conditions and circumstances of each agency and community (refer also to Monterey County/City of Soledad Memorandum of Understanding, included as Appendix B and incorporated into the specific plan by reference). Note that policy guidelines deemed less-relevant to the plan area have been omitted from this presentation.

LAFCO Sphere of Influence Policy	Specific Plan Consistency
II-1. LAFCO intends that its Sphere of Influence determination will serve as a master plan for the future organization of local government within the county. The spheres shall be used to discourage urban sprawl; limit proliferation of local governmental agencies; encourage efficiency, economy and orderly changes in local government; promote compact, community centered urban development; and minimize adverse impacts on lands classified as prime agriculture.	The proposed sphere of influence boundary is consistent with the geographic development limits established by the memorandum of understanding between the city and Monterey County. Therefore the proposed sphere of influence accomplishes the stated purposes of this policy and is consistent with this policy.
II-2. The Sphere of Influence lines shall be a declaration of policy which shall be a primary guide to LAFCO in the decision on any proposal under its jurisdiction. Every determination made by LAFCO shall be consistent with the Spheres of Influence of the agencies affected by those determinations.	The specific plan's sphere of influence will set the geographic limits within which the city will apply to the LAFCO for annexations, consistent with this policy (see Specific Plan Land Use Goal LU-1).

LAFCO Sphere of Influence Policy	Specific Plan Consistency
II-3. Any proposal which is inconsistent with an agency's adopted Sphere of Influence shall not be approved until LAFCO, at a noticed public hearing, has considered an amendment or revision to that agency's Sphere of Influence.	The specific plan's sphere of influence will set the geographic limits within which the city will apply to the LAFCO for annexations, consistent with this policy (see Specific Plan Land Use Goal LU-1).
II-4. Inclusion within an agency's Sphere of Influence does not assure annexation to that agency. LAFCO shall evaluate boundary change proposals as they relate to all of the relevant factors listed in the [Cortese Knox Hertzberg] Act.	The specific plan's sphere of influence will set the geographic limits within which the city will apply to the LAFCO for annexations, consistent with this policy (see Specific Plan Land Use Goal LU-1). The city will phase annexations and development within the plan area consistent with the phasing parameters presented in Section 6.4, Phasing. The phased annexation is consistent with this policy.
II-7. The adopted Sphere of Influence shall reflect city and county General Plans, plans of regional agencies, growth management policies, annexation policies, resource management policies, and any other policies related to ultimate boundary or service area of an affected agency unless those plans or policies conflict with the legislative intent of the [Cortese Knox Hertzberg] Act. Where inconsistencies between plans exist, LAFCO shall rely upon that plan which most closely follows the Legislature's directive to discourage urban sprawl, direct development away from prime agricultural land and open-space lands, and encourage the orderly formation and development of local governmental agencies based upon local conditions and circumstances.	The proposed sphere of influence boundary is consistent with the geographic development limits established by the memorandum of understanding between the city and Monterey County. The Memorandum of Understanding acknowledges the need for development to occur beyond the present city limits, and directs that growth to those areas where that growth will have the least adverse impact on agricultural lands. The proposed sphere of influence boundary is consistent with the geographic development limits established by the Memorandum of Understanding, and therefore, the specific plan is consistent with this policy.
III-1. LAFCO will designate a Sphere of Influence for each local agency representing the agency's probable physical boundary within a zero to twenty year period.	The geographic limits for the city's ultimate sphere of influence are established in the memorandum of understanding, and the specific plan sphere of influence boundaries are consistent with those limits.
III-3. LAFCO may establish urban transition areas within adopted Spheres of Influence to discourage premature pressure for development. Transition areas consist of the residual lands between designated urban service areas and the ultimate Sphere of Influence boundary. This land will most likely be used for urban expansion within approximately five (5) to twenty (20) years. Territory included within urban transition areas, but not within urban service areas, generally will not be considered eligible for annexation to receive urban services within five years.	Although there are no urban transition areas included within the specific plan, the city will phase annexations and development within the plan area consistent with the parameters presented in Section 6.4, Phasing. This approach will result in the gradual and orderly conversion of land to urban uses, consistent with this policy.
III-5. Territory not in need of urban services, including open space, agriculture, recreational, rural lands or residential rural areas, shall not be assigned to an agency's Sphere of Influence unless the area's exclusion would impede the planned, orderly and efficient development of an area.	This policy is applicable to the Hillside Open Space. The specific plan includes the Hillside Open Space within the proposed sphere of influence, and anticipate eventual annexation, so that the city or an assigned entity can provide maintenance of the designated trail system, provide alternative energy, provide other recreational activities, locate infrastructure to serve the plan area (e.g. water tank), conduct fire fuel reduction as needed, and provide efficient emergency response services within the area. The area is to be placed under a conservation easement with land uses limited to those specified by this plan or further activated in a development agreement.
IV-14. For annexations and Sphere of Influence applications, Monterey County LAFCO shall consider as part of its decision whether the proposal mitigates its regional traffic impacts by, for example, monetary contribution to a regional transportation improvement fund as established by the Transportation Agency for Monterey County or otherwise.	Development within the plan area would pay the Transportation Agency for Monterey County regional traffic impact fee, and therefore is consistent with this policy.

LAFCO Sphere of Influence Policy	Specific Plan Consistency
IV-15. For annexations and Sphere of Influence applications, Monterey County LAFCO shall consider as part of its decision whether the city in which the annexation or Sphere of Influence amendment is proposed has included certain goals, policies, and objectives into its General Plan that encourage mixed uses, mixed densities, and development patterns that will result in increased efficiency of land use, and that encourages and provides planned, well-ordered, efficient urban development patterns.	Consistent with the city's general plan, which identifies the plan area as part of the Mirrasou Specific Plan Area, the specific plan includes numerous densities and types of residential units, including more than 40 percent medium and high density (up to about 23 units per acre) units, which will provide for an efficient land use development pattern. The specific plan includes more units within its boundaries than were planned for the overall Mirrasou Specific Plan Area, and includes elimination of the remaining Mirrasou Specific Plan Area as a future urban development area. The specific plan is consistent with this policy

Annexation Policies

LAFCO will generally apply the following policy guidelines in consideration of annexation determinations with consideration given to the particular local conditions and circumstances of each agency and community (refer also to Monterey County/City of Soledad Memorandum of Understanding, included as Appendix B and incorporated into the specific plan by reference). Note that policy guidelines deemed less-relevant to the plan area have been omitted.

Preservation of Open Space and Agricultural Land

Pursuant to Government Code Section 56301, one of the primary focuses of LAFCO policy is the preservation of open space and agricultural lands located outside city boundaries. Most of the land within the plan area is designated as Prime Farmland on the Important Farmlands Map. Monterey County LAFCO uses the agricultural and open space policies presented below in assessing boundary change applications that include Prime Farmland. The Memorandum of Understanding, presented in the next section, has specific requirements regarding the conversion of agricultural land to urban uses.

Housing and Jobs

Monterey County LAFCO considers the following housing and jobs policy when making determinations on boundary amendments.

Monterey County/City of Soledad Memorandum of Understanding

The city entered into a memorandum of understanding with Monterey County on March 15, 2016. The Memorandum of Understanding is included in Appendix B and incorporated into the specific plan by reference. The Memorandum of Understanding binds the city to the following principals related to growth beyond the current sphere of influence.

The Memorandum of Understanding further requires that timing of annexation applications submitted for consideration by LAFCO will be based upon the approval by the city of a specific plan, which includes a phasing plan, a plan for services and public facilities and financing plans that demonstrate compliance with LAFCO standards. A specific plan must address development phasing and sequence of improvements. The phasing programs shall ensure that adequate supporting public services, retail, parks, schools, and other uses are in place to support residential, institutional, and commercial uses. The specific plan includes a phasing program in Section 6.4, Phasing.

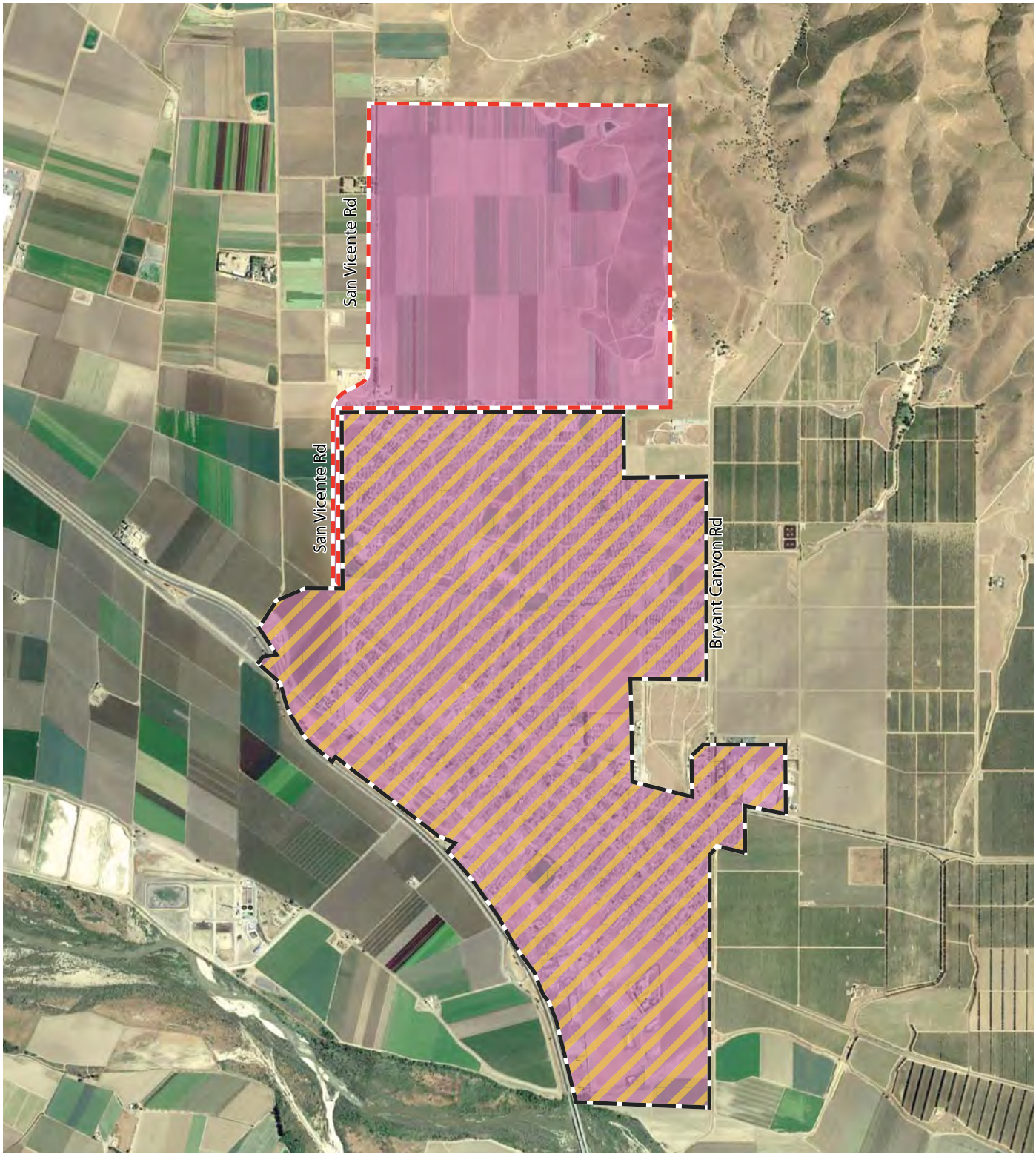
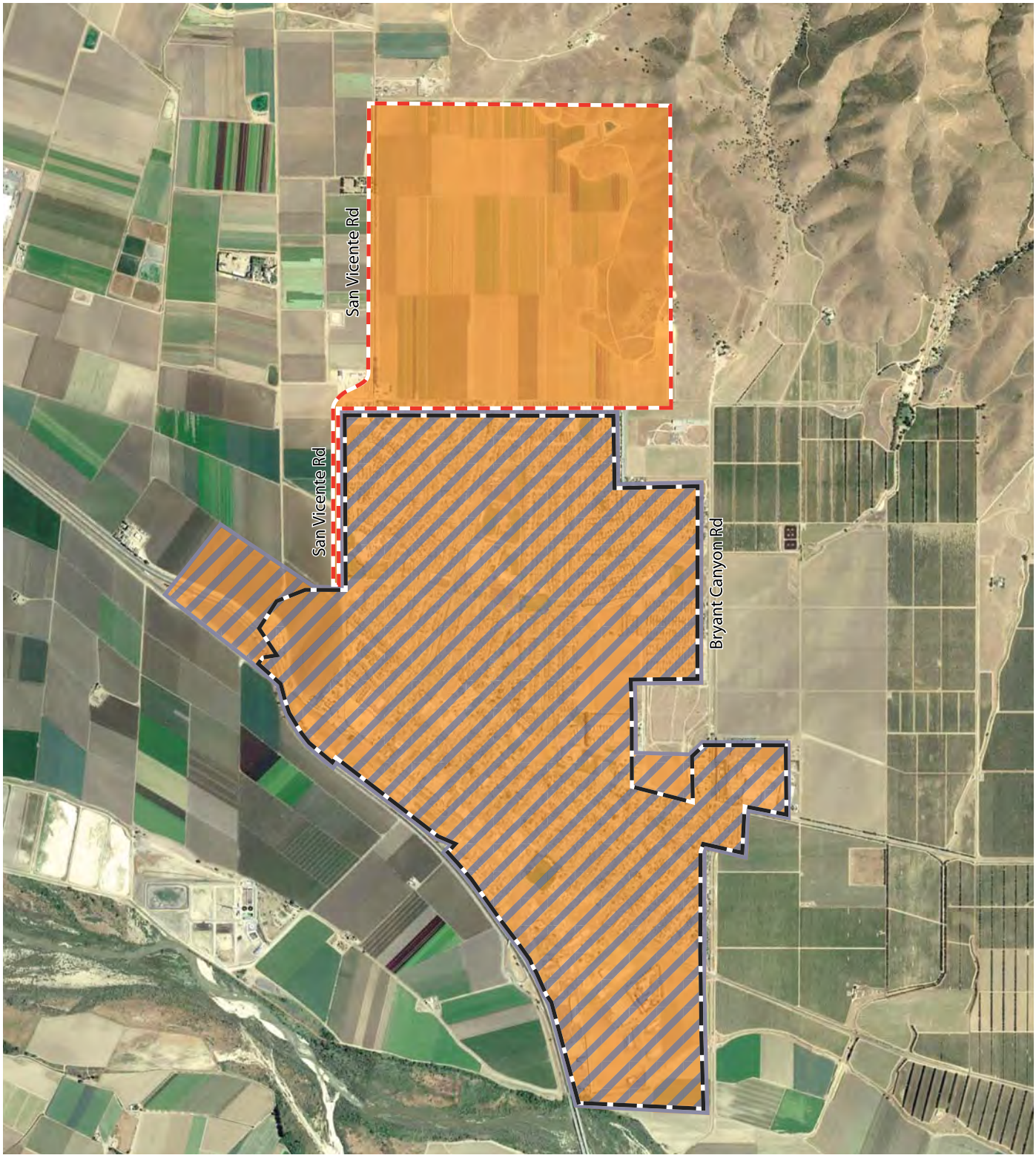


Figure 2-1

City of Soledad Existing and Proposed City Limits

Miramonte Specific Plan

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Source: Esri 2017

Figure 2-2

City of Soledad Existing and Proposed Sphere of Influence

Miramonte Specific Plan

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LAFCO Annexation Policy	Specific Plan Consistency
II-2. To the greatest possible extent, boundaries should follow existing political boundaries and natural or man-made features such as rivers, lakes, railroad tracks, and freeways. Where boundaries do not meet this standard, the proponent shall justify the reasons for non-conformance.	Exact annexation boundaries are not proposed within the specific plan, although a set of parameters are included to focus the order of land development. Boundaries are likely to follow the linear park and collector streets within the specific plan. These features will provide an interim buffer between urban development and the remaining agricultural lands. This guidance within the specific plan will ensure orderly annexation and consistency with this policy.
II-4. Whenever practicable, boundary lines of areas proposed to be annexed to cities and/or districts shall be located so that all streets and rights-of-way will be placed within the same jurisdiction as the properties which abut thereon and/or for the benefit of which such streets and rights-of-way are intended.	The plan area is bordered on the west by and served by San Vicente Road, an arterial street that provides traffic circulation to and from U.S. Highway 101. The portion of San Vicente Road adjacent to the plan area will be included in annexations, as will a strip of land to the south of the plan area necessary for ultimate expansion of San Vicente Road to four lanes. The specific plan is consistent with this policy
II-7. The following guidelines related to road right-of-way apply to all proposals submitted to LAFCO. a. The following should not be allowed: (1) City limits which include a portion of the road right-of-way. (2) Road islands of county maintained roads. (3) Islands of road caused by annexation on both sides. (4) Strip annexation roads. c. The following should be annexed to the city. These roads would have direct access to the annexing property and would serve the residents of the property: (1) Minor or local roads. (2) When the street will be used for the city sewer lines, water lines, or storm drains. (3) Piece-meal development by developer causing difficult coordination between two or more agencies. (4) Where the annexation will complicate drainage or traffic control.	The proposed sphere of influence includes the entirety of the right-of-way necessary for development of San Vicente Road, which borders the plan area to the west and provides access from the south. The specific plan boundary includes all of the local roads and utility easements necessary to serve future development within the plan area. The specific plan is consistent with this policy.
II-10. Boundaries should reasonably include all territory which would reasonably benefit from agency services.	The proposed boundaries encompass all of the areas that would need to receive services from the City of Soledad.
IV-1. Each proposal should be consistent with the appropriate city or county general and specific plans. Where the proposal does not abide by these plans, the proponent shall specify the reasons for plan non-conformance.	The specific plan includes additional residential units than proposed for the area in the General Plan. Therefore, the specific plan includes a General Plan amendment to transfer the additional units from other plan areas within the General Plan, so that overall General Plan build-out remains the same. Therefore the specific plan will be consistent with the General Plan and consistent with this policy.
VII-1. LAFCO shall discourage proposals that would have adverse financial impacts on the provision of governmental services or would create a relatively low revenue base in relationship to the cost of affected services. Applications shall describe related service and financial impacts (including revenues and expenditures) on the county, cities, and/or special districts and provide feasible measures which would mitigate such adverse impacts.	The specific plan would not have an adverse fiscal impact on the Soledad General Fund. Further, the specific plan requires the development to participate in special financing districts to fund maintenance of streets, storm drains, and parks providing a funding source outside of the Soledad General Fund in.

LAFCO Annexation Policy	Specific Plan Consistency
VII-3. Applications must indicate that the affected agencies have the capability to provide service. Territory shall be annexed to a city or special district only if such agency has or soon will have the capability to provide service.	The specific plan includes provision of a new fire station, a police substation, and parks that would facilitate cost effective provision of these services. The cost of these services is not anticipated to be substantially in excess of costs currently borne by development within the boundaries of the City of Soledad. The specific plan includes stipulations that the Miramonte development will participate in impact fee programs and special financing districts necessary to provide funding for the construction and operation of these facilities.
VII-6. LAFCO discourages proposals which will facilitate development that is not in the public interest due to topography, isolation from existing developments, premature intrusion of urban-type developments into a predominantly agricultural area, or other pertinent economic or social reason.	The plan area is contiguous to existing development on the south, and provides three street connections to the existing developed parts of the city. Urban development, excepting water tanks and trails, is kept below the 400-foot elevation contour in accordance to General Plan policies. The specific plan includes a set of phasing parameters that are designed to prevent premature conversion of agricultural land. The specific plan is consistent with this policy.
VIII-3. Proposals which contain territory which is not within a city or district's adopted urban service area and have an expected build-out extending beyond a five- to seven-year period may be considered appropriate for phasing. For the purpose of this policy, "phasing" shall be defined as a planned incremental approval of a project and "buildingout" shall be interpreted as 70 to 80 percent developed. When an exception from this policy is desired, the proponent shall justify to LAFCO the reasons why phasing is not appropriate. Included within the justification for exception, the proponent shall demonstrate the jurisdiction's ability to provide necessary public services.	The plan area is currently outside the city's sphere of influence and urban service area. Build-out of the specific plan is expected to take more than seven years. The specific plan includes a set of phasing parameters that are designed to facilitate efficient provision of services, provide for adequate circulation, and prevent premature conversion of agricultural land. Because the specific plan includes a phasing program, it is consistent with this policy.
XIII-1. For annexations and Sphere of Influence applications, Monterey County LAFCO shall consider as part of its decision whether the city in which the annexation or Sphere of Influence amendment is proposed has included certain goals, policies, and objectives into its General Plan that encourage mixed uses, mixed densities, and development patterns that will result in increased efficiency of land use, and that encourages and provides planned, well-ordered, efficient urban development patterns.	Consistent with the city's general plan, which identifies the plan area as part of the Mirrasou Specific Plan Area, the specific plan includes numerous types of residential units, including more than 40 percent medium and high density (up to about 23 units per acre) units, which will provide for an efficient land use development pattern. The specific plan includes a mixed use overlay on several parcels. The Miramonte Specific Plan represents the full residential buildout potential for the Mirrasou Specific Plan Area as well as 525 units of the identified residential potential of the Northwest Expansion Area. The specific plan effectively consolidates growth into a smaller geographic area, effectively preserving agricultural land and open space. For consistency, a general plan amendment is required to identify a reduced development potential of 525 units in the Northwest Expansion Area. The specific plan is consistent with this policy.

LAFCO Agricultural and Open Space Policy	Specific Plan Consistency
II-1 . A Proposal must discuss how it balances the state interest in the preservation of open space and prime agricultural lands against the need for orderly development. (Government Code section 56001.) Proposals that fail to discuss this balance, in the opinion of the executive officer, will be deemed incomplete. Proposals may be denied if they fail to demonstrate to the satisfaction of LAFCO that the need for orderly development is balanced against the preservation of open space and prime agricultural lands.	The Memorandum of Understanding acknowledges the need for development to occur beyond the present city limits, and directs that growth to those areas where that growth will have the least adverse impact on agricultural lands. The proposed sphere of influence boundary is consistent with the geographic development limits established by the Memorandum of Understanding. The specific plan includes a set of phasing parameters that are designed to prevent premature conversion of agricultural land. Annexation boundaries are likely to follow the linear park and collector streets within the specific plan. These features will provide an interim buffer between urban development and the remaining agricultural lands.
	The Miramonte Specific Plan represents the full residential buildout potential for the Mirrasou Specific Plan Area as well as 525 units of the identified residential potential of the Northwest Expansion Area. The specific plan effectively consolidates growth into a smaller geographic area, effectively preserving agricultural land and open space. For consistency, a general plan amendment is required to identify a reduced development potential of 525 units in the Northwest Expansion Area. The intensification of development within the plan area will preserve the agricultural land within the remaining Mirrasou Specific Plan, estimated to be about 30 acres, as well as additional open space below the 400-foot contour, estimated to be about 90 acres. Within the plan area, about 150 acres of hillside land above the 400-foot contour will be preserved as open space, consistent with the city's general plan. The specific plan preserves agricultural land and open space and is consistent with this policy.
II-2. A Proposal must discuss its effect on maintaining the physical and economic integrity of agricultural lands. (Government Code section 56668 (a).) Proposals that fail to discuss their effect, in the opinion of the executive officer, will be deemed incomplete. Proposals may be denied if they fail to demonstrate to the satisfaction of LAFCO that the physical and economic integrity of agricultural lands is maintained.	The specific plan will result in the preservation of about 30 acres of agricultural land to the north of the plan area by way of consolidating residential units into the plan area. On an interim basis, the phased annexation of land will include broad buffers in the form of the linear parkway and collector streets to maintain agricultural lands separate from urban uses as development occurs within the plan area. Remaining agricultural land, whether interim or permanent, will be contiguous to other agricultural land, to facilitate efficient ongoing use for agriculture. With these measures built into the specific plan, the specific plan will be consistent with this policy.
II-3. A Proposal must discuss whether it could reasonably be expected to induce, facilitate, or lead to the conversion of existing open-space land to uses other than open-space uses. (Government Code section 56377.) Proposals that fail to discuss potential conversion, in the opinion of the executive officer, will be deemed incomplete. Proposals may be denied if they fail to demonstrate to the satisfaction of LAFCO that: a) they guide development or use of land for other than open-space uses away from existing prime agricultural lands in open-space use and toward areas containing nonprime agricultural lands (Government Code section 56377 (a)); and b) development of existing vacant or nonprime agricultural lands for urban uses within the existing jurisdiction of a local agency or within the Sphere of Influence of a local agency will occur prior to the development of existing open-space lands for non-open-space uses which are outside of the existing jurisdiction of the local agency or outside of the existing Sphere of Influence of the local agency (Government Code section 56377 (b)).	The specific plan will convert the agricultural land within the plan area to urban uses. This is consistent with the Memorandum of Understanding which establishes geographic development limits to direct growth to locations that will have the least adverse impact on agricultural lands. The specific plan includes a set of phasing parameters that are designed to prevent premature conversion of agricultural land. The specific plan will also permanently preserve 150 acres of hillside open space, located above the 400-foot elevation contour. The specific plan includes means of preserving agricultural land on an interim basis and permanently preserves open space land, and is consistent with this policy.

LAFCO Agricultural and Open Space Policy	Specific Plan Consistency
II-4. A Proposal must, if applicable, provide for pre-zoning (Government Code section 56375 (a)), and must demonstrate that it is consistent with the General Plans and Specific Plans of the existing local agency and any immediately adjacent local agency (Government Code sections 56375 (a) and 56668 (g)). Proposals may be denied if they are not consistent with such plans, or, if not pre-zoned, if the Proposal does not demonstrate to the satisfaction of LAFCO that the existing development entitlements are consistent with the local agency's plans.	The specific plan includes provisions for pre-zoning of land in conjunction with annexation applications, and therefore, is consistent with this Policy.

LAFCO Housing and Jobs Policy	Specific Plan Consistency
II-1. It is the policy of LAFCO that, consistent with section 56300 (a) of the Act, Proposals must demonstrate through both quantitative and qualitative methods the relationship between the Proposal and the surplus or deficiency of local and county-wide housing supply and demand, and employment availability and creation. Additionally, the Proposal must demonstrate how its pattern of land use and transportation complements local and regional objectives and goals for the improvement of air quality and reduction of greenhouse gas (GHG) emissions and local vehicle miles traveled (VMT). These factors and their impacts, if any, shall be considered by the Commission in acting upon the Proposal.	The Association of Monterey Bay Area Governments assigned the city a Regional Housing Needs Assessment housing target of 191 units for the 2014 – 2023 time period. The specific plan includes 2,392 housing units, which more than meets this target. The specific plan also includes housing for lower income households, seniors, and farmworkers. Development of the specific plan commercial uses and public services (e.g. schools, parks, public safety, etc.) and the increase in population resulting from new residential units creating demand, will result in the establishment of new jobs within the plan area and in the community of Soledad. The specific plan is designed to promote walking and bicycling, with an integrated trail system that connects every neighborhood to each other and to the schools and commercial area. The land use and circulation pattern will promote reduced vehicle miles for shopping and school trips. The specific plan provides much needed housing, additional job opportunities, and a trail system to reduce automobile trips. The specific plan is consistent with this policy.

Memorandum of Understanding Provision	Specific Plan Consistency
a) To limit future long-term development within the area shown on Exhibit 'A' [see Appendix B] and designated as "Urban Growth Boundary" (the "UGB"). The purpose of the UGB is to bound and enclose the land intended for development within the 2005 Soledad General Plan.	The plan area falls within the area that the Memorandum of Understanding identifies for future growth. The specific plan is consistent with this provision of the Memorandum of Understanding.
b) To manage development of land within the UGB utilizing the best available "sustainable" practices. The intent of the city is supported by city's General Plan Policy L-2, which partially reads as follows: "Further annexations to the city may occur when a) a substantial portion of the development capacity within the existing city limits has been developed, b) a substantial public benefit can be realized through the annexation, such as the provision of public open space, additional parkland, or the protection of scenic vistas, or natural resources..."	The specific plan includes about 150 acres of open space, about 35 acres of parkland, and two school sites. Scenic vistas are preserved by the provision of open space land above the 400-foot elevation contour. The specific plan is consistent with this provision of the Memorandum of Understanding.
c) To encourage proposals for infill development on vacant or underutilized sites within the existing city limits east of Highway 101 whenever possible, to avoid urban sprawl and postpone the conversion of agricultural land to urban uses.	Most of the annexed portion of the Miravale II Expansion Area is built out at this time, and will be further built out by the time the specific plan is adopted and entitlements are approved. The specific plan would provide additional land for future growth. The specific plan is consistent with this provision of the Memorandum of Understanding.

Memorandum of Understanding Provision	Specific Plan Consistency
d) To require specific plans to include residential densities that ensure a compact urban form that helps protect agricultural land from premature conversion.	The specific plan includes several densities and types of residential units, including more than 40 percent medium and high density (up to about 23 units per acre) units, which will provide for an efficient land use development pattern. The Miramonte Specific Plan represents the full residential buildout potential for the Mirrasou Specific Plan Area as well as 525 units of the identified residential potential of the Northwest Expansion Area. The specific plan effectively consolidates growth into a smaller geographic area, effectively preserving agricultural land and open space. The intensification of development within the plan area will preserve the agricultural land within the remaining Mirrasou Specific Plan Area, estimated to be about 30 acres, as well as additional open space below the 400-foot contour, estimated to be about 90 acres. Within the plan area, about 150 acres of hillside land above the 400-foot contour will be preserved as open space, consistent with the city's general plan. The specific plan is consistent with this provision of the Memorandum of Understanding.
e) To establish a Permanent Agricultural Edge for the purpose of maintaining a clearly defined northwest and southeast boundary between the urbanized incorporated areas of city and the agricultural areas within the unincorporated County as shown on Exhibit 'A' and identified as "Permanent Agricultural Edge" [see Appendix B]. A "Temporary Agricultural Edge" is hereby established east of Bryant Canyon Road, as specifically shown on Exhibit 'A'. The Temporary Agricultural Edge may be eliminated through an amendment to this Agreement.	The Permanent Agricultural Edge identified in the Memorandum of Understanding is not located within or adjacent to the plan area. No Permanent Agricultural Edge, as defined in the Memorandum of Understanding is required in the plan area. The specific plan is consistent with this provision of the Memorandum of Understanding.
f) To utilize agricultural buffers within the UGB to address the compatibility between the development of urban land uses and existing or planned agricultural uses. The city's General Plan requires development within or adjacent to designated agricultural areas to minimize conflicts with adjacent agricultural uses. The county requires an agricultural buffer as typically 200 feet in width and includes other vegetation, walls, or other screening deemed necessary to ensure that property owners on both sides of the buffer may enjoy full and unencumbered use of their property for its designated use without experiencing significant deleterious effect from neighboring use.	The Farmers' Village is the only specific plan component that is immediately adjacent to cultivated agricultural lands outside the plan area. No specific buffer is included because the Farmers' Village site is large enough to accommodate a buffer during the site planning process. On the east side and the remainder of the north side, a buffer to the ranchland is provided by the Hillside Open Space, the dirt roadway, and rear building setbacks of the adjacent houses in Neighborhood 1. On the west side, a buffer to the cultivated farmland is provided by San Vicente Road and rear building setbacks in Neighborhoods 10 and 11, the drainage basin/park, and landscape areas. The specific plan is consistent with this provision of the Memorandum of Understanding.
g) To actively participate with the county, LAFCO and other cities within the Salinas Valley to develop a Valley-wide Agricultural Land Mitigation Program to address the loss of agricultural land due to development and conversion to urban uses.	The plan area includes Prime Farmland that would be converted to urban uses. Four options for compensation for the loss of agricultural land are provided in the Memorandum of Understanding, as described in the section following this table. Development within the specific plan will participate in the established mitigation program, consistent with this provision of the Memorandum of Understanding.
h) To utilize permanent agricultural buffers along the UGB to ensure compatibility between the development of urban land uses and agricultural uses in the unincorporated area. The city agrees to actively participate with the county, LAFCO and other cities in the Salinas Valley to develop a Valley-wide Agricultural Buffer Program to ensure compatibility of urban land use with agricultural uses in the unincorporated area.	The Permanent Agricultural Edge identified in the Memorandum of Understanding is not located within or adjacent to the plan area. No Permanent Agricultural Edge is required in the plan area. The specific plan is consistent with this provision of the Memorandum of Understanding.

Compensation for conversion of Prime Farmland or Farmland of Statewide Importance to urban uses is required by the Memorandum of Understanding, using one of four methods, at the discretion of city to coincide with the time of the recordation of a final subdivision map (refer to Policy LU-J):

a) provide the in-kind direct purchase/acquisition of an agricultural mitigation easement at a 1:1 ratio and dedicate the easement to an agricultural land trust or other qualifying entity; and/or

b) if available, purchase agricultural banked mitigation credits at a 1:1 ratio from a qualifying entity; and/or

c) pay an in-lieu mitigation fee, which amount shall be determined by the city prior to project approval. The amount of the fee should reasonably be expected to lead to the reservation of agricultural land. Said fee shall be kept by the city in a fund established specifically for agricultural land mitigation purposes; and/or

d) implement other innovative approaches as approved by the city that results in the preservation of agricultural land within areas targeted by the city.

City Requests of LAFCO

The city will request, through a City Council resolution, an amendment to its sphere of influence to include the plan area, and a request for annexation of the territory. The city will submit the LAFCO reorganization application along with the specific plan, approving resolutions, pre-zone ordinance, and supporting documentation, including the plan for services, fiscal analysis, and California Environmental Quality Act compliance document. Together, these submittals will provide the city's justification for the reorganization request.

2.3 Land Use Concept

Development within the plan area should create inviting pedestrian-oriented neighborhoods through a safe and efficient circulation system and the provision of parks, schools, and neighborhood commercial uses that are readily accessible to residents. The site layout is an important component of realizing this goal. Streets and sidewalks within the core area should be lined with retail shops in the retail areas and welcoming front porches should be a primary feature in the residential areas. Parking lots and garages should be tucked behind buildings. In the low density residential areas, front porches and street connectivity should be emphasized over driveways and garages. The following overall design policies are designed to enhance the overall site layout to achieve the pedestrian oriented vision for the Miramonte Specific Plan Area.

The specific plan Land Use Plan sets forth the areas and configurations of each land use designation within the plan area: Low Density Residential, Medium Density Residential; High Density Residential; Neighborhood Commercial, Public Facilities, and Open Space. Each designation is consistent with the land use designations of the Soledad General Plan. The relationship of land uses within the plan area is illustrated in Figure 1-4, Miramonte Specific Plan Land Use Diagram. The land use diagram, along with

the lotting program, illustrated in Figure 2-3, Miramonte Specific Plan Land Use Diagram and Conceptual Lotting Program will guide the implementation and development of the plan area. The land use diagram and lotting program may be varied slightly to accommodate the more precise design of the final subdivision mapping, but the street, lot, and land use arrangements must be essentially the same as shown. City staff shall make findings that final tract maps are substantially consistent with Figure 1-4, Miramonte Specific Plan Land Use Diagram, and Figure 2-3, Miramonte Specific Plan Land Use Diagram and Conceptual Lotting Program.

Table 2-1, Land Use Data, summarizes the land use designations, identifies the approximate acreage of the land use distribution within the plan area, and presents the residential density and maximum lot yield for residential development. A detailed description of the specific plan's allowable land uses are provided below.

Table 2-1 Land Use Data

Land Use	Zoning District	Acreage	Residential	Commercial
Low Density Residential	MMSP-R-1	295.3	1,353 dwelling units	---
Medium Density Residential and Affordable Housing	MMSP-R-V	31.3	507 dwelling units	---
Senior Housing	MMSP-R-V	6.6	132 dwelling units	---
Farmers Village	MMSP-R-V MMSP-MU (overlay)	42.6	400 dwelling units	0 to 20,000 square feet
Village Commercial	MMSP-C-V MMSP-MU (overlay)	9.0	---	75,000 to100,000 square feet
Police & Fire Department	PF	2.0		
Elementary School	PF	8.0		
Middle School	PF	16.5		
Parks and Recreation	OS	39.2		
Open Space (Hillside)	OS	150.4		
Water Tank	PF	2.2		
Collector Streets ROW		29.8		
San Vicente Road ROW		14.1		
Total		647.0	2,392 dwelling units	75,000 to 120.000 square feet

Source: EMC Planning Group 2017

NOTE: Acreages are based on the Land Use Diagram and are approximate.
Low Density Residential includes the local streets, neighborhood parks, and connecting paths.
Zoning districts prefaced with MMSP are specific to the Specific Plan

This section provides an overview of land uses within the specific plan. Detailed land use and development standard information is presented in Section 2.3 Zoning Districts and Development Standards.

Residential

Approximately 2,392 residential units are planned to be located within the approximately 387.1 acres dedicated to residential uses in the plan area. The specific plan includes low, medium, and high density housing. The average overall gross density at buildout within the residential areas will be about 6.4 units per acre. The residential neighborhoods will contain a variety of housing types and lot sizes enhanced by ample open space and recreational amenities. Pedestrian and bicycle access pathways connecting residential streets with parks, schools, and/or commercial areas are included within the residential designation to allow flexibility in their location.

Low Density Residential

Low Density Residential neighborhoods provide a conventional residential approach characterized by detached low density homes and pedestrian friendly tree-lined streets. A variety of housing styles and elevations are encouraged, giving each neighborhood a distinctive character. Neighborhoods emphasize connections to parks and open space, schools, and trails by incorporating landscaped pedestrian paths and open ended cul-de-sacs. Flexibility is encouraged in setbacks, garage location, and home orientation to reduce monotony along the streetscape.

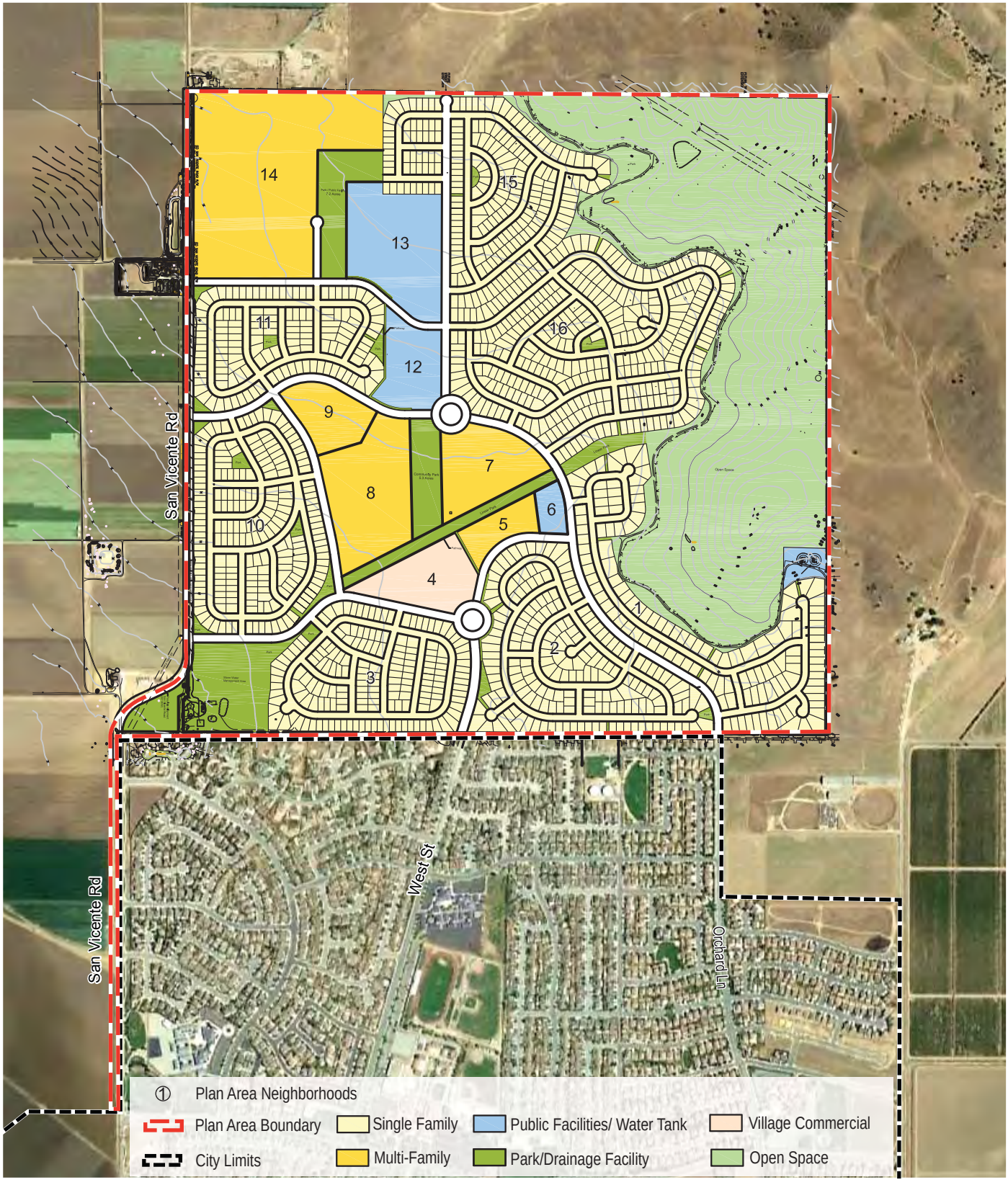
Low density residential neighborhoods on standard size lots (minimum lot size of 5,000 square feet and averaging about 6,000 square feet) are the predominant residential use, comprising just under half the total housing units. Lots in the hillier eastern edge of the plan area would be larger than average. Lots near San Vicente Road, as well as other lots throughout the designation, would be smaller than average, and provide a more affordable low density family detached housing opportunity. Duplexes and duets may also be constructed in this designation. Gross density will vary depending on incorporation of non-residential amenities; net density will be between six and ten units per acre, with a typical density of about seven units per acre.

Medium Density Residential

Medium Density Residential homes (10 - 23 units per net acre) will be located within the plan area core and at the northwestern corner of the plan area within the Farmers' Village. This designation provides for attached low density homes, duplex homes, triplex homes, apartments, cohousing, and single room occupancy housing. The sites are within walking distance to neighborhood parks, schools, and/or commercial areas. The Farmers' Village may be developed with a mixed use or integrated commercial component to provide convenient services to residents and neighbors. A senior housing or assisted living facility is designated for a 6.6-acre site within this designation. Many of these units will be affordable, as described in the following section.

Affordable Housing

The city's Housing Element and Inclusionary Ordinance include requirements for affordable housing in new developments. The specific plan will provide much needed affordable housing for Soledad, including housing in the "very low," "low," and "moderate" categories. It is also a



0 1,200 feet

Source: Google Earth 2017

Figure 2-3

Miramonte Specific Plan Land Use Diagram and Conceptual Lotting Program

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specific plan goal to provide workforce housing which will include smaller units that are more affordable by design. Specific details of how the affordable housing will be managed, such as sales price/rental limitations for restricted affordable housing and qualifying incomes of families, will be worked out through an affordable housing agreement between the developer and city. In general, housing developed at a density of up to 19 units per acre is expected to be affordable to households of moderate income, and housing developed at a density of 20 units per acre or greater is expected to be affordable to low or very low income households. Housing units built at a density of 20 units or more per acre automatically qualify as affordable under the State's housing guidance.

Housing Element Requirements

The city's Housing Element was adopted in 2009 for the 2009-2014 planning period, and the State Housing and Community Development Department lists it as in compliance with state requirements. The current planning period for jurisdictions in Monterey County is 2014-2023. Soledad's citywide Regional Housing Needs Assessment target for the 2014-2023 planning period is 46 very low, 30 low, 35 moderate, and 80 above-moderate housing units (191 total units). The specific plan will help the city achieve these housing targets.

The following Soledad Housing Element policies and programs are pertinent, but will be superseded when the next housing element is certified by the state. In particular, note that Policy 2.1 is not aligned with current Regional Housing Needs Assessment numbers, and will require revision next time the Housing Element is updated. In addition, the specific plan will add to the supply of areas within the city that have zoning appropriate to the provision of affordable housing.

a. Program 1.1.1: Amend the Sphere of Influence and adopt specific plans to guide development.

b. Program 1.2.1: Enter into development agreements that prescribe the proportion of very low-, low-, and moderate-income housing to be built in a project consistent with the city's Inclusionary Ordinance and Housing Element. Units shall be constructed concurrently with any above moderate-income housing. Alternative densities and housing types can satisfy the requirement if superior in design.

c. Program 1.2.4: Require specific plans for growth areas to incorporate a higher density residential designation and corresponding zone district that allows at least 30 units per acre on sites close to commercial services and existing or planned public transportation.

d. Policy 2.1: In specific plan areas, provide an integrated mix of housing types and affordability levels that closely approximate the city's 2007–2014 "fair share" housing allocation as follows:

   - 39 percent of units affordable to households of lower income (very low- and low-income)
   - 19 percent of units affordable to households with moderate incomes,
   - 42 percent of units affordable to households with above moderate incomes.

e. Program 2.1.1: Development agreements shall link housing affordability to housing type, design, and development density. A minimum density of 20 dwelling units per net acre, consisting of multi-family, housing above commercial use, and single-room occupancy (SRO) units is required for the very low- and low-income persons or families. A minimum density of 12 dwelling units per net acre is required for the moderate-income category. Exceptions apply for housing restricted by sales price or rent and income eligibility.

f. Program 2.1.2: 30 percent of units in each neighborhood shall be designed to accommodate rental households, including medium and higher density housing and second dwelling units and meeting these guidelines:

- Minimum average density of seven dwelling units per gross residential acre (not counting accessory dwelling units);
- Up to 10 percent being a second dwelling unit on the same lot (accessory units, duplex, etc.);
- At least 20 percent of units in new residential neighborhoods should be comprised of duplexes, tri-plexes, four-plexes and smaller multi-family housing (townhomes, apartments, etc.) of approximately 20 or fewer units and integrated within specific plan neighborhoods. Multi-family housing shall be integrated with low density residential development in form, scale, and architectural character.
- Promote rental availability, especially in multi-family apartments.

Inclusionary Ordinance Requirements

The inclusionary ordinance requires 20 percent of the affordable units to be restricted affordable units pursuant to execution of an Affordable Housing Agreement between the developer and city. Inclusionary units must, be affordable to the target income categories in the following proportions: eight percent—moderate income, six percent---low income and six percent—very low income. The ordinance establishes several development principles for development of inclusionary units. Section 17.41.050 A-5 states that "Inclusionary units should be similar in size and design to market rate units within the development." Section 17.41.140 reads "(1) The development shall provide for the dispersal of inclusionary units to the maximum extent feasible. (2) Multi-family buildings may contain any proportion of inclusionary units, but no inclusionary units should be located to or in the immediate vicinity of another inclusionary housing development." Affordable housing projects are not subject to these requirements.

Affordable Housing Compliance

The specific plan is a requirement under Housing Element Policy 1.1. The specific plan will provide approximately 2,392 attached and detached residential units over a 10 to 20 year timespan, potentially through about 2038. Depending on build-out pace, the 2014-2023 housing element planning period covers the first one-half to one third of that timespan.

Compliance under Current Regional Housing Needs Assessment. Based on the current Regional Housing Needs Assessment, the city needs to accommodate about 28 affordable units per year. Therefore the specific plan could, on its own, meet the city's affordable housing requirement by providing 280 affordable units over a 10-year

period or 560 affordable units over a 20-year period. The specific plan includes about 1,049 units that would be affordable due to deed restrictions (169 units) or a minimum density meeting the default density value of 20 units per acre for which affordability is assumed (481 units). Affordable units will be provided specifically as farmworker housing in the Farmers Village (400 units).

Compliance under Policy 2.1. Under the Policy 2.1 requirements for 560 required affordable units, 39 percent (218 units) need to be affordable to households in the very low category, 19 percent (106 units) in the low income category, and 42 percent (235 units), in the moderate income category. The specific plan provides enough affordable units in each category.

A summary of compliance with the Housing Element and Inclusionary Ordinance is presented in Table 2-2, Affordable Housing Compliance Summary.

Affordable Housing Integration. The specific plan ensures integration of affordable housing both through design and location. The designated affordable housing is located in the specific plan core area adjacent to a park, the elementary school, senior housing, commercial uses, and low density residential. The housing that meets the minimum 20 unit per acre standard is likewise located in the specific plan core area. Because it is envisioned to include resident-specific services and require all units in close proximity, the Farmers Village worker housing is located in a corner of the plan area, though adjacent to the middle school and low density residential. Other inclusionary units would be distributed throughout the plan area. The design guidelines ensure that affordable housing will blend visually with market rate housing. Locating duets or duplexes on corner lots with building massing consistent within the neighborhood and one garage accessed off each street will give the appearance of low density family homes.

Table 2-2 Affordable Housing Compliance Summary

Requirement		Compliance
HE Program 1.1.1	SOI Amendment and Specific Plan	The Specific Plan fulfills this requirement.
HE Program 1.2.1	DA to prescribe percentage of affordable units.	Development agreements will be prepared for development entitlements.
	Concurrent construction of affordable units	The Specific Plan phasing integrates higher density housing within the middle phases of the development.
HE Program 1.2.4	Allow up to 30 units per acre	The highest density within the plan area is 23 units per acre.
HE Policy 2.1	Prescribed percentages	Current HE: 18 additional affordable units needed. Current RHNA: surplus of affordable units included.
HE Program 2.1.1	DA density requirements of 20 units/acre and 12 units/acre	The Specific Plan includes these densities.
HE Program 2.1.2:	30 percent available for rentals	A Specific Plan policy addresses this requirement.
	Average gross residential density of 7 units/acre	Average net density 6.4 due in part to larger hill lots and inclusion of parks and trails.
	20 percent of rentals under 20 units/building	A Specific Plan policy addresses this requirement.
Inclusionary Ordinance	6 percent very low; 6 percent low; 8 percent moderate	A Specific Plan policy addresses this requirement.

SOURCE: City of Soledad 2008

Workforce / Entry Level Housing. Workforce / entry level housing is defined for the specific plan as housing units/lots that are smaller in size therefore more affordable by design. It is the intent to provide workforce housing which will be affordable by design but not restricted in price or rent. Workforce / entry level housing includes products such as duplexes, triplexes, townhouses, and condominiums, and the units at the Farmers' Village.

Neighborhood Commercial

A nine-acre neighborhood commercial site is designated in the specific plan core area adjacent to the West Street roundabout. Centrally located to serve primarily plan area and neighboring residents, commercial uses on this site are anticipated to include retail, office, and personal services. With a floor-area ratio of about 0.2, the shopping center would include about 75,000 to 100,000 square feet of commercial floor space, which could accommodate a medium-sized grocery store and half a dozen smaller spaces.

Mixed Use Opportunities

Mixed use development is encouraged in the specific plan core area and the Farmers Village. The mixed use may consist of office above retail commercial, residential above commercial, or adjacent commercial, residential, and/or office space. Although commercial is designated at the West Street round-about site, commercial uses may also be integrated into the adjacent portions of the medium and high density housing site, and high density housing may be integrated into the commercial site. Commercial development in these areas should be directly integrated with the main commercial area. Development of commercial space up to a total of 100,000 square feet is allowed in the core area. If residential uses are developed within the commercial area, no additional units are allowed and units must be transferred from the capacity of adjacent residential areas.

Commercial uses may also be integrated within the Farmers Village. Intended to serve primarily Farmers Village residents and immediate neighbors, uses may include personal services and convenience retail, with a total square footage up to 20,000 square feet.

Public/Institutional

This land use is intended to designate those sites that will be improved with public facilities required to support and serve project residents and businesses. It is applied to two school sites (one elementary school and one middle school), a public safety station, and utility facilities. Both school sites abut designated park sites, providing opportunities for joint use of these facilities. Although not designated as such, and not credited toward the specific plan's park dedication requirement, approximately half of the middle school site is intended for development and use as a community sports complex to enable joint school and community use. Joint use of school facilities administered by the Soledad Unified School District and the parks managed by the city would be guided by a joint use agreement between these entities.

Open Space and Parks

Designations are provided for open space and parks, including hillside open space, village park, linear park, soccer park, and drainage basin/park. The open space and park system is designed to integrate and connect the neighborhoods within the plan area to each other and to the core area and the schools.

The Parks and Recreation designation includes improved public parks and recreation (excluding the shared recreational use at the middle school), the linear park, and landscaped park connections. Parks will be open to the public and park improvements may include paths and trails, picnic areas and benches, par course, playgrounds, turf areas, play fields and courts, swimming pool, clubhouse or locker room, community room or center, community garden, and similar uses. Although the Parks and Recreation designation is intended to be primarily without structures, small structures as identified above are allowed with no set limit on square footage. Overhead lighting and sound amplification are limited, and subject to city approval, so as not to disturb neighboring residences. Utility uses are allowed but should not exclude recreational uses. The southwestern corner of the plan area is designated for storm water retention, and should be developed with compatible recreational uses.

The Open Space designation includes hillside areas to be retained as passive parkland for purposes of recreation and view preservation. Development and improvements in this area are limited to passive recreation, a gathering place (e.g. clubhouse), alternative energy, and utilities required for the plan area or the city. Examples of passive recreational uses include recreational foot trails, interpretive or educational signage, benches, picnic tables, and a par course. Public facilities could include additional water storage tanks, emergency access road, access fencing and signs, fire breaks, and other facilities needed by the city.

2.4 Zoning Districts and Development Standards

The specific plan utilizes base zoning districts consistent with Soledad Municipal Code Title 17. The zoning districts are prefaced with MMSP, to indicate their specific applicability within the specific plan, shown in Figure 2-4, Miramonte Specific Plan Zoning Map, and as summarized in Table 2-1, presented earlier.

The specific plan's zoning districts are regulated by the design guidelines and development standards contained in this section, which have been adopted by ordinance and provide development regulations that control the subdivision and improvement of land within the plan area. The intent of the community design guidelines and standards is to provide additional flexibility and creativity, as well as foster quality design solutions. Table 2-3 provides a list of the specific plan zoning districts.

Low Density Residential (MMSP-R-1)

Intent

The MMSP-R-1 District provides for traditional low density attached housing in neighborhoods with attractive, high quality architecture and landscaping. Residents can conveniently walk or bicycle within the neighborhoods and to nearby schools, parks, and shopping. A range of densities is allowed and density is expected to be greater near the core of the plan area and lower near the open space areas that adjoin the MMSP-R-1 District.

Table 2-3 Zoning Districts

Zoning District	Description
MMSP-R-1	Low Density Residential
MMSP-R-V	Village Residential (Medium Density)
MMSP-C-V	Village Commercial
MMSP–MU (overlay zone)	Mixed Use Opportunity
PF	Public Facility (Including Park Lands)
OS	Hillside Open Space

Design Guidelines

Design of low density residential areas shall conform to the city's Community Design Guidelines and Standards for Single Family Residential, and the following guidelines. In the event of a conflict, the following design guidelines shall apply.



a. Architecture should be varied, but this should not preclude a consistent architectural style or set of architectural styles within a neighborhood.

b. Design of structures should create variety and interest. Differences in the massing and composition (not just finish materials) of each adjacent house should be accomplished. One identical design should not be repeated more frequently than each sixth house.

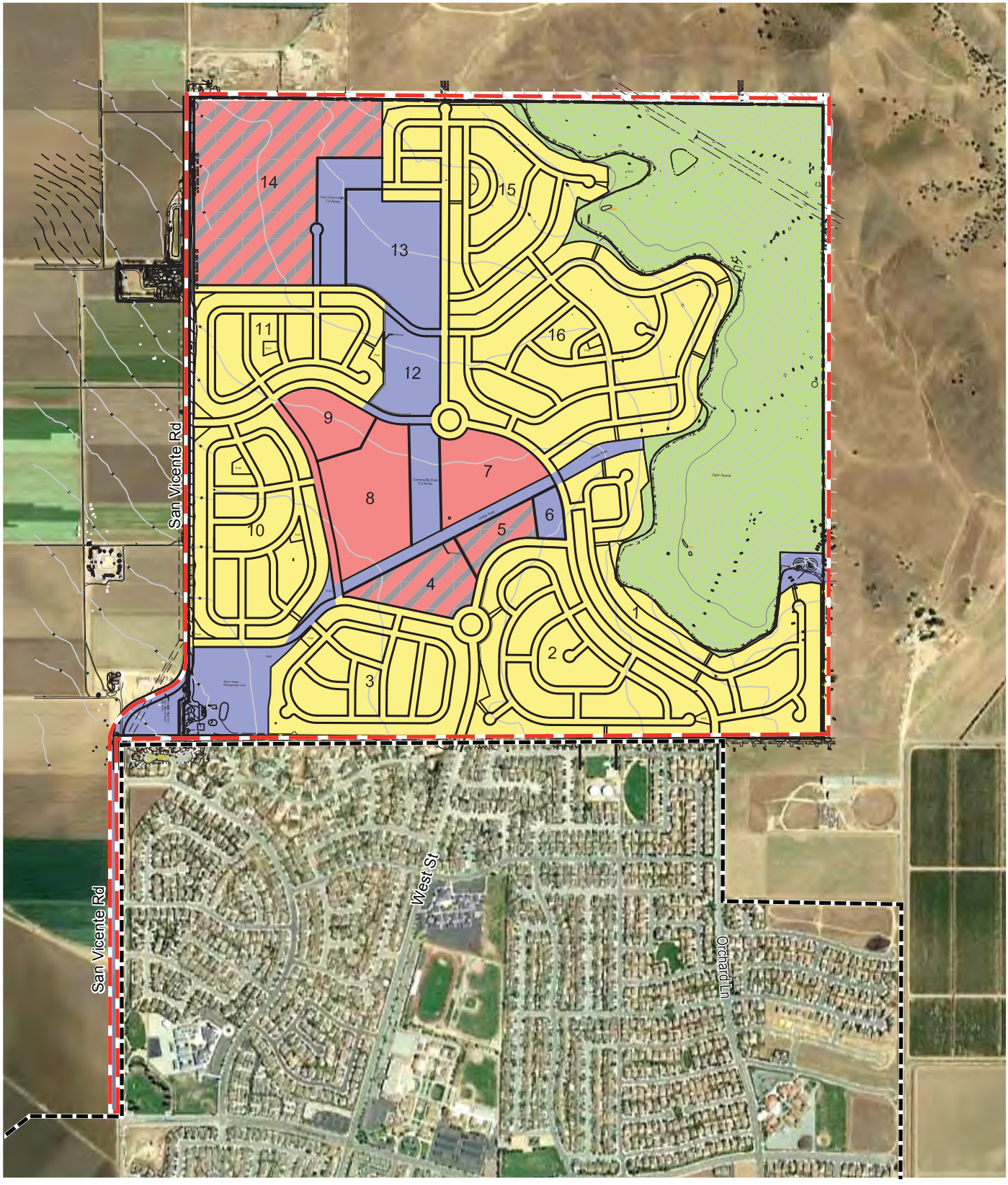
c. To avoid a repetitive street scene, the front façade on buildings should have varied materials and building forms.

d. When a row of residential lots backs onto a collector street, a lot arrangement with front entries facing the collector, and parking accessed from the local street is encouraged to prevent a walled in streetscape on the collector street.

e. At least two different roof lines and two different pitches should be used, i.e. gable, hipped, dormers, if the selected architectural style allows. To the extent feasible, at least one roof surface should face south to facilitate solar panels.

f. Houses adjacent at their sides to parks, open space, and pedestrian paths should be oriented toward those areas. Side fences adjacent to pedestrian paths should be kept at a low height for as great a distance from the street as possible to avoid a closed in tunnel and to maximize visibility into the pathway from adjacent yards and houses.

g. Neighborhoods shall be interconnected with streets and pedestrian paths.



Source: Google Earth 2017

Figure 2-4

Miramonte Specific Plan Zoning Map

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h. Encourage a varied streetscape appearance by varying front building lines by a minimum of two feet, and/or incorporating covered porches, projections, or other building features that differentiate each building.

i. Building elevations adjacent to the schools, parks, or visible from any other public space should be articulated with varied wall planes and roof forms consistent with the design of the front façade.

j. Garages shall be located behind habitable portions of structures or recessed from the front façade a minimum of four feet.

k. Residential developments should offer an optional design accessible to physically disabled persons.

l. Landscaping should relate to the architectural style and be consistent within each neighborhood. Design landscaping to provide summer shade and winter sun for houses and sidewalks.

m. Sidewalk planter strips of at least three feet in depth shall be provided, with a widened strip where trees are planted.

Development Standards

The development standards presented Table 2-4, MMSP-R-1 Development Standards, represent minimums unless otherwise noted. For regulations not covered in this code, refer to City of Soledad Title 17 Zoning code.

Table 2-4 MMSP-R-1 Development Standards

Category	Regulation	Interpretation and Notes
Zoning District Density Range	6 to 10 units per net acre	This zone is primarily for a density of about 7 units per net acre. Density up to 10 units per net acre is allowed in order to accommodate affordable small lot detached, duet, and duplex units.
Permitted Uses		
The following uses shall be permitted in the R-1 district:		Home occupations, subject to Section 17.38.140 of the Municipal Code Mobile home on a permanent foundation, subject to Section 17.38.210 of the Municipal Code Swimming pools subject to Section 17.38.320 of the Municipal Code.
Residential and public/quasi-public.	Single family dwellings, duets, duplexes and accessory buildings (including garage). Accessory and junior accessory dwelling units, small day nurseries, group homes, and similar uses in accordance with state law.	
Lot Configuration		
Lot Area	5,000 square feet minimum	
Corner Lot	6,000 square feet minimum	
Width		
Interior Lot	50 feet minimum	
Corner Lot	60 feet minimum	
Curved / Cul-de-sac	40 feet minimum	
Depth		
Local Street frontage	100 feet minimum	
Collector Street frontage	100 feet minimum	

Building Massing		
Lot Coverage	40 percent maximum	Roof overhangs, patio overhangs, unenclosed shade structures and the like are exempt from the building coverage calculation.
Building Height	2 stories and 30 feet maximum	
Accessory Building*	14 feet maximum	
	**Accessory structures contingent on appropriate design as defined in the CC&R's.*	
Setbacks		
Front Yard		
Living Space	15 feet minimum	Architectural features may extend up to 2.5 feet into the adjacent setback. Fireplace and fireplace/ media centers may extend 2 feet into side yards.
Porch	9 feet minimum	
Garage	20 feet minimum	Duel access front yard shall be measured from the collector street, and assumes landscape buffer within right-of-way
Front Yard Dual Access Lots		
Living Space	10 feet minimum	
Porch	4 feet minimum	Measured from the side property line
Garage	30 feet minimum	
Side Yards		A minimum of 1,000 square feet open space/yard shall be provided to the side or rear of the main dwelling or in an "L" or "U" design.
Interior	5 feet minimum	
Exterior	10 feet minimum	
Side Loaded Garage	25 feet minimum	
Porch	3 feet minimum	
Rear Yard		
Primary Building	10 feet minimum	
Porch	4 feet minimum	
Accessory Building	5 feet minimum	
Rear Yard Dual Access Lots	Same as for Front Yard	
Open Space (un-irrigated and undeveloped)	100 feet low fire risk area to be provided behind rear fences within the open space area	
Fencing - Refer to Section 17 .36 .01 0 of the Municipal Code		
Fencing adjacent to park/neighborhood connection corridors should be kept to three feet tall to the greatest extent possible. Fences on dual access residential lots should be no greater than three feet tall within ten feet of either street frontage.		
Off Street Parking		
Parking Requirements	2 spaces/ unit minimum	Minimum two covered spaces within a garage

Village Residential – (MMSP–R-V)

The Village Residential (MMSP–R-V) designation allows a variety of detached and attached medium and high density housing types within an area characterized by inviting building facades, shady streets, and landscaping. Garages will be recessed or accessed off of parking courts. A variety of housing styles and unit configurations connected by landscaped trails and parks will give these areas a distinctive character. Creative



lot designs including 'duet' lots, shallow-wide lots, and angled lots are permitted as well as apartment complexes, townhouses, triplexes, and condominiums. Careful attention to detail and architectural design will ensure these residences share the same character and quality of larger lot homes. Density is a minimum of 10 units and maximum of 30 units per gross acre, consistent with the density designation of the land use concept map.

Design Guidelines

Design of medium and high density residential areas shall conform to the city's Community Design Guidelines and Standards for Multifamily Residential, and the following guidelines. In the event of a conflict, the following design guidelines shall apply.



Site Design and Character

a. Provide variety in architectural detail while maintaining a consistent architectural style. Use of varied lot sizes, details and color selections, and diversity in building elevations within developments and neighborhoods is encouraged.

b. Where side yards are adjacent to public amenities such as parks and plazas, the homes shall face those amenities to the extent possible.

c. Interconnect Village Residential neighborhoods with low density residential neighborhoods, commercial centers, and parks and open space through the use of pedestrian pathways where streets do not provide direct connections.

d. The variety of housing types, including small lot detached, attached, zero lot line, townhouses, and garden apartments, should be arranged to provide an overall garden character.

e. Multi-family structures such as apartments are limited to 50 units maximum per building to ensure effective onsite management and security. At least 20 percent of multi-family units shall be provided in buildings with 20 or fewer units





per building. Buildings shall be interspersed with landscaping and common yard space for tenants, and present a welcoming public facade that conveys a feeling of lower density through the use of entry plazas, courtyards, porches, balconies, and/or other features.

f. The orientation or placement of residential structures should be strategically planned to be energy efficient and improve the streetscape with front doors and porches facing the street and garages and parking pulled behind the buildings to reduce their dominance.

g. Garages, carports, and parking spaces should be located at the rear of the lot to the extent feasible.

h. Surface parking in multi-family developments should be minimized to maximize available common open space and reduce visual effects. Below-grade parking facilities are preferred.

i. When surface parking is provided, it should be dispersed around the site, to avoid large paved expanses. Parking visible from public streets or parks should be screened with berms and landscaping not exceeding 3 ½ feet in height, with the exception of trees. Where a separate row of carports or garages are used, incorporate roof-top solar panels.

Building Form and Design

a. Building form and massing on multi-family buildings should be designed to create interesting architecture that relates to the pedestrian and minimizes the appearance of garage doors and large box-like buildings.

b. Minimize blank walls on elevations visible to the public. Change in wall plane on all facades visible from a public street or park should occur at a minimum of 40’ intervals.

c. Articulate individual units or clusters of units by varied height and setback.

d. Avoid large monolithic structures. Clusters or pods of smaller buildings are preferred over large building forms.

e. To divide the building mass into smaller scale components, buildings over 40 feet long should reduce the perceived mass and bulk by one or more of the following:

- change of roof or wall plane;
- projecting or recessed elements, such as trellises, balconies, openings, etc. Such elements should be repeated at intervals of approximately 30 feet;
- varying cornice or rooflines; or
- other similar means.

f. Roof forms should be used to distinguish various building forms, create an interesting roof line, and help break up the building massing. Roof forms should reflect a residential appearance through pitch and use of materials.

g. Roof forms typical of residential buildings, such as gable, hip or shed roof combinations, are strongly encouraged. If parapet roofs are used they should include detailing typical of residential character and design.

h. Avoid long horizontal roof lines. The maximum unbroken roof line should be limited to a 40-foot length.

i. Multi-form roof combinations are encouraged to emphasize the individual dwelling units, and break up the massing of the building.

j. All roof-mounted equipment should be effectively and attractively screened through the use of various architectural detailing including, but not limited to, roof form, decorative parapets, or cornices.

k. Multi family structures should be well articulated on all sides visible from public streets and spaces. Though the highest level of articulation will occur on the front façade, buildings should be designed to incorporate 360-degree architecture. 360-degree architecture is articulation on every building elevation. This includes variation in massing, roof forms, and wall planes, as well as surface articulation.

l. Homes should be designed to give individuals maximum privacy within and outside homes. Site layout techniques for privacy include alternating the placement of windows, rear yard outdoor patio areas and entrances.

m. Residential developments should offer an optional design accessible to physically disabled persons.

Architectural Detail

a. Architectural elements that add visual interest, scale, and character such as projecting balconies, trellises, recessed windows, and window and door detailing, should be incorporated to create shadow patterns and help articulate facades and blank walls.

b. The main building entrance should be distinguished from the rest of the building and easily recognizable.

c. Each unit's entry should be easily identifiable, distinguishable, and oriented toward the street whenever possible.

d. Entry design should incorporate two or more of the following methods:

- front porch
- decorative detailing or placement of art;
- a projecting element above the entrance;
- changes in the roofline, a tower, or
- a change in the wall plane

e. Window and door type, material, shape, and proportion should complement the architectural style of the building.

f. Windows should be articulated with accent trim, sills, kickers, shutters, window flower boxes, balconies, awnings, or trellises authentic to the architectural style of the building.

g. Faux shutters should be proportionate to the adjacent windows to create the appearance of a real and functional shutter.

h. Deep roof overhangs are encouraged to create shadow and add depth to facades. Where applicable to the architectural style, roof eves should extend a minimum of 24" from primary wall surface to enhance shadow lines and articulation of surfaces.

i. Exposed structural elements (beams, rafter tails, etc.) are encouraged as roof overhang details. Exposed rafter tails should not extend beyond the roof overhangs to prevent rot damage.

j. Multi-family structures should appear to be made of high quality, authentic, and timeless materials. In addition, the use of durable materials requiring low maintenance is strongly encouraged.

k. Where appropriate to the architectural style, materials and textures should vary between the base and body of a building to break up large wall planes and add visual base to the building. Heavier materials and darker colors should be used lower on the building elevation to form the building base.

l. Materials and colors should be used to enhance different parts of a building's façade and be consistent with the desired architectural style.

m. Material changes should occur at intersecting planes, preferably at inside corners of changing wall planes or where architectural elements intersect such as a chimney, pilaster, projection, or fence line.

n. Colors used on exterior facades should be harmonious. Contrasting colors are encouraged to accentuate details such as trim, windows, doors, and key architectural elements.

Garages and Ancillary Structures

a. Carports, garages, and other ancillary structures should be designed as an integral part of the development and should not dominate the street scene.

b. Garages and ancillary structures should incorporate similar or complementary roof forms, materials, and pitches as the main buildings within the project.

c. Garages doors should not face public streets. Garage doors facing a private street or drive aisle should be set back from the face of the main house to help reduce visual dominance of garage doors.

d. Garage doors should be recessed a minimum of six inches from the face of the exterior wall plane.

e. Garage doors should incorporate panels and/or windows to articulate these large planes.

f. No more than four garage doors should be within the same wall plane.

g. Where garage doors are visible from public streets or spaces, roof forms, trellises, and balconies should be located directly above the garage door to help minimize the impact of garage doors on the street scene.

h. Common mailbox enclosures should be designed similar or complementary in form, material, and color to the surrounding residential buildings.

i. Trash and Mechanical enclosures should be designed early in the building process, rather than an afterthought at the construction document phase.

j. Trash enclosures and loading areas provided in the parking areas should be screened with landscaping and wall materials.

k. Trash enclosures should be separated from adjacent parking stalls by minimum 3-foot wide planters with low-growing plant materials to ensure that adequate space is available for passengers to access a vehicle in an adjacent parking space.

l. The trash and recycle enclosure should be consistent with the design of the project and building architecture. The same or similar materials should be used on the enclosure as the buildings. Architecturally designed roof structures should be used to create a finished looking structure.

Development Standards

The development standards presented in Table 2-5, MMSP-R-V Development Standards, represent minimums unless otherwise noted. For regulations not covered in this code, refer to City of Soledad Title 17 Zoning code.

Table 2-5 MMSP-R-V Development Standards

MMSP-R-V Development Standards		
Category	**Restriction**	**Interpretation and Notes**
Land Use		
Zoning	Medium Density Residential (R-V)	Gross density shall conform with the stated range within each medium density housing area identified on the Land Use Diagram.
Density Range	10-30 dwelling units / gross acre	
Permitted Uses		
Small lot low density dwellings, duplexes, triplexes, apartments, clustered "pack" style homes, townhouses, condominiums, accessory buildings		
Lo t Configuration		
Lot Area	2,000 square foot minimum 6,000 square foot minimum for buildings of four or more units	Lot area may be reduced up to 10 percent in constrained locations provided all setback and usable yard area requirements are met.
Width	35 feet minimum	Measured at property line. May have a lot frontage less than specified provided all setback and rear yard area requirements are met.
Interior Lot Exterior Lot	40 feet minimum	
Depth	65 feet minimum	
Curve / Cul-De-S ac Frontage	30 feet minimum	

Building Massing		
Lot Coverage	65 percent of lot maximum	Roof overhangs, patio covers, unenclosed shade structures and the like are exempt from the building coverage calculation.
Height	3 stories maximum	
First 50 feet of lot adjacent to R-1	2 stories maximum	
Setbacks, Front	10 feet minimum	Architectural features may extend up to 2.5 feet into the adjacent setback. Fireplace and fireplace/ media centers may extend 2 feet into side yards.
Living Space Porch	5 feet minimum	
Garage	20 feet minimum	
Setbacks, Side	5 feet minimum	
Porch	3 feet minimum	
Adjacent to Street	10 feet minimum	Front/Rear setbacks can be varied up to 2 feet with combined setback of at least 20 feet.
Adjacent to R-1	10 feet minimum	
Zero lot line, duet, etc.	No setback required	Side setbacks can be varied up to 2 feet with a minimum of 3 feet and combined setback of at least 10 feet
Setbacks, Rear	10 feet minimum	
Adjacent to R-1	15 feet minimum	
Rear attached garage	5feet minimum	
Accessory Structure	5 feet minimum per story	
Distance Between Buildings	10 feet minimum	
Residential Buildings Accessory Structures	6 feet minimum	

Fencing Refer to Section 17 .36 .01 0 of the Municipal Cod e
Fencing adjacent to parks and pathways shall be no more than three feet tall and provide pedestrian access.

Landscaping & Open Space		
Private/Common Usable O pen Space for Townhomes, Condominiums and Apartments	Structures with more than 4 units: 300 square feet minimum for studio 350 square feet minimum for 1 bedroom 50 square feet additional per bedroom over 1 bedroom For 4 or fewer units, usable open space can be private or common in any combination.	Structures with more than 4 units: A portion of the required usable open space shall be outdoor private space; otherwise it shall be shared in common space. Private outdoor open space is accessible to just the unit served, and includes: patios, porches, balconies, terraces, and decks. A minimum of 48 square feet of private space shall be provided for each unit. Half of common space may be provided as indoor rooms, such as lounges, fitness centers, etc.
All developments	Provide a landscaped 4foot wide minimum strip along the periphery of the project site. The front yard setback shall contain a landscaped strip varying in width from 6 feet wide to 10 feet wide.	

Parking Refer to Section 17.36.020 of the Municipal Code
Street parking fronting on the parcel may be counted toward ½ space required for units with more than two bedrooms.

Signage Refer to Section 17.36.030 of the Municipal Code

Village Commercial (MMSP–C–V)

Intent

The Village Commercial district provides centrally located neighborhood retail shops, outdoor gathering areas, restaurants, services and/or business-professional uses to support the daily needs of residents of the plan area, within walking distance of a variety of housing areas. Potential neighborhood serving uses at the Village Commercial district include a market, pharmacy, restaurants, shops, banking, an ice-cream parlor, laundry / cleaners, café / deli, offices, and other similar types of uses.



The Village Commercial district may include a civic component and a common open space area in the form of a plaza and green space within close proximity to provide a place for people to relax, play, and interact. The Village Commercial district is well connected to the surrounding residential neighborhoods through pedestrian and vehicular paths, including a landscaped parkway that runs adjacent to the Village Commercial district.

Design Guidelines

Design of commercial areas shall conform to the city's Community Design Guidelines and Standards for Community Commercial, and the following guidelines. In the event of a conflict, the following design guidelines shall apply.



Site Design and Character

a. Provide clearly defined pedestrian walkways between residential neighborhoods as an integral component of the overall commercial site design, including a direct pedestrian access from the adjacent linear park and community park.

b. Avoid "strip commercial" by designing a single cohesive commercial center.

c. Provide for public amenities to enhance the visitor and shopper experience such as small plazas or gathering places, toddler playground, fountains, art, outdoor dining, etc.

d. A significant building with prominent architectural features should be located near the roundabout.

e. Other than curb parking on the fronting street, parking areas should be provided away from the street edge, behind buildings, underground, or within parking structures.

f. Portions of buildings may be set back from the sidewalk creating alcoves for plazas, entry nooks, and outdoor cafe seating.

g. Incorporate design elements to minimize the visual and noise impact where commercial development is adjacent to residential neighborhoods.

h. Loading areas, delivery service areas, and trash enclosures should be screened with decorative walls, trellises and vines, berming with heavy

landscaping, dense trees, or a combination of these treatments. Where through pedestrian traffic is expected past loading areas, a crossing shall be provided.

i. Loading areas and driveways, delivery service areas, and trash enclosures shall not be located in required street setback areas or any setback area adjacent to a residential district.

j. Loading areas, delivery service areas, and trash enclosures shall be designed to accommodate truck access from within the site without having to back onto or otherwise use the adjoining street.

Building Form and Design

a. Architecture should embrace the streets and sidewalks creating inviting places for people to walk, dine, and shop.

b. Avoid large box-like buildings. Building forms and massing should be designed to create interesting architecture that relates to the pedestrian scale, and creates the desired character.

c. Building form and massing should prevent blank walls on elevations visible from public streets and gathering spaces. There should be a change in wall planes on facades visible from a public street or space.

d. To divide the building mass into smaller scale components, buildings over 50 feet long should reduce the perceived mass and bulk by using one or more of the following:

- change in roof heights or wall plane;
- projecting or recessed elements;
- varying cornice or rooflines; or
- other similar means.

e. At least 60 percent of the total street frontage ground floor length of any building shall be differentiated architecturally by recessed windows and entries, display windows, offset surfaces, differentiated piers and columns, offset planes, textured materials, awnings, and compatible landscaping, or other details which are of interest to pedestrians, with at least half that total requirement being glazing.

f. Human scale should be created through the use of building forms such as arches, walls, trellises, awnings, arbors, and pergolas.

g. Roof forms should be used to distinguish various building forms, create an interesting roof line, and help to break up the building massing.

h. Variation in roof form is encouraged to create visual interest and lessen the appearance of the building mass.

i. Roof elements should continue all the way around the building and not just be used in the most visible locations.

j. All roof-mounted equipment should be effectively and attractively screened through the use of various architectural detailing including, but not limited to, roof form, decorative parapets, or cornices.

k. If the interior side of a parapet is visible from pedestrian view, it should be finished with the same materials and a similar level of detail as the front façade.

Architectural Detail

a. Though the highest level of articulation will occur on the front façade, building designs should incorporate 360-degree architecture, where they are visible from the public right-of-way. 360-degree architecture is the articulation on every building elevation. This includes variation in massing, roof forms, and wall planes, as well as surface articulation.

b. Architectural elements that add visual interest, scale, and character such as projecting balconies, trellises, recessed windows, and window and door detailing, should be incorporated to create shadow patterns and help articulate facades and blank walls. It is most important to articulate building facades that are visible from public view.

c. Architectural details and materials should be incorporated on the lower part of the building facade to relate to human scale. These pedestrian scale elements can include awnings, trellises, windows, building base articulation, and changes in materials, textures, and colors.

d. The design of rear entrances should be well articulated and appropriate to their surroundings and should respond to the need for identification signs, storage, and display areas.

e. Well-designed storefronts, including windows, doors, wall composition, colors, and materials, are very important to create a sense of entry and pedestrian scale. The main building entrance should be distinguished from the rest of the building and easily recognizable.

f. Entry design should incorporate two or more of the following methods:

   - change in wall / window plane;
   - a projecting element above the entrance;
   - a change in material or detailing;
   - integration of architectural elements such as flanked columns or decorative fixtures;
   - recessed doors, archways, or cased openings; or
   - changes in the roofline or a tower feature

g. Windows should be articulated with accent trim, sills, trim, kickers, shutters, window flower boxes, balconies, awnings, or trellises authentic to the architectural style of the building and in scale with the window.

h. Architectural and site design cues should be used to guide visitors from parking areas to commercial building entrances, since building entrances may not be directly visible from parking areas.

i. Buildings should be constructed with high quality, authentic, and timeless materials. In addition, the use of durable materials requiring low maintenance is strongly encouraged.

j. Material changes should occur at intersecting planes, preferably at the inside corners of changing wall planes or where architectural elements intersect, such as a pilaster, projection, or similar articulation.

k. Materials and colors should be consistent with the desired architectural style.

l. The use of materials and color should convey a sense of quality architecture and permanence.

m. Heavier materials and darker colors should be used lower on the elevation to form the building base.

n. Materials that are highly resistant to damage, defacing, and general wear and tear, such as precast concrete, stone masonry, brick, and commercial grade ceramic tile, should be used at the base of the building.

o. Colors used on exterior façades should be harmonious. Contrasting colors are encouraged to accentuate details such as trim, window and door mullions, and key architectural elements.

Lighting and Signage

a. All building entrances should be well-lit.

b. Security lighting fixtures should not project above the fascia or roofline of the building and should not be substituted for parking lot or walkway lighting fixtures.

c. If project elements, such as signs, walls, and trees are lit, down-lighting is encouraged over up-lighting.

d. Lighting sources should be hidden unless the sources are an integral part of the design.

e. Exterior lighting shall be located and designed to avoid shining directly onto nearby residential properties, and shall minimize offsite glare.

f. Building signs should enhance the building façade. All signs should be consistent with the City of Soledad's Zoning Ordinance, except where otherwise provided herein. A master sign program shall be approved for each development that includes commercial components.

g. Signs reflecting the type of business through design, shape, or graphic form are encouraged.

h. The method of sign attachment to the building should be integrated into the overall sign and building design.

i. Signs should be designed to coordinate with the building design, materials, color, size, and placement.

j. Sign variety is encouraged among different users.

k. Lighting of all exterior signs should be directional to illuminate the sign without producing glare on pedestrians, autos, or adjacent residential units.

l. Signs should align with others on the same building facade so as to maintain a consistent pattern.

m. Neon lighting is discouraged; however innovative use of neon may be appropriate at the discretion of the Community Development Director.

n. Hanging signs attached to buildings that project perpendicular to the building are encouraged in pedestrian areas. These signs should be a minimum of 8' from ground level to the bottom of the sign.

o. Plastic, internally illuminated sign cabinets are strongly discouraged. Externally illuminated lettering or awning signs could be an effective alternative if implemented successfully.

p. Quality directional signs and pavement markings should be provided at all parking, loading and receiving, and other special areas.

Development Standards

The development standards presented in Table 2-6, MMSP-C-V Development Standards, represent minimums unless otherwise noted. For regulations not covered in this code, refer to City of Soledad Title 17 Zoning code. Commercial developments within the plan area are subject to the master site plan approval procedures of the Zoning Code. Refer to Sections 17.22.020 to 17.22.080 and 17.22.140.

Table 2-6 MMSP-C-V Development Standards

Category	Restriction	Interpretation and Notes
Land Use	Commercial (C)	
Zoning	(M3-C-V)	Village Commercial
Permitted Uses		
Village Commercial (C-V) Bakery goods, barbershop, beauty shop, bicycle shop, books, clothing store, deli, department store, drug store, dry cleaner, florist shop, furniture store, garden supplies, gift shops, grocery store, hardware store, health foods, hobby shops, ice cream, laundromats, meat market, music store, newspaper stand, pet shop, photographic supplies, electronic stores, restaurants, shoe repair store, sporting goods, stationary store, toy store, any other use which the Planning Commission finds to be consistent with the purposes of this section		
Conditional Uses		
Banks and other financial institutions, buildings with more than 50,000 square feet of gross floor area, bowling alleys, cocktail lounges, liquor products, pool and billiards, any use the Planning Commission determines consistent with the provisions of this section.		
Prohibited Uses		
Liquor stores as a principal use, bars, automobile body and paint shop, exclusive automobile repair; sheet metal shop; fortune tellers, adult entertainment; gambling; pawn shops, thrift shops, and flea markets. Drive through lanes are prohibited in Village Commercial.		
Lot Configuration		
Landscape Area Coverage	10% of lot minimum	Area between front/street side property line and the building, excluding driveways, shall be landscaped. Parking lot areas shall be planted to reduce the impact of large paving areas.
Building Massing		
Lot Coverage	No limitation	
Height	3 stories maximum	
Setbacks	0 to 10 feet	
Street or Park	0 feet minimum	
Interior sidewalk	0 feet minimum	
Rear	20 feet minimum	
Adjacent to Residential	10 feet minimum	
Distance Between Buildings		
Parking - Refer to Section 17.36.020 of the Municipal Code		
Street parking fronting on the parcel may be counted toward commercial parking requirements.		
Signage - Refer to Section 17.36.030 of the Municipal Code		

Mixed Use Opportunity Overlay (MMSP-MU)

Intent

The Mixed Use Opportunity Overlay is intended to encourage blending of commercial and medium to high density residential in the specific plan core area and the Farmers' Village. The mixed uses are intended to provide residents with convenient access to services, and to enliven both commercial and residential areas without imposing undue noise or nuisance on residents. Under this overlay, limited commercial uses may be constructed within residential areas, and limited residential uses may be constructed within commercial areas. In the Farmers' Village area, this designation is intended to allow for office space, social services, and fixed and mobile convenience and personal services and retail to serve residents and immediate neighbors.

Design Guidelines

a. Incorporate design elements to minimize the visual and noise impact at residential units.

b. Loading areas and driveways, delivery service areas, trash enclosures, and commercial parking lots shall not be located closer than 30 feet from a residential unit.

c. Exterior lighting shall be located and designed to avoid shining directly into residential units.



d. Residential parking shall be clearly differentiated from commercial parking, unless intended for shared use.

e. In the Farmers' Village, commercial parking requirements shall be reduced to two spaces per 1,000 square feet.

Open Space and Public Facilities (OS and PF)

Intent

The OS Open Space and PF Public Facilities are designations for lands that will be kept lightly developed with public or quasi-public uses.



Allowed uses in the PF District include utilities, parks, schools, and fire/police stations. Except as otherwise noted herein, uses and standards for the areas zoned OS Open Space shall be as provided in Chapter 17.32 of the Soledad Zoning Code, and uses and standards for the areas zoned PF Public Facilities shall be as provided in Chapter 17.34_ of the Soledad Zoning Code, except as otherwise noted in this specific plan.

Design Guidelines

OS District

Landscape planting shall consist exclusively of plant material native to the Salinas Valley region and its foothills.

Permanent irrigation is prohibited.

A buffer of low-growing and low fire fuel load vegetation shall be maintained within 100 feet of residential properties.

Pathways shall be natural dirt or surfaced with permeable material, such as gravel.

Signs shall not exceed six feet in height, 16 square feet in area, and shall be unlit.

Fencing shall allow wildlife movement within the open space area.

PF District

Vegetative screening shall be provided for utility structures such as water tanks and electrical substations.

Landscaping shall be provided adjacent to structures and public sides of fences.

Architecture shall be compatible with adjacent structures.

2.5 Visual Elements

Design shall conform to the city's Community Design Guidelines and Standards and the following guidelines. In the event of a conflict, the following design guidelines shall apply.

Gateways

Gateways establish the overall first impression of the plan area and its neighborhoods, indicating to the resident and/or visitor the character and quality of the community. An attractive gateway is crucial for creating a desired residential atmosphere. Figure 2-5 Miramonte Specific Plan Gateways, shows where the plan area gateways are located: at the northwest corner of the storm water basin along San Vicente Road, at the southwest corner of the Farmers Village parcel along San Vicente Road, at Orchard Lane and San Vicente Road in the traffic circle on West Street, in the traffic circle on Orchard Lane in the middle of the plan area,, and at the plan area entry on Orchard Lane. The gateway leading to the commercial area from San Vicente Road should incorporate a sign identifying the commercial area and the stores and services located there, as a subordinate element to the main gateway signage.

Gateways should announce entry to the plan area by incorporating specific elements that create a "gateway scene." The composition should function as a visual anchor and provide a sense of arrival, reaffirm direction, and reinforce the plan area character. The design for each of the defined gateways may vary, although the elements comprising the "gateway scene" should be repeated to reinforce the concept of entry and overall plan area character.

Major gateways announce the plan area's three main arrival locations: the first two entry points from San Vicente Road, and the traffic circle near the commercial area. Major Gateways will have prominent monuments, signs, and enhanced landscape features. Minor gateways are secondary points entering the plan area, such as from the existing neighborhoods to the south, the traffic circle near the school, and the final entry point from San Vicente Road.



Minor gateway monuments and signs will be scaled down, and landscaping may be slightly enhanced from that found along the edge of the streets. Neighborhood gateways are located at each point where a collector street provides entry into a neighborhood, and feature a modest monument and could include a sign identifying the neighborhood. The following policies shall be implemented in gateway design:



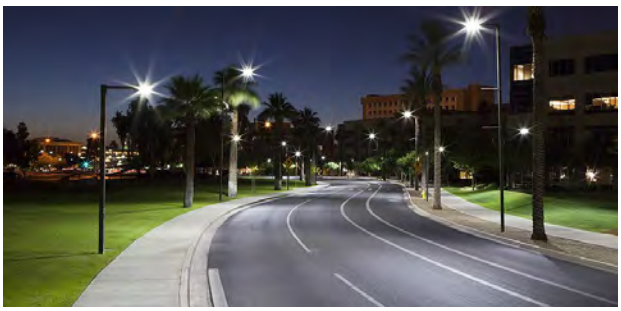
Gateway Guidelines

Each plan area gateway should be prominently marked with signage, accent paving, lighting, landscaping, accent trees, and monument features. Monuments and signage shall reflect the plan area's agricultural heritage. The design of gateways shall be coordinated with any adjoining lighting, landscaping, walls, or fencing elements. Gateway entry features should include gateway monumentation, walls and/or fencing, vineyard planting clusters, and seasonal interest plants where feasible. Coordinate the design of the West Street circle gateway with the commercial development to the north, so that the two together provide a cohesive visual statement. The gateway within the storm water basin should be designed to align with the eventual configuration of San Vicente Road. Vehicle and pedestrian entries to the commercial area should be designed with signage, walls, landscaping, and accent features consistent, complimentary, and compatible with the rest of the commercial site.



Landscape islands and roundabouts may be used within the plan area to provide accent landscape elements to local roads. Residential neighborhood gateways and pedestrian gateways can be marked by smaller monuments, colored/textured sidewalks and crosswalks, and/or decorative walls.

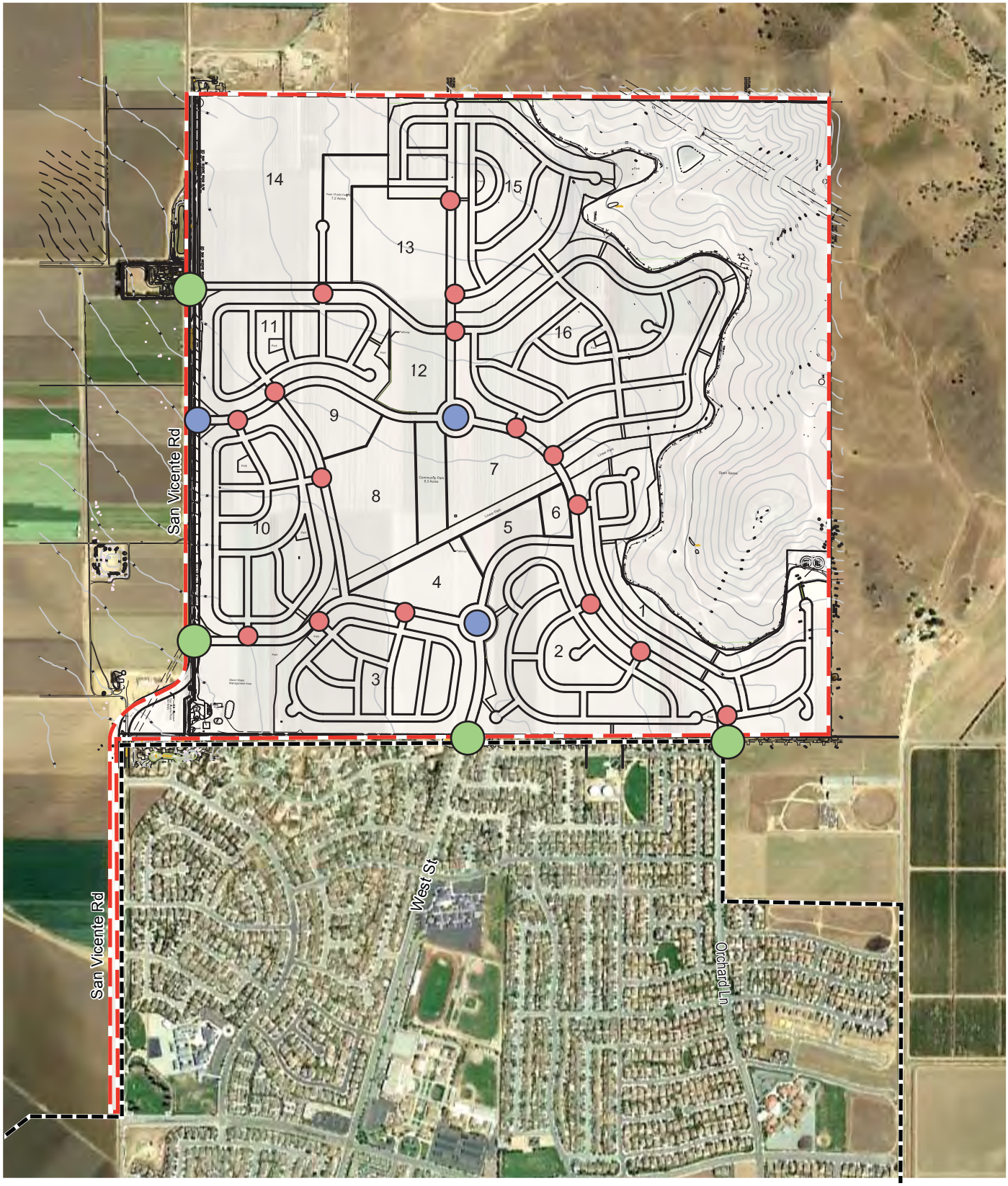
Lighting



Effective lighting provides safety and direction for vehicles and pedestrians, while enhancing architectural building and landscape details. In order to uniformly incorporate a pedestrian-friendly experience, ornamental lighting fixtures and pole specifications have been identified that are consistent with the fixtures found in downtown Soledad.

Lighting Guidelines

The use of city standard galvanized light fixtures shall be limited to collector streets within the plan area. All street lights shall shine downward and provide an even spectral distribution of



Source: Google Earth 2017

Figure 2-5

Miramonte Specific Plan Gateways

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light. Street lights shall be on poles no taller than 20 feet. Avoid high intensity street lights in residential neighborhoods. Design quality street poles shall be used within the plan area.

Lit pedestrian pathways (paths between homes and the linear park) in residential neighborhoods shall incorporate cut-off style lighting on poles no taller than 10 feet. No lighting shall be permitted along the hillside trail. Lighting shall not cause glare or intrusion at residential properties.



Exterior building lights should be used to wash walls or provide light immediately adjacent to the building, and not to illuminate large areas. Exterior lighting color shall not exceed 3,000 on the Kelvin scale.

Signage

Signs and monuments within neighborhoods provide a cohesive character and identity. Proper design and application of signs and monuments orient future residents and visitors. Signage also serves as wayfinding mechanisms directing drivers and pedestrians to desired locations. Signage improves circulation efficiency and access to important neighborhood designation points, enhancing one's overall experience. Temporary project-specific signs (such as billboards, human signs, and sidewalk signs) and marketing logos shall not be permitted as these signs create a sense of separation from the larger community. Most signage will be related to commercial uses and for identifying multifamily developments.

Signage Guidelines



All sign elements shall reinforce and coordinate with the character of the plan area and its surroundings. Signage, including monuments, shall incorporate like materials, colors, and shapes that reflect the plan area and city. Signs and/or monuments shall be constructed with high quality, low maintenance, and long-lasting materials. Sign and/or monument design shall coordinate with any adjoining walls or fences. Signs and/or monuments shall be used to identify uses such as various residential developments, open space paths, and parks. Street signs and directional signs shall have a common design theme.

Landscaping

Plants should be selected to provide opportunity for shade, protection from wind, ease of maintenance, and climate compatible planting. The landscaping should establish visual integrity for the area and promote pedestrian and vehicular safety by clearly distinguishing walkways and access points. Landscape water use should be minimized to the extent feasible, unless recycled water or captured rainwater can be used for irrigation.

Street Trees

Street trees are large trees generally selected for their ability to form dense, round canopies, grow well under paving areas and produce limited debris. Suitable street trees include:

Madrone	*Arbutus menziesii*
Western Hackberry	*Celtis reticulata*
European Hackberry	*Celtis australis*
Red Ironbark	*Eucalyptus sideroxylon*
Silver Dollar Tree	*Eucalyptus polyanthemos*
Raywood Ash	*Fraxinums oxycarpa* Raywood
Australian Willow	*Geijera Parviflora*
Maidenhair Tree	*Ginkgo biloba* Autumn Gold or Fairmount
Golden Rain Tree	*Koelrueuteria paniculata*
Glossy Privet	*Ligustrum lucidum*
Sweet Gum	*Liquidambar styraciflua*
Prickly Melaleuca	*Melaleuca styphelloides*
Pacific Wax Myrtle	*Myrica californica*
Chinese Pistache	*Pistacia chinensis*
Catalina Cherry	*Prunus illicifolia 'Lyonii'*
Chantecleer Pear	*Pyrus calleryana* Chanticleer
Holly Oak	*Quercus ilex*

Street trees should be planted in locations where there is at least a five-foot wide planting strip available. The sidewalk may be curved to provide adequate width. Trees on the accent tree list are generally smaller, but can also be suitable street trees in some situations.



Accent Trees

Accent trees are generally smaller than standard street trees and are used to accentuate key locations. Accent trees are selected for the foliage color or flowers, but close attention is also given to their ability to perform well under various soil and water conditions. Suitable trees include:

Silk Tree	*Albizia julibrissin*
Strawberry Tree	*Arbutus unedo*
California Lilac	*Ceanothus* Concha and *thyrsifloris* Skylark
Western Redbud	*Cercis occientallis*
Smoke Tree	*Cotinus coggygria*
Coast Silktassel	*Garry elliptica*
Toyon	*Heteromeles arbutifolia*
Jacaranda	*Jacaranda mimosifolia*
Crepe Myrtle	*Lagerstroemia indica*
Australian Tea Tree	*Leptosporum laevigatum*
Crabapple	*Malus* spp.
Star Magnolia	*Magnolia stellata*
Coffeeberry	*Rhamnus californica*



Park Focal Point Trees

Park areas, roundabouts, the linear parkway, and potentially wider street medians, provide an opportunity for large trees that will provide shade and wind protection for many years. These trees

will become plan area landmarks as they mature. Since these trees grow tall, they should be kept at least 30 feet back from adjoining residential properties to prevent inadvertent yard shading or tree litter issues. Suitable trees include:



Camphor Tree	*Cinnamomum camphora*
Red Gum	*Eucalyptus camaldulensis*
European Beech	*Fagus sylvatica*
Locust	*Gleditsia triacanthos*
Sweet Gum	*Liquidambar styraciflua*
Chinese Pistache	*Pistacia chinensis*
London Plane	*Platanus acerifolia*
California Sycamore	*Platanus racemosa*
Coast Live Oak	*Quescus agrifolia*
Scarlet Oak	*Quercus coccinea*
Blue Oak	*Quescus douglasii*
Valley Oak	*Quercus lobata*
Red Oak	*Quercus rubra*
Cork Oak	*Quercus suber*
Sawtooth Zelcova	*Zelcova serrata*

California sycamore is suggested specifically for the edges of the detention basin/park, due to its tolerance of seasonally wet soils.

Native Plantings in Open Space Areas

Many of the open space areas provide a transition to natural areas in the hillsides to the east of the plan area. Plantings within these areas are restricted to trees and shrubs that are native to the Salinas Valley and surrounding hills. The transition area is not considered especially sensitive, so no sourcing requirements are mandated, and commercial named cultivars may be used. Minimal planting is anticipated in these areas unless needed to replace invasive plants or provide erosion protection.



Drought Tolerance and Irrigation

Landscapes should be designed to minimize the need for irrigation by utilizing plants that thrive with little or no water, and irrigation systems that conserve water and operate only when necessary. Turf should be reserved for use in active play fields only.

Landscaping along Arterial or Collector Streets

Where fences or walls front on an arterial or collector street, a minimum of three feet of landscaping shall be provided between the street and the sidewalk, and a minimum of four feet of landscaping shall be provided between the sidewalk and fence or wall. Street trees shall be planted between 25 and 30 feet on center. Shrubs shall be selected to attain a height between three and five feet, and not encroach into the sidewalk when mature. The sidewalk should connect through the landscaping to the street at locations where pedestrian crossings are needed.

Landscaping in Parking Lots

Parking areas should be landscaped to minimize sun glare and heat buildup and to reduce the negative visual impact associated with large areas of paving. Accent landscaping should be used to

enhance/identify entry drives and delineate drive aisle locations. Landscaping within parking areas should be protected from encroaching vehicles by concrete curbing. The curbs should have breaks to allow entry of storm water run-off. If used, landscape islands should be a minimum of 5 feet in width to allow for tree growth and to avoid tree trunks from being damaged by cars. Plants near corners shall be selected for a mature height of no more than three feet to permit good visibility. Trees may be selected from the street tree and accent tree lists.

Fences and Walls

Residential Fences

Fences can provide a setting for entryway landscaping and treatments that differentiate and define the neighborhoods, and assist in defining a sense of place. Fences also provide separation between residential units for individual privacy, safety, and security. All fencing will be installed by the developer(s) and shall coordinate with landscape treatments.

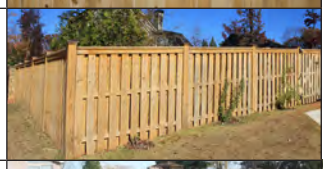
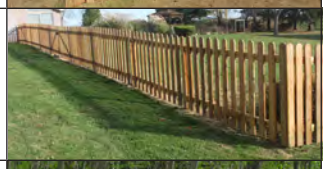
Fence and Wall Design Guidelines

Fence and wall styles shall be coordinated throughout the plan area. Fences and walls shall incorporate materials, colors, and shapes that reflect the character of the plan area and its surroundings. Fences and walls shall be constructed of high quality, long lasting, low maintenance, and graffiti resistant materials. Fences and walls shall be designed to minimize policing problems, indefensible spaces, and hiding spots, and shall not diminish public or private views. Along pedestrian pathways, fencing should be kept at three feet within the front yard, and within the side yard for the greatest length feasible to provide visibility into the pathway.

Residential yard fences shall not exceed six feet in height (as per city standards), shall be constructed from construction heart redwood or comparable, durable material. Residential walls backing to a street may be decorative masonry. Open fencing used in front yard setbacks shall not exceed three feet in height, be of decorative material (i.e. wood pickets, split rail, etc.), maintaining a minimum transparency of 50 percent.

Edge fencing along the open space conservation areas shall not exceed three feet in height and shall be of decorative material (i.e. wood pickets, split rail, etc.). The design shall permit passage of wildlife. This requirement does not apply to residential fences backing up to open space areas. Landscape improvements shall complement the character of the fence (see Landscaping Standards). Chain-link fencing is prohibited. Fencing guidelines are presented in Table 2-7, Fencing Guidelines.

Table 2-7 Fencing Guidelines

Fence Type	Height Limit (feet)	Permitted Application	Image
Wood: Wood Fence with wood posts	6' Setbacks A minimum of 5' behind the leading edge of the house along rear and side property lines.	Rear and side yard of residential lots	
Good Neighbor: Wood fence with wood posts and a decorative cap. Cap should be a semi-transparent panel.	7' Setbacks A minimum of 5' behind the leading edge of the house along rear and side property lines	Rear & side yard of residential lots when visible from public view.	
Picket: Picket Fence with wood posts	3' Setbacks Must be 2' minimum behind property line and a minimum 50% transparent	Front yard of residential lots, and along side yard property lines to the front façade of the house. Rear yards adjacent to the golf course.	
Split Rail: Split rail fencing that reflects the agrarian character of the area.	4' Setbacks A minimum of 5' behind the leading edge of the house along rear and side property lines.	Front yard of hillside residential lots, along side yard property lines to the front façade of the house; Open ended cul-de-sacs leading to open space; May also be used in conjunction with neighborhood entries. (Min. 50% transparency). Rear yards adjacent to the golf course.	
Split Rail with Mesh: Split rail fencing that reflects the agrarian character of the area.	4' Setbacks A minimum of 5' behind the leading edge of the house along rear and side property lines.	Rear yard adjacent to the golf course.	
Wrought Iron: Wrought iron fence with wrought iron posts.	6' Setbacks A minimum of 5' behind the leading edge of the house along rear and side property lines.	Rear and side yards adjacent to the golf course.	

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3.0

CIRCULATION

The specific plan's circulation system is designed to provide a functional and efficient transportation network for automobiles, transit, bicyclists, and pedestrians. The street system is comprised of a network of arterial, collector, and local residential streets designed to accommodate traffic generated by plan area residents. All streets are public with the exception of the private driveways that may be developed within the commercial and medium density residential areas. Figure 3-1, Miramonte Specific Plan Circulation Diagram, has been incorporated into this plan consistent with Section 65451(a)(2) of the State Government Code.

Section 3.0 is organized into the following subsections:

3.1 Circulation Goals and Policies

3.2 Circulation Concept

3.3 Circulation Elements

3.1 Circulation Goals and Policies

The following Circulation Goal and Policies establish the implementation framework for the Plan's Circulation Diagram.

Circulation Goals

C – 1 Provide the necessary circulation system and infrastructure to create a safe and efficient circulation network for motor vehicles, pedestrians, physically disabled persons, and alternative forms of transportation with an emphasis on creating a pedestrian friendly, walkable community.

C – 2 Provide a comprehensive bicycle and pedestrian network separate from street rights-of-way to facilitate quick and convenient non-motorized access.

C – 3 Provide seamless connections to adjacent areas, but encourage most automobile and all truck traffic to use San Vicente Road, rather than Orchard Lane or West Street.

Circulation Policies

C – A The general plan circulation concept should be adapted to the plan area in recognition of development limitations related to the 400-foot elevation contour and future traffic demands in the northwest quadrant of the city.

C – B All streets and circulation routes shall be consistent with Figure 3-1, Miramonte Specific Plan Circulation Diagram.

C – C San Vicente Road shall be connected to the plan area temporarily by way of following the existing alignment, and ultimately by large-radius curves to provide a smooth transition from the plan area south to the existing.

C – D Street widths shall be consistent with street section minimums indicated in Figures 3-2, Street Classifications Cross Sections.

C – E All street improvements shall be financed and installed by the developer. The developer may be credited by the city's Traffic Impact Fee program.

C – F All streets within the plan area shall be public and dedicated to the City of Soledad, and shall be constructed with curbs, gutters, landscape parkways, and sidewalks meeting City of Soledad Standard Plan specifications.

C – G City shall assume responsibility for the maintenance and repair of all street facilities with funding from a Benefits Assessment District or other appropriate funding mechanism.

C – H Funding for maintenance of lighting, street improvements, special paving surfaces, sewer, storm drain, common area landscape, open space, and hardscape shall be provided through a Public Facilities Maintenance District or a similar funding mechanism.

C – I All private streets and driveways within the plan area, such as within commercial and medium density areas, shall be maintained and paid for by the property owners for those developed areas.

C – J All streets shall include a sidewalk at least four feet in width on each side of the street.

C – K Sidewalks adjacent to schools, commercial areas, and village residential areas (external road frontages only) shall be a minimum of eight feet wide, and may replace planting strip and landscaping included in the street sections with interspersed landscaping blocks.

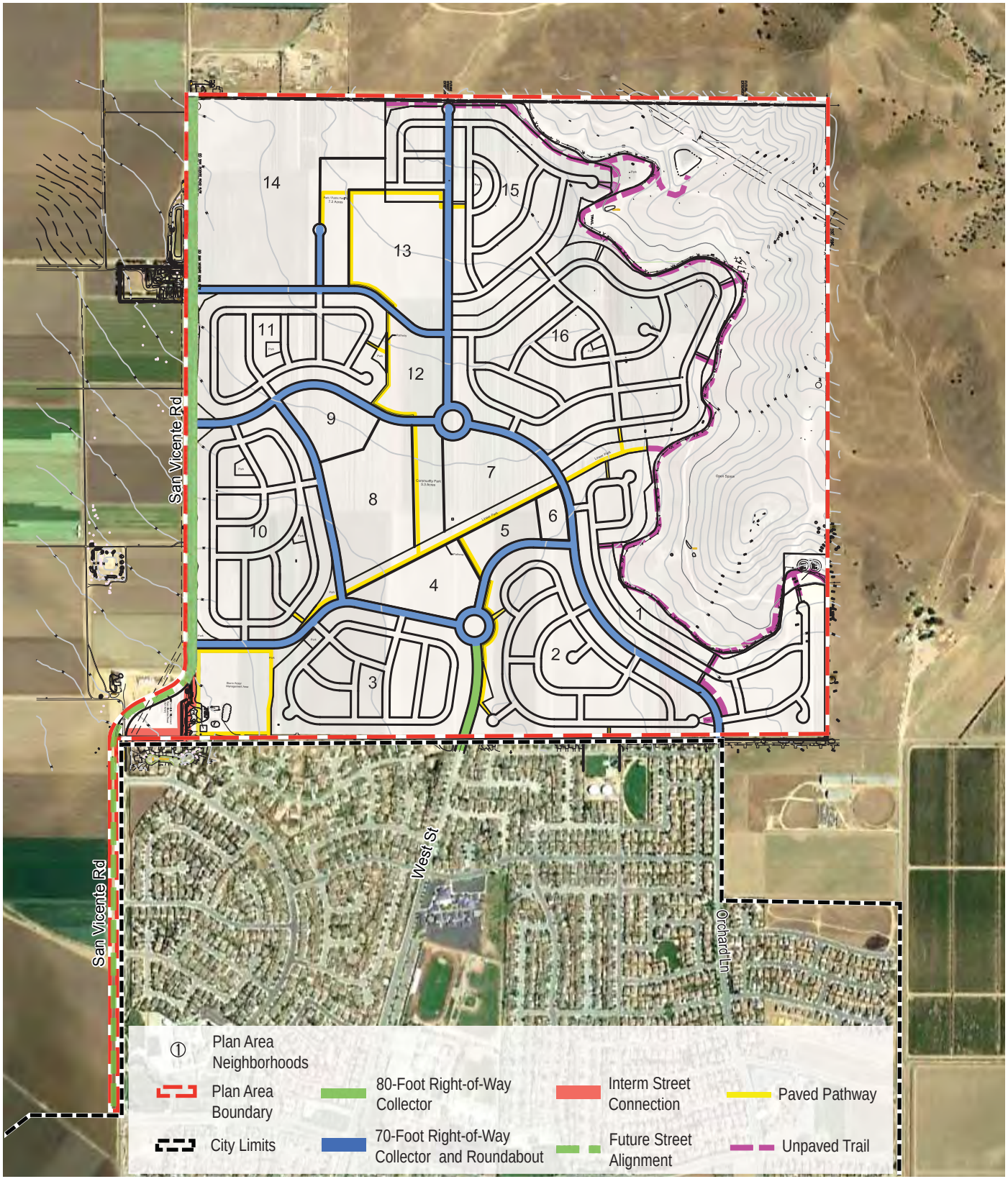
C – L Sheltered bus stops including bus turnouts, meeting MST (Monterey-Salinas Transit) specifications, shall be provided at appropriate locations within the plan area. The developer will develop these bus stops for use by the on-call service or future fixed route service.

C – M Bike lanes and paths shall be designed and maintained to improve bicycling safety and convenience, achieve integration with the street network, and encourage people to use bicycles to commute to work or school.

C – N New development shall provide bike lanes and paths, secure bicycle storage, and parking facilities.

C – O Bicycle parking should be provided in locations near building entrances or outdoor use areas with good public visibility.

C – P A minimum of two ingress/ egress will be provided for each neighborhood area. Access should be aligned with intersecting streets where possible.

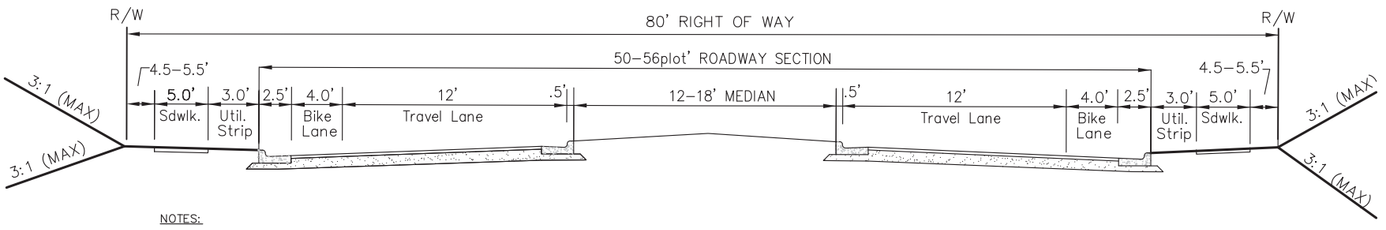


Source: Google Earth 2017

Figure 3-1

Miramonte Specific Plan Circulation Diagram

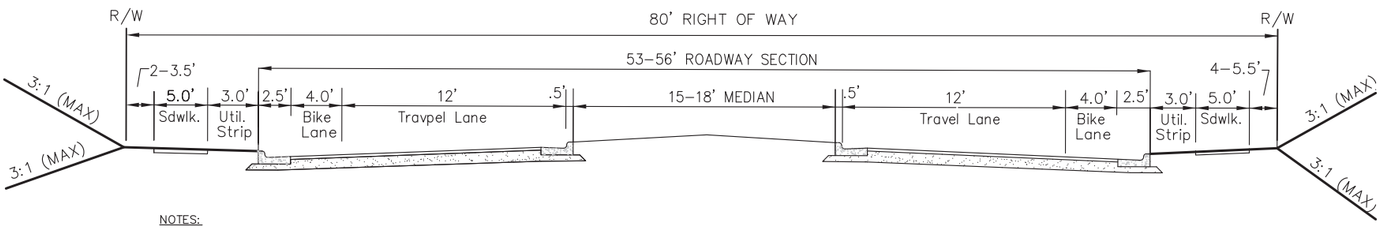
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NOTES:

1. NORMAL CROWN OF 1/4" PER FOOT UNLESS OTHERWISE DIRECTED BY CITY ENGINEER.
2. PAVEMENT DESIGN SHALL BE 10" ABC, 3" TYPE H, AND 2 1/2" I–2.
3. SIDEWALK CAN VARY IN POSITION WITHIN THE LANDSCAPED AREA.

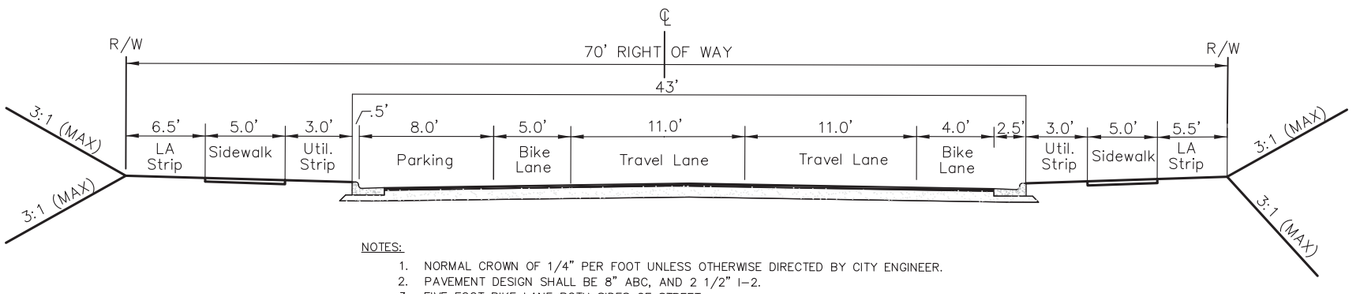
TYPICAL SECTION (WEST STREET)



NOTES:

1. NORMAL CROWN OF 1/4" PER FOOT UNLESS OTHERWISE DIRECTED BY CITY ENGINEER.
2. PAVEMENT DESIGN SHALL BE 10" ABC, 3" TYPE H, AND 2 1/2" I–2.
3. SIDEWALK CAN VARY IN POSITION WITHIN THE LANDSCAPED AREA.

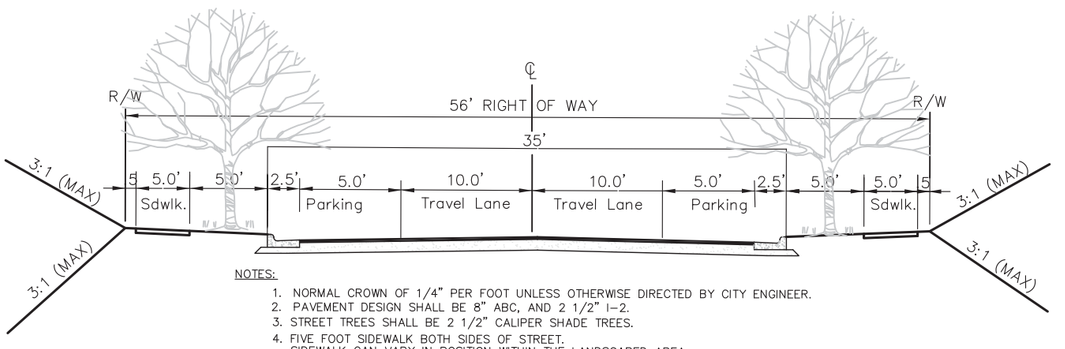
TYPICAL SECTION (SAN VICENTE ROAD)



NOTES:

1. NORMAL CROWN OF 1/4" PER FOOT UNLESS OTHERWISE DIRECTED BY CITY ENGINEER.
2. PAVEMENT DESIGN SHALL BE 8" ABC, AND 2 1/2" I–2.
3. FIVE FOOT BIKE LANE BOTH SIDES OF STREET.
4. FIVE FOOT SIDEWALK BOTH SIDES OF STREET.
   SIDEWALK CAN VARY IN POSITION WITHIN THE LANDSCAPED AREA.

TYPICAL SECTION (COLLECTOR STREET)



NOTES:

1. NORMAL CROWN OF 1/4" PER FOOT UNLESS OTHERWISE DIRECTED BY CITY ENGINEER.
2. PAVEMENT DESIGN SHALL BE 8" ABC, AND 2 1/2" I–2.
3. STREET TREES SHALL BE 2 1/2" CALIPER SHADE TREES.
4. FIVE FOOT SIDEWALK BOTH SIDES OF STREET.
   SIDEWALK CAN VARY IN POSITION WITHIN THE LANDSCAPED AREA.

TYPICAL SECTION (LOCAL STREET)

Figure 3-2

Street Classifications Cross Sections

Miramonte Specific Plan

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3.2 Circulation Concept

The plan area streets and pathways are designed to accommodate a variety of transportation modes. Streets will create a logical network which will accommodate cars, bicycles, and pedestrians. Sidewalks, street trees, landscaping, and building placement shall be considered in order to create inviting public spaces. The use of internal local streets feeding into collector streets will keep traffic volumes low in residential neighborhoods, while a separate network of pathways will provide additional circulation options for pedestrians and bicyclists. Refer to Figure 3-1, Miramonte Specific Plan Circulation Diagram, for the circulation plan.

Street Classifications

Collector streets serving the plan area are San Vicente Road, Orchard Lane from the southern plan area boundary to San Vicente Road, Orchard Lane through the roundabout to San Vicente Road, West Street from the southern plan area boundary through the roundabout to Orchard Lane, Crest Street, the street west of the schools, and the street south of the Farmers' Village. Collector streets will be within a right-of-way that is either 80 feet wide (San Vicente Road and the southern leg of West Street) or 70 feet wide (all other collector streets). Other streets within the plan area will be local streets within 56-foot rights-of-way. Figure 3-2, Street Classifications-Cross Sections, illustrates the various classifications of streets.

On-street Bicycle and Pedestrian Facilities

Pedestrian sidewalks provide excellent opportunities for leisure and recreation as well as an alternative means of transportation. Pedestrian sidewalks are provided on all plan area streets. Plan area sidewalks consist mostly of a five-foot wide sidewalk area separated from the adjacent



street by a landscaped planting strip. A landscaped area is also provided between the sidewalk and adjacent walls or fences.

Class II bicycle lanes are provided on all collector streets within the plan area. Bicycle lanes will be a minimum five feet wide and will be separated from the vehicle travel lane by a painted stripe, generally solid, but dashed approaching intersections.

Bicycle and Pedestrian Pathways

A network of pathways is integrated into the specific plan. Two major pathway spines cross the plan area. The linear park connects from San Vicente Road northeastward to the residential areas north of Orchard Lane, and a second spine pathway begins at the linear park and extends northward to the Farmers' Village. These two spines serve all of the medium and high density residential areas, the commercial area, both schools, the Farmer's Village, and park areas. Numerous short connecting pathways provide connections between the low density residential neighborhoods and these two spines or to schools



or adjacent streets. These pathways within the developed portions of the plan area will be paved or constructed with another type of hard surface material, and will serve both utilitarian and recreational purposes. A trail in the open space area will utilize the existing dirt road and serve primarily recreational purposes. Figure 3-3, Pathway System, shows the location of off-street pathways for bicycles and pedestrians.

The hard-surfaced pathways will be within minimum 20-foot-wide rights-of-way, to allow enough room for emergency ingress/egress if needed. The pathway surface will be eight feet wide to meet Caltrans bikeway design standards. Where the pathway provides the only secondary access, the right-of-way will be 20 feet with a 12-foot wide paved pathway. At least three feet of low landscaping will be provided on each side of the pathways. Figure 3-4, Pathway Cross Section, shows typical pathway standards. Signage may be provided throughout the plan area to guide bicyclists toward trails, parks, and other points of interest.

Public Transit

Monterey Salinas Transit (MST) operates five routes servicing the City of Soledad: Seaside-King City; King City-San Jose Airport; Monterey-Paso Robles; Soledad-Paso Robles; and Salinas-King City. All of these routes stop on Hector de la Rosa Street, about two miles from the southern boundary of the plan area, and one route (Salinas-King City) also stops at Front Street and San Vicente Road, about one mile from the southwest corner of the plan area. MST also operates local door-to-door transit service on an on-call basis within the cities of Soledad, Gonzales, Greenfield, and King City. This service can be used to connect to the fixed routes that serve Soledad, and would serve the plan area when the plan area is within the city limits.



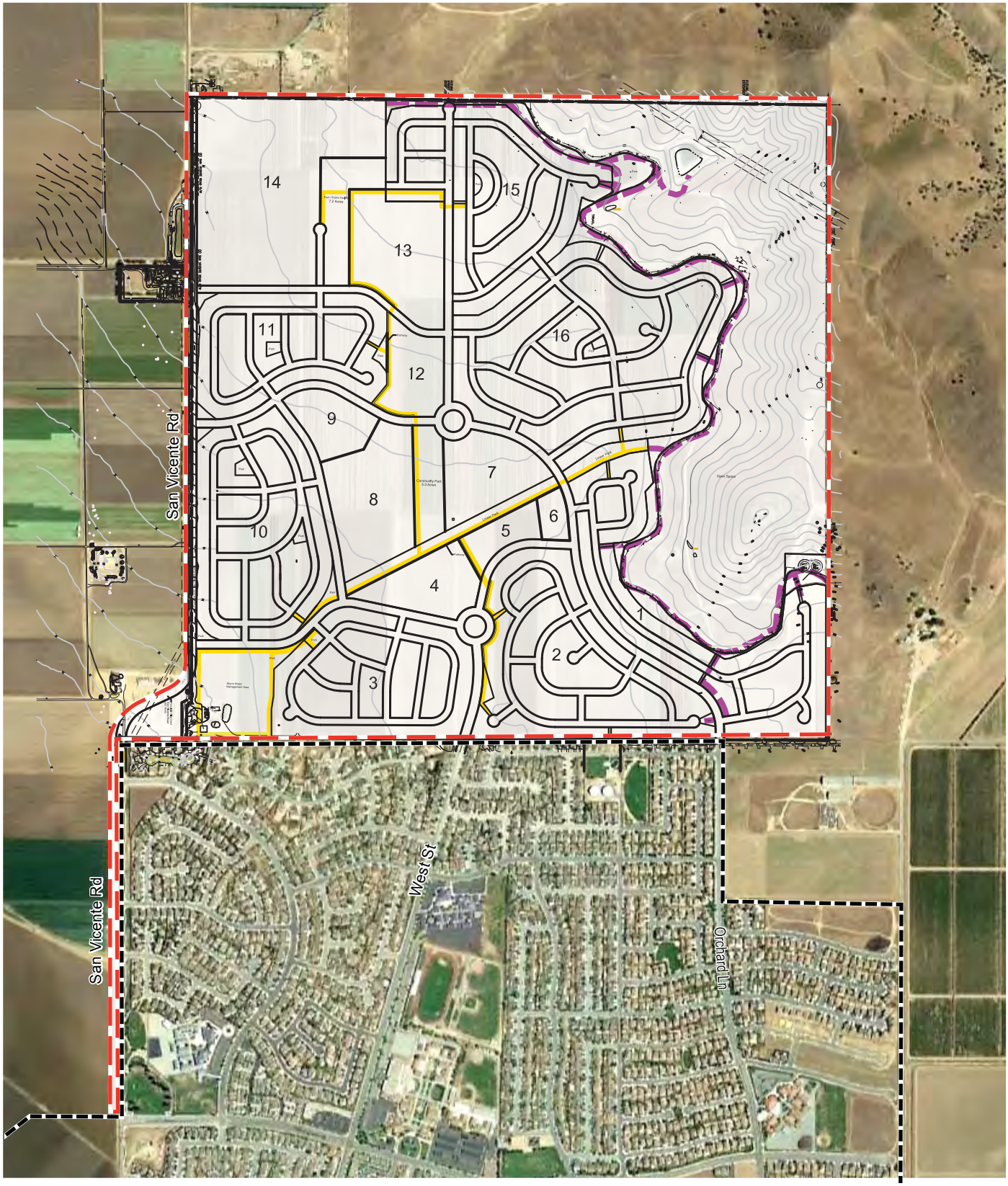
The specific plan includes a policy to include bus stop locations, and the looped nature of the street layout facilitates future fixed route bus service through the plan area. Two potential transit loops are identified in Figure 3-5, Potential Transit Loops.

Rail Service

A commuter train station has been proposed at the intersection of Main Street and Front Street, one and one-half miles from the southern boundary of the plan area. The station could provide a connection for Amtrak, Caltrain, or a new commuter rail line at some point in the future; Caltrain currently provides service from San Francisco to San Jose, with limited service as far south as Gilroy. Planning is underway for extension of Caltrain service to Salinas, but there are no current proposals for commuter rail to the southern Salinas Valley. Amtrak's Coast Starlight passes through Soledad, but the nearest stops are in Salinas and Paso Robles.

Street Design

All streets will be designed to meet the city's Standard Plan specifications. Every street will include one traffic lane in each direction, gutter, storm drains, curb, planting strip, and sidewalk. Street cross-sections are shown in Figure 3-2, Street Classifications Cross Sections.



0 1,200 feet

Plan Area Boundary
City Limits
① Plan Area Neighborhoods
Paved Pathway
Unpaved Trail

Source: Google Earth 2017

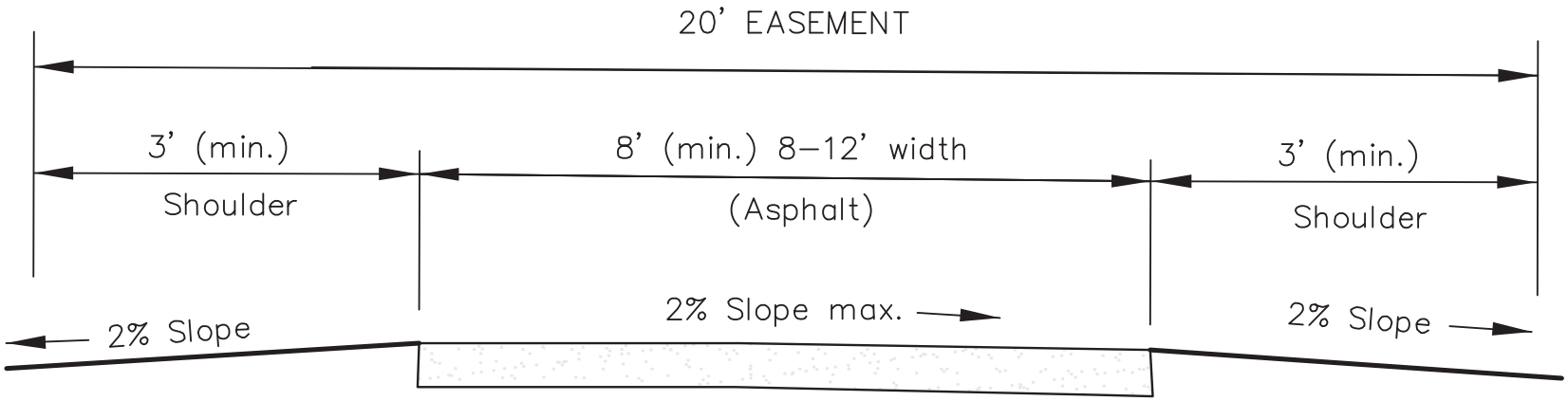
Figure 3-3

Pathway System

Miramonte Specific Plan

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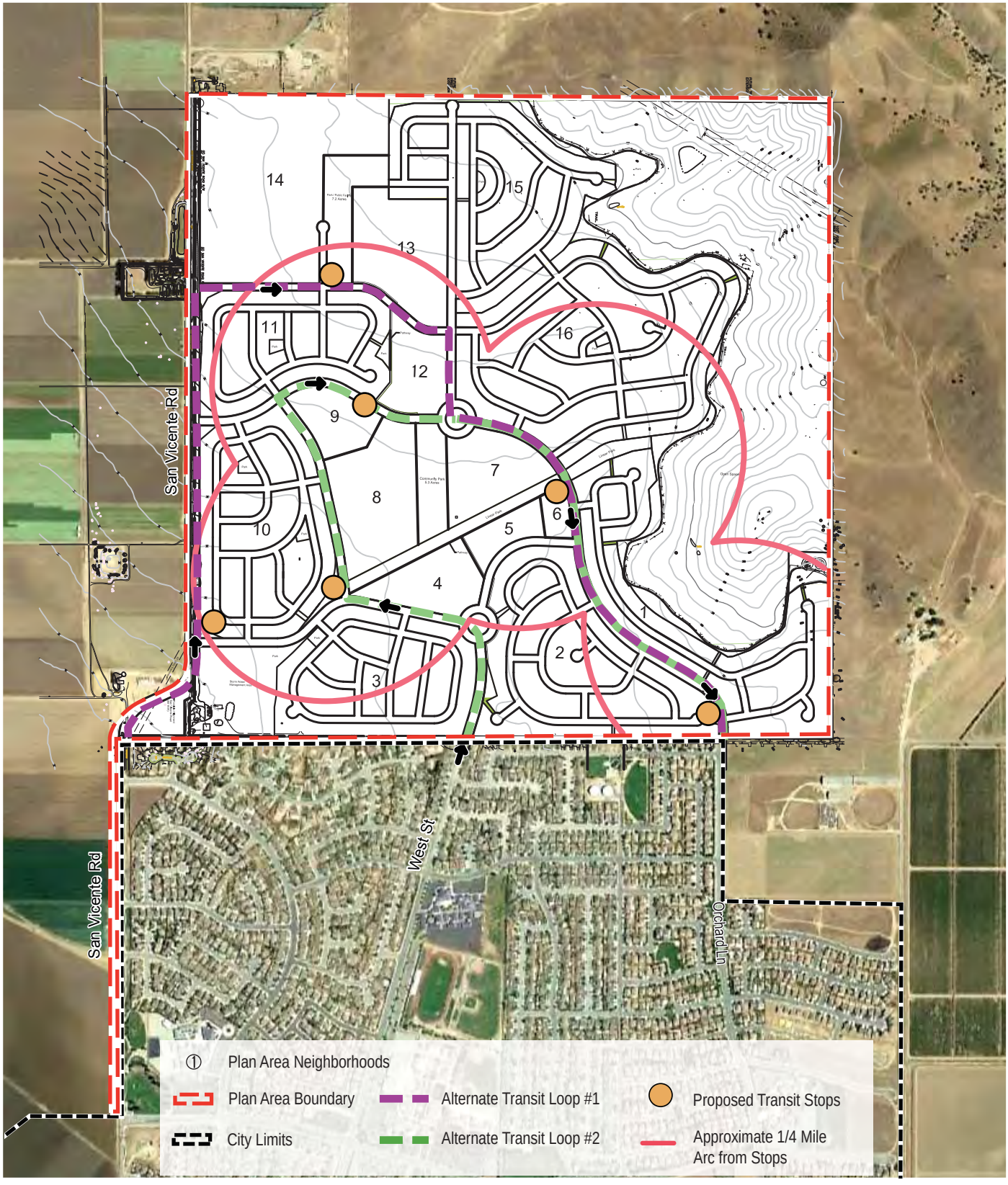


Notes: 1) Use Caltrans Class I specifications, see index 1003.1 (14) for pavement structure guidance of bike path.
2) Sign clearance, see CA MUTCO, Fig 9B–1
3) 1% cross–slope min. on path.

TYPICAL PATHWAY SECTION

Figure 3-4
Pathway Cross Section

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0 1,200 feet

Source: Google Earth 2017

Figure 3-5

Potential Transit Loops

Miramonte Specific Plan

E M C

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80-foot Collector Street Design

San Vicente Road and West Street south of the roundabout will be designed with 80-foot wide rights-of-way.

West Street will have a landscaped median of between 12 and 18 feet in width, two 12-foot travel lanes, two five-foot bicycle lanes, two five-foot sidewalks, and the remaining 18 to 24 feet will be landscaped areas to the sides of the street. No parking will be permitted on West Street.

San Vicente Road will have two 12-foot travel lanes, two five-foot bicycle lanes, two five-foot sidewalks, a landscaped median of 15 to 18 feet, and the remaining 18 to 21 feet will be landscaped areas to the sides of the street. Twelve-foot turn lanes will be provided within the median where needed, leaving a three- to six-foot landscaped median area adjacent to the turn lane. No parking will be permitted on San Vicente Road.

On San Vicente Road between the north end of the storm water basin parcel and the northern boundary of the plan area, the specific plan developer will construct all of the east-side improvements, as well as southbound turn lanes and adjacent median where needed to serve the plan area, the eastern half of the median including curb and landscaping (except in locations where a northbound turn lane will be needed, and a temporary asphalt curb should be provided), and the southbound travel lane in its ultimate position. Between the north end of the storm water basin parcel and the point about 300 feet north of Vista del Soledad, the specific plan developer will upgrade San Vicente Road on the existing alignment to a pair of 13-foot lanes with two-foot shoulders for temporary use until a final wide-radius curve connection can be completed on adjacent land by the developer of that land. In lieu of the temporary connection, the specific plan developer may construct the wide-radius curve connection on the adjacent land.

70-foot Collector Street Design

Most of the collector streets within the plan area will be within 70-foot rights-of-way. These streets will have two 11-foot travel lanes, two five-foot bicycle lanes, two five-foot sidewalks, an eight-foot parking lane on one side, and the remaining 20 feet will be landscaped areas to the sides of the street.

A parking lane will be provided on the side of the street on which development fronts, such as in front of the commercial area, the schools, and the medium density housing areas. No parking will be provided on the side of a street fronted by a wall. In locations where there are walls on both sides, parking will only be provided in the vicinity of a park or trail entrance, and for the remainder of the street, the extra width will be dedicated to landscaping at the side of the street, or a landscaped median. Parking may be provided on both sides where the collector runs between the two schools, and to reduce congestion and improve crossing visibility, no parking will be provided on Orchard Lane between the roundabout and the senior housing. No parking will be allowed within 50 feet of any of the roundabouts, and a bulb-out will be provided to mark the point where parking ends. Parking spaces will not be delineated by paint marks. In places where houses are arranged to front onto a collector street, garage access will be provided from the local street, but parking may be included along the street.

56-foot Local Street Design

The 56-foot local streets will provide access within residential neighborhoods. Each street will have two 10-foot travel lanes, two seven-foot parking lanes, a five-foot planting strip, and a five-foot sidewalk. Houses will front on most local streets. In some situations, where a row of lots is situated between an collector and a local street, garage access may be off the local street, while the house fronts on the collector street.

Roundabouts

Two 180-foot diameter roundabouts, located within a 300-foot diameter right-of-way, are proposed to accommodate collector street traffic flow without the need for signal lights or stop signs. One of the traffic circles is located where West Street reaches the commercial area. This roundabout will provide options for northbound traffic to proceed to the northern neighborhood or to the commercial area, senior housing, or southern residential areas. Another roundabout will be located where the street east of the schools meets Orchard Lane. Traffic entering the project site from San Vicente Road will have an option to reach the northern neighborhoods, the fire station, or either of the schools.

The roundabouts will include single 20-foot travel lanes shared with bicycles, the central island, a five-foot sidewalk, and landscaping. The central island would measure about 80 feet in diameter, including a 5 to 10-foot wide oversized vehicle/fire engine apron and landscaping. Optional bicycle routing will be provided via the sidewalks. The West Street roundabout will also accommodate a Class I pathway along the eastern edge to connect the north-south pathway spine to residential areas.



Parking Lots and Driveways

On-site circulation systems should be designed to reduce conflicts between vehicular and pedestrian traffic, provide adequate maneuvering and stacking areas, and consider emergency vehicle access. Adequate parking within the project area is necessary for a successful project; however, it should be located and designed to minimize the visual impact of paved lots.

Parking Guidelines



- low screen walls;
- landscaping;
- changes in elevation (i.e. recessed from street level).

Parking areas should be designed so that the paths of travel for cars and pedestrians are separated to the extent possible. Parking areas should include shade trees, landscaping, lighting, and pedestrian/vehicular circulation areas. Accent paving should be used to delineate locations where a pedestrian travel route crosses the vehicular route. Bicycle parking shall be provided adjacent to commercial parking lots at a ratio of one bicycle space for each ten automobile space.

Driveways to parking lots should be located as far from street intersections as possible so that adequate stacking room along the street is maintained (25-foot minimum from curb return). The primary entry drive to parking lots should be designed with enhanced paving, landscaping, and architectural features. Parking lot entrances should align with street intersections to minimize entry and exit locations along collector streets. Parking lots shall provide adequate turning and backing space to safely accommodate garbage trucks, delivery trucks, and emergency vehicles.

Traffic Calming and Street Crossings

Traffic calming is important to creating a safe and enjoyable neighborhood. Traffic calming devices can control traffic volumes and speeds to promote a safe neighborhood feel within the plan area.

The curvilinear street design will naturally reduce speeds by preventing long straight streets where traffic can increase its speed. Speed limits are expected to be set at 25 miles per hour on all streets internal to the plan area. Traffic will also be slowed as it flows into the roundabouts, with a typical speed of about 15 miles per hour.



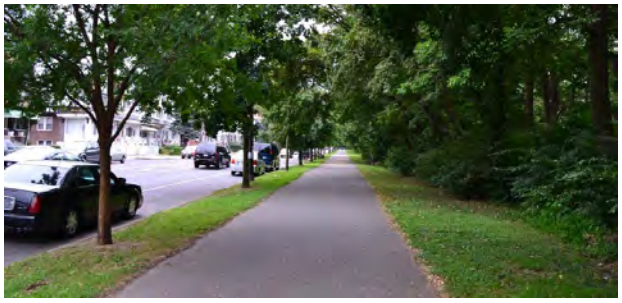
The low density residential lots are on interior streets that will not carry through traffic or large volumes of traffic.

Intersection and mid-block bulb-outs reduce the paved surface width of a street to serve two purposes: control traffic movements and provide safer pedestrian crossings as driving speeds tend to decrease as a street narrows, and the pedestrian's crossing distance is reduced. Intersection and mid-block bulb-outs will be built at the intersection between the two schools, the intersection near the senior housing, and at the four major pathway/street crossings, as well as the point where the trail system transitions onto West Street. These bulb-outs should include special paving and landscaping that does not decrease driver sight lines at intersections. Refer to Figures 3-6, Traffic Calming Locations and Figure 3-7, Traffic Calming Details.

Painted lines or differentiated paving will be used to mark crosswalks across collector streets at intersections. Crossings with bulb-outs will be marked with differentiated pavement that will span across the street. The mid-block trail crossings will be raised to sidewalk level on speed tables as a further traffic calming measure.

Surfaced Pathways

Surfaced pathways will be constructed of concrete, impervious concrete, or asphalt. The pathways will be eight feet wide with two feet maintained clear on each side, in conformance with Caltrans standards. Where the pathways intersect with streets, a ramp will be provided. At intersections with collector streets a stop sign for the path will be posted, and at intersections with local streets a yield sign for the path will be posted. Parking will be prohibited within 10 feet of a path intersection with a street. Where pathways parallel streets, a five-foot landscape buffer will be provided.



The pathways will include spurs to provide access to the commercial area, low density residential areas, multifamily residential areas, senior housing, and parks. Lighting may be provided as needed. The surfaced paths will meet Americans with Disabilities standards.

Unsurfaced Pathways

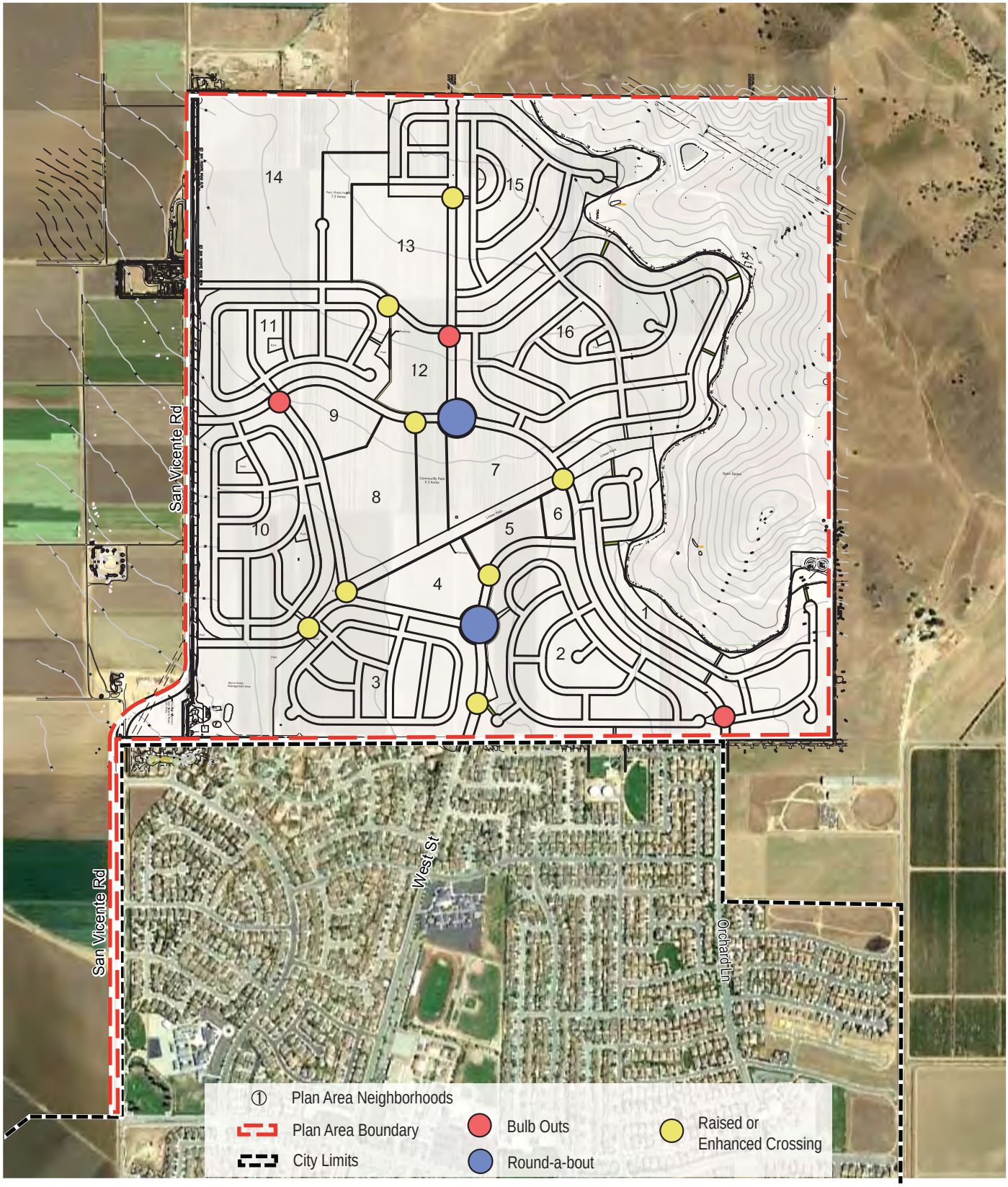
The unsurfaced pathways are intended as unimproved trails within semi-natural areas that are transitioning to natural areas. The paths may be surfaced with gravel if necessary for all-weather use. No lighting will be provided. The unsurfaced paths will not necessarily meet Americans with Disability Act standards, but at the location where a surfaced pathway is concurrent, there will be accessibility and a viewing area will be provided.



Bus Stops

Bus stops will be provided at locations with the highest demand. The bus stops will be constructed to MST design specifications including parking pad, curbs, shelter, and bench. Each stop will bear a name plate identifying its location, visible on the approach from either direction. The bus pull-out will take the place of the planting strip and/or the parking lane, depending on the side of the street and space requirements for the pull-out. No adjacent landscaping is required at the bus stop if space does not permit.





Source: Google Earth 2017

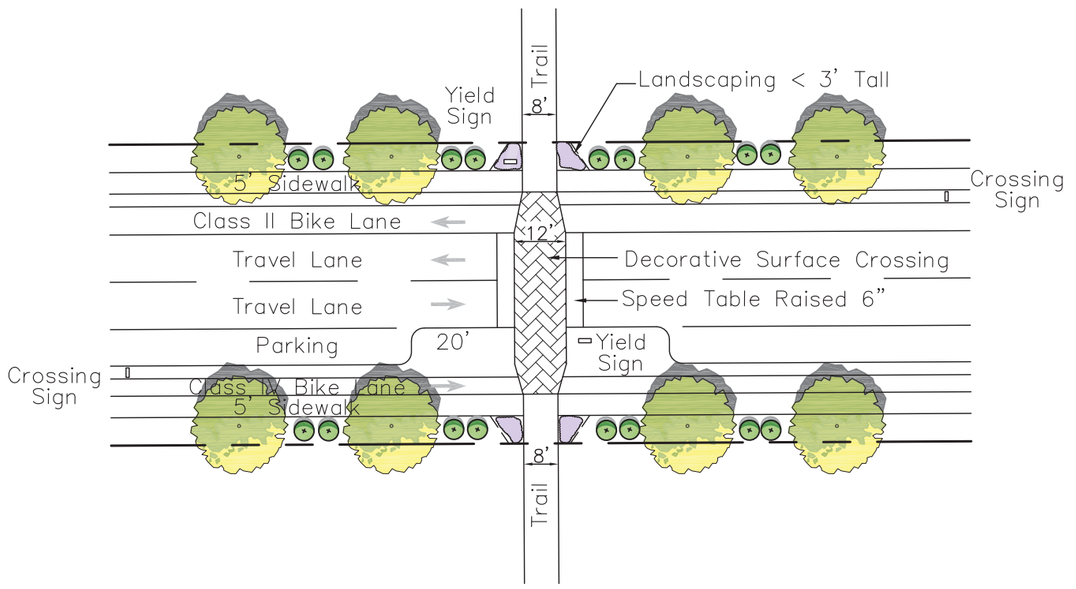
Figure 3-6

Traffic Calming Locations

Miramonte Specific Plan

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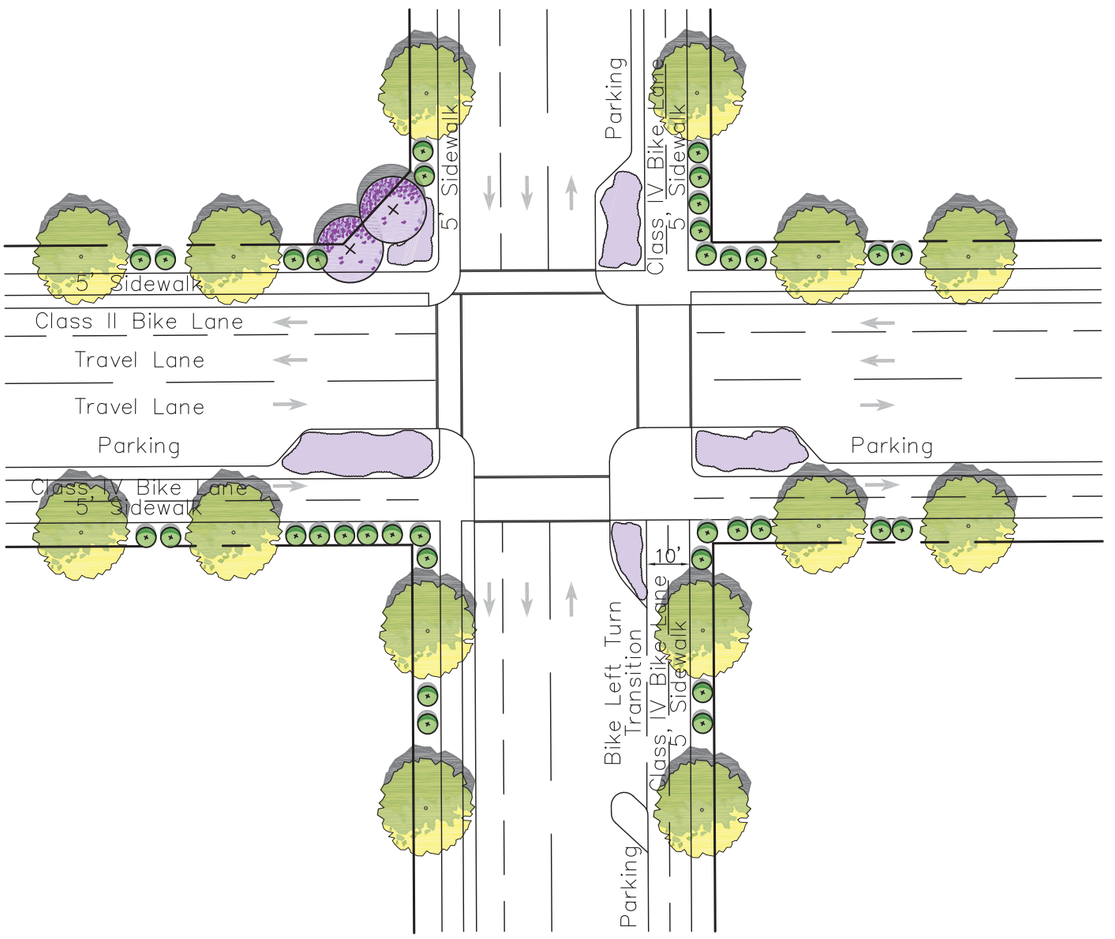
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MID-BLOCK TRAIL CROSSING

COLLECTOR STREET

(Shown with Optional Class IV Bike Lane on Parking Side)



TYPICAL BULB-OUT

Figure 3-7

Traffic Calming Details

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4.0

PARKS, RECREATION, AND OPEN SPACE

The specific plan provides several open space and recreational opportunities, including various parks, paved trails, and unimproved open space trails. The park and open space areas are arranged within the plan area to connect neighborhoods and to protect the hillside area from development.

Section 4.0 is organized into the following subsections:

4.1 Parks, Recreation, and Open Space Goals and Policies

4.2 Parks, Recreation, and Open Space Concept

4.3 Description of Park and Open Space Improvements

4.1 Parks, Recreation, and Open Space Goals and Policies

Parks, Recreation, and Open Space Goals

P – 1 Ensure that the provision of adequate park, open space, and recreational facilities meets the varied needs of the plan area residents.

P – 2 Protect the visual and natural resource values of the hillside open space lands.

P – 3 Utilize park lands to link neighborhoods.

Parks, Recreation, and Open Space Policies

P – A Provide a variety of semi-active and passive recreational features that meet the needs of residents' abilities and interests.

P – B Each phase of development shall provide enough parkland to meet the needs of project residents in that phase or neighborhood being constructed.

P – C Parkland minimum requirements shall be determined at three acres per 1,000 residents (per General Plan policy PR-1(a)). With an estimated population of 9,833 residents, the parkland requirement is about 29.5 acres. Parkland and open space combined shall be required at a ratio of five acres per 1,000 residents, or a minimum of about 50 acres.

P – D Design and landscape parks for easy maintenance, water efficiency, wind protection, and shade. Utilize native plants when suitable selections are available.

P – E Interconnect parks, open space, schools, commercial areas, and the neighborhoods with sidewalks and/or trails.

P – F Include multi-functional spaces and facilities in the parks.

P – G Parks, open spaces, and recreation facilities should be designed to eliminate or avoid hidden and difficult-access areas where security problems would be likely to occur.

P – H Each of the neighborhood parks will include a small children's play area.

P – I Children's play areas and other appropriate park areas should have adequate shade, seating, and wind protection provided through landscaping and/or constructed elements, and if located near collector streets, a three- to four-foot fence to separate the play area from the street.

P – J The storm water basin will be a dual-purpose area with sport and recreation fields.

P – K A recreational field should be located near the middle school.

P – L Parks should be located and designed to minimize noise and activity conflicts with residential areas.

P – M A 100 foot wide low growing and low fuel vegetated buffer should be provided between residential lots and the larger hillside open space area. This 100-foot buffer will be located within the open space area, and will be maintained to keep fuel load low.

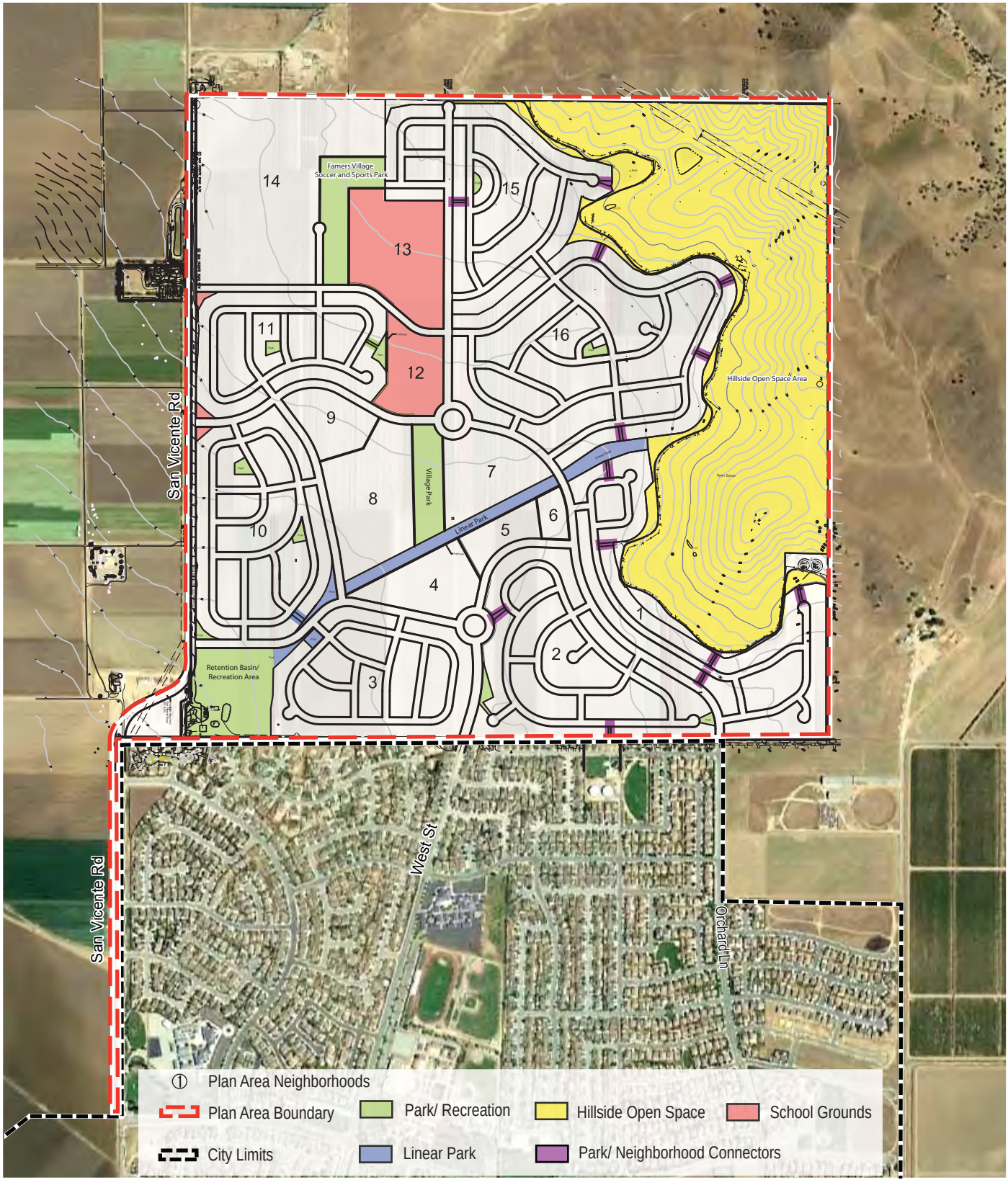
P – N Landscaping in the open space area, if needed to supplement existing vegetation, should utilize native plant materials that are both fire resistant and non-invasive.

4.2 Parks, Recreation, and Open Space Concept

The specific plan envisions a network of parks and pathways that form a comprehensive and thoroughly interconnected system. This system will provide recreational opportunities near each home in the plan area, and a system for non-motorized circulation within the plan area. A range of recreational options will be provided, including soccer, baseball, or other sports fields, picnic areas, playgrounds, and trails. The park areas will provide space for large trees that can provide shade and reduce winds.



Nearly one third of the 647-acre plan area is devoted to active or passive parks, open space, and recreation. This includes public parks, trails, and natural hillside open space, as well as landscaped areas along collector streets. The un-built portions of the schools provide additional open space. Nine neighborhood parks, two community parks, linear park, and an open space trail system are available to serve plan area residents. Approximately 150.4 acres of passive open space have been designated to preserve viewsheds and provide a recreational trail system. The specific plan provides a variety of passive and active recreational and open space amenities, while respecting the natural features within the plan area. Figure 4-1, Parks and Open Space, provides a diagram of the plan's parks and open spaces.



Source: Google Earth 2017

Figure 4-1

Parks and Open Space

Miramonte Specific Plan

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In addition to public park and open space, the multifamily, senior, affordable housing areas and the Farmers' Village will include private recreational amenities to serve those residents. The specifics of these amenities will be designed in conjunction with these areas.

Parks, Recreation, and Open Space Requirements

The city's general plan establishes a goal of five acres of park land for every 1,000 residents. Policy PR-1a of the general plan requires the dedication of three acres of park land for every 1,000 residents anticipated within a development.

Parks, Recreation, and Open Space Provided

Table 4-1, Specific Plan Parkland breaks down the acres of parkland provided in the specific plan. The anticipated population with buildout of the specific plan is 9,833 residents. To meet the general plan parkland requirement of three acres of parkland for every 1,000 residents, the specific plan would need to provide 29.5 acres of parkland. To meet the general plan goal of five acres of parkland for every 1,000 residents, the specific plan would need to provide 49.17 acres of parkland. The specific plan exceeds the 29.5-acre requirement through allocation of active park use alone (39.2 acres). With the addition of 150.4 acres of passive recreation, for a total of 189.6 acres of parkland, the specific plan far exceeds the city's general plan requirement of 29.5 acres as well as the city's general plan goal of 49.17 acres.

Table 4-1 Specific Plan Parkland

Active Use Park	Acres Provided
Village Park	5.3 acres
Detention Basin/Recreation Area	15.1 acres*
Farmers' Village Soccer/Sports Park	7.2 acres
Linear Park	7.3 acres
Neighborhood Parks	3.3 acres
Neighborhood Connection Trails	0.9 acres
Active Use Park Total	**39.2 acres**
Passive Use Open Space	**Acres Provided**
Hillside Open Space	150.4 acres
Passive Use Open Space Total	**150.4 acres**
Total Park and Open Space	**189.6 acres**

* This is for dual use, storm water retention and recreational park space. This area includes excess park space that is connected to the retention basin area.

4.3 Description of Park and Open Space Improvements

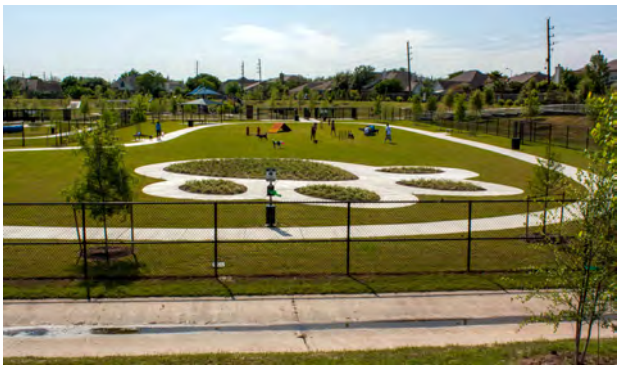
Parks

Parks are public developed park lands for active and passive pursuits. Each of the major types of park within the plan area is described below.

Village Park

The Village Park is central to the plan area and forms the core of a parkway spine that extends north through the schools, and extends east and west along the Linear Park. The Village Park comprises 5.3 acres adjacent to medium density residential uses on its east side and affordable housing on its west side. The Village Park is a key part of the north-south trail system.

Park uses could include turf areas for recreation, tennis or basketball courts, picnic and sitting areas, a dog park, a community



garden, a water play area, a playground, or a community center. A restroom building and parking will be provided.

Retention Basin/Recreation Area

The retention basin/recreation area is a 15.1 acre area located at the lowest elevation within the plan area, and will collect storm water run-off during periods of rain. The basin will be designed with gently sloping sides, and low fencing will prevent accidental entry while providing ample access during the times when the area is usable for recreational activity. The retention basin/recreation area is the largest area for active use in the plan area and will provide a large turf area for formal and informal sports. The slopes of the basin can be used for informal seating for games, and bleachers could also be constructed for certain sports fields. Trails will run along the perimeter of the basin and be open year-round. Picnic areas and restrooms will be provided. Depending on ultimate use and demand, a concession building could be provided. Parking will be provided.

Farmer's Village Soccer and Sports Park

This park will be about 7.2 acres, and extend the open space of the middle school into the Farmers' Village area. The focus of this park will be to provide additional parkland adjacent to the school to expand recreational facilities, if need, and provide recreational opportunities adjacent to the Farmers' Village in the form of soccer or other sports fields. Depending on ultimate use and demand, and the type of services provided in the Farmers' Village, this park could include a restroom and concession building. Limited parking will be provided, and may be provided along the entry street.



Linear Park



A 7.3 acre linear park crosses roughly east-west through the core of the plan area. This park connects the northern and southern residential neighborhoods, and runs adjacent to the medium density residential areas and the commercial area. The linear parkway includes a Class 1 bicycle/pedestrian trail as its main feature, and provides opportunities for activities such as Frisbee, a dog run, informal turf areas, a playground and picnic areas. At its eastern terminus the Class I trail provides entry to the Hillside Open Space, and there is an opportunity to provide handicapped access to a Hillside Open Space viewing area. The linear park may include amenities such as benches and lighting. The linear park is 100 feet wide in most places, and may also be designed to accommodate surface storm water flows and provide storm water treatment. Bicycle and pedestrian access will be provided from three adjacent neighborhoods, collector street crossings, the Village Park, and the north-south trail.

Neighborhood Parks

Residents of each neighborhood will have access to a park within or immediately adjacent to the neighborhood. A total of nine neighborhood

parks are included, comprising about 3.3 acres. These parks may be pocket parks, expanded neighborhood/park connector corridors, portions of larger parks, or portions of the linear parkway that include neighborhood park features. The focus of these parks will be on providing convenient playgrounds, sitting areas, and other gathering opportunities for neighborhood residents.

Trails and Neighborhood Connection Corridors

Two paved trail systems have been designed within the plan area to encourage walking and bicycling. One runs through the Linear Park, described above. The other runs along the edges of the two schools, through the Village Park, and between the commercial and multifamily area. There are numerous connecting paths between neighborhoods, parks, and schools. Additional landscaping will be planted along the entry ways and roundabouts of the plan area. Trail amenities may include drinking fountains, par course stations, benches, trail lighting, and signage.



The park and neighborhood connector corridors provide local connections to trails, parks, and schools, and add about one acre to the parkland within the plan area. Amenities such as concrete, asphalt, or decomposed granite walking paths; lighting for safety (four-foot high fixture maximum - lighting levels shall not reasonably interfere with adjacent residences), bollards; low growing shrubs and groundcover; and accent trees. Amenities that promote loitering, such as benches, are prohibited.

Adjacent residential units are encouraged to provide open fencing abutting the landscaped pedestrian corridor to create a distinctive separation between private and public property, while providing visibility into the corridor. The corridors will be at least 20-feet wide to give them a safe and open feeling. See Figure 3-4, Pathway Cross Section for the design of these connections.

An unpaved trail is also provided and is described as part of the Hillside Open Space.

Open Space Areas

Open space areas include the hillside area, landscape areas along collector streets, and unbuilt portions of the school sites. These areas serve as secondary recreational use areas. Each of the major types of open space within the plan area is described below.

Hillside Open Space

Approximately 150.4 acres of open space have been provided within the plan area, representing approximately one-quarter of the plan area. Open space lands encompass the natural hillsides above the 400-foot elevation. The Hillside Open Space area is intended to be preserved under a conservation easement, and could remain essentially in its natural state. However, other allowed uses within the conservation easement are passive recreation, a gathering area (e.g. clubhouse or community center), alternative energy, and public facilities. The existing unpaved ranch road will be retained and used as a trail. Connections to the trail from adjacent neighborhoods will be provided at about seven locations as identified on Figure 1-4, Miramonte Specific Plan Land Use Diagram. Only small

extensions and additions to the hiking trail system will be made beyond the existing ranch road. Native vegetation may be restored, if necessary, for erosion control or habitat establishment. Fuel reduction may take place to reduce fire risk. Small signs for educational and navigational purposes may be installed. Lighting on the hillside trail is prohibited.

Collector Street and Roundabouts Landscape

The collector streets, while not counted toward park land dedication requirements, have been designed to include landscaping on both sides, with additional landscaping where a fence or wall backs to the street. The roundabouts will also feature landscaping to provide significant focal points within the plan area. In several locations, deeper landscape pockets are provided, such as at the plan area entries from San Vicente Road.



School Grounds

The school grounds at the elementary school and the middle school, while not counted toward park land dedication requirements; do provide additional open areas and the potential for additional recreational opportunities.

5.0

PUBLIC SERVICES AND FACILITIES

The provision of adequate public facilities and services to the plan area is a primary goal of the specific plan. The plan area is served by an extension of the City of Soledad's existing public facilities and public safety services consistent with the provisions of the General Plan. This section describes at a conceptual level how and where services shall be extended/ provided to serve the plan area.

Section 5.0 is organized into the following subsections:

5.1 Public Facility Goals and Policies

5.2 Public Facility Improvements

5.3 Public Services

5.1 Public Facility Goals and Policies

Public Services and Facilities Goals

PSF – 1 Provide an efficient, self-sustaining system of public facilities that accommodates the needs of the residents and businesses within the plan area through buildout.

PSF – 2 Provide adequate and reliable services and utilities to residents and business and ensure adequate maintenance of these utilities and services.

Wastewater Policies

PSF – A Minimize wastewater flows through water conservation efforts.

PSF – B Design and construct the wastewater treatment system in accordance with applicable requirements of the Soledad Urban Water Management Plan and Long-Term Wastewater Management Plan.

PSF – C Wastewater lines shall be sized in anticipation of development in the remaining Mirrasou Specific Plan Area to the north.

Water Policies

PSF – D Design and construct the specific plan water supply and distribution system to expand upon and integrate with the city's water distribution system to meet the needs of future plan area developments consistent with the Soledad Urban Water Management Plan and 2005 Water Master Plan.

PSF – E Reduce potable water consumption throughout the specific plan area through the use of recycled water for irrigation, emphasis on

drought- tolerant plant materials for landscaping, and the incorporation of state-of- the art low water/high efficiency use fixtures and appliances in all new private development and public facility construction, including schools.

PSF – F Water lines extending to the north boundary of the plan area shall be sized in anticipation of development in the remaining Mirrasou Specific Plan Area.

Storm Water Policies

PSF – G Ensure provision and sizing of adequate storm water facilities to accommodate the plan area and provide for water retention sufficient to limit peak flows to predevelopment levels.

PSF – H Design, fund, and construct a storm water collection and retention system, including an appropriately sized retention basin, that adequately retains peak storm flows onsite, avoids aggravating or causing storm water flow capacity problems offsite downstream from the plan area, ensures separation of storm water drainage from recycled water generated within the plan area, and is consistent with the city's Storm Drain Master Plan, the city's Storm Water Management Plan, and the City of Soledad Storm Water Ordinance No. 617.

PSF – I Limit the development of impervious surfaces, to the extent practical in order to reduce post-project runoff volumes.

PSF – J Require appropriate runoff control measures as part of development to minimize discharge of urban pollutants (such as oil and grease) into drainage areas, and design, fund, and construct a bio swale for the length of the linear park that connects to the retention basin in the plan area.

PSF – K Construction and grading activities shall comply with Best Management Practices and Storm Water Pollution Prevention Plan policies per applicable controls, standards and Regional Water Quality Control Board.

Energy and Communication Policies

PSF – L The city shall ensure that energy and communications services are provided, either through direct city provision, contract, or franchise.

PSF – M Electrical and gas services shall be provided by Pacific Gas & Electric (PG&E) or other authorized service providers.

PSF – N Telephone service shall be provided by AT&T or other authorized service providers.

PSF – O Cable television shall be provided by Charter Communications or other authorized service providers.

PSF – P No roof mounted or aerial antennas or receiver dishes shall be installed that are visible from beyond a parcel's property lines.

PSF – Q All utilities shall be installed underground.

PSF – R Provide new communication technologies such as fiber optics, which will provide future benefit to residents and businesses within the plan area.

PSF – S New development should include the provision of an I-net system, linking all city facilities, as a part of public improvements.

PSF – T Promote energy sources that will ensure reliability during high energy demands.

PSF – U Promote the use of solar energy devices and encourage solar orientation of residential and business buildings to facilitate passive and active solar systems and reduce the use of fossil fuels.

PSF – V Promote recycling of consumer and business waste to reduce landfill requirements and lengthen the service life of existing landfills.

School Policies

PSF – W New elementary and middle school facilities, or improvements to existing schools, shall be in place as needed to serve each phase of specific development prior to occupancy. Prior to approval of the first Final Map, an agreement shall be established between Developer and/or successors in interest and the Soledad Unified School District that establishes the timing of school construction or improvements and financing obligations. The applicant and/or developer(s) will provide an offer to dedicate the designated school sites. The school sites shall be dedicated to the Soledad Unified School District within sixty (60) days of city approval and recordation of the first final map.

PSF – X New school facilities shall be located and designed in accordance with Soledad Unified School District and/or State Department of Education sitting and design criteria.

PSF – Y Approval of final map(s) and improvement plans shall be predicated upon evaluation and findings by the City Council that adequate public services and infrastructure, including schools, are available to serve additional housing and residents.

PSF – Z New development shall provide stub-out utilities for schools so that new public improvements are not disturbed or removed during school construction.

Law Enforcement and Fire Protection/ Medical Services Policies

PSF – AA Expand police and fire protection services and facilities as needed to adequately meet the needs of project residents. To serve build-out of the specific plan area, a 1.3 acre site has been centrally located and designated for development of a public safety facility.

PSF – BB Provide adequate lighting, visual corridors, and vehicle access along streets and nature trails to the extent feasible.

PSF – CC Select and maintain landscaping features and plant materials to minimize hiding spaces and other indefensible spaces.

PSF – DD Landscape, design and/or protect walls, fences and other publicly accessible flat surfaces to minimize areas that attract graffiti.

PSF – EE Design streets to City of Soledad Fire Department/Emergency Response standards, including fire hydrants, turn-outs, and cul-de-sac radii.

PSF – FF New development shall provide fire flow, emergency access, and hydrants consistent with Fire Department Requirements.

PSF – GG The plan area should include site planning which helps reduce crime potential through appropriate lighting, access, ease of surveillance, and other features such as alarms and security systems as may be required by the police department.

PSF – HH Police and Fire Services will be maintained with funding from a Public Safety Benefit Assessment District or similar funding mechanism.

5.2 Public Facility Improvements

Wastewater Infrastructure

The plan area is not currently connected to the existing wastewater collection system. The city's



existing collection system will be extended by the project applicant or subsequent developer in order to provide services to the plan area. The Miramonte Specific Plan Area development will be connected from new wastewater infrastructure built in the plan area to the municipal sewer main located on San Vicente Road. Construction of an offsite 18-inch sewer main from the southwest corner of the plan area south along San Vicente Road to Gabilan Drive will be required to transport wastewater from the plan area to the city's municipal reclamation facility. The on-site wastewater conveyance system is gravity-fed and will be collected and conveyed by a network of 8-inch or larger pipes throughout the site before discharging from the site through the new 18-inch sewer main extension. The preliminary design of the new wastewater system within the limits of the plan area is shown conceptually on Figure 5-1 Conceptual Wastewater Plan.



The city's Water Reclamation Facility (WRF) has sufficient capacity to accommodate the addition of the plan area's wastewater because the WRF upgrade was originally designed to accommodate developments outside of the current city limits. Since the upgrade, little or no development has occurred outside of the current city limits creating an abundance of capacity available for the plan area (AKEL Engineering 2016) plan area will be 1.5 million gallons per day (mgd). When adding the city's current wastewater flow of 2.4 mgd to the projected

flow from the plan area of 1.5 mgd, the total wastewater flow to the plant of 3.9 mgd is well under the total facility treatment capacity of 5.7 mgd. The City of Soledad *Plan for Providing Services, Miramonte Specific Plan* (EMC Planning Group 2017) (plan for services) was prepared as a separate stand-alone document, and provides further detail on the city's existing and planned wastewater infrastructure. The plan for services is incorporated herein by reference.

The project developers will design, finance, and construct backbone wastewater infrastructure, necessary for connection to the city's system, in the first phase of development. Additionally, the developers will construct and finance the collector wastewater infrastructure in each neighborhood by phase as the development proceeds. All infrastructure will be constructed by the developer(s) in accordance with city standards, unless an exception is made by the City Engineer, and would be in place prior to issuance of building permits for any structures. Where site conditions require deviation from city design standards to meet performance thresholds, the applicant shall provide engineered site-specific plans demonstrating that performance standards are met. These plans shall be provided for review and approval by the City Engineer prior to issuance of any grading permit. The applicant shall be responsible for the payment of required development impact fees for new facility construction and may participate in a reimbursement program per Municipal Code Chapter 14.06 for the new sewer main and upgrades to the existing sewer main on San Vicente Road. All sanitary sewer system improvements will be dedicated to the city. Ongoing facility maintenance costs will be financed by the formation of or annexation into a Mello-Roos Community Facilities District or some other form of maintenance district.

Water Infrastructure

The development within the plan area will be required by the city to provide all of the water production, storage, and distribution to adequately serve the project demand. The water system design for the plan area shall be to develop potable water production from Zone B, utilize and expand existing storage, as necessary, within the specific plan area, and connect back to the existing city distribution system. The applicant proposing development within the plan area has committed to drilling new domestic water wells in the plan area, which is in Zone B, sufficient to meet the projected demand of the plan area at buildout. Treatment of water from the new domestic wells may be required. Appropriate permitting and well tests observed by the Monterey County Environmental Health Department will be required.



The *Soledad Water Master Plan* (City of Soledad 2005a) (water master plan) assumed the project site will develop as a combination of medium density residential, public facility, and open space land use types. According to the *City of Soledad Water Supply Assessment for Miramonte Specific Plan* (water supply assessment) prepared by prepared for the specific plan, the water demand for the plan area will be 938 acre feet per year (afy). This amount is 57 afy greater than the water demand identified in the city's 2005 water master plan for a similarly-sized use using 2005 water demand coefficients, and 630 afy less than the approximately 1,568 afy water demand for the



existing agricultural use of the site (AKEL Engineering Group 2017). Based on the *City of Soledad 2015 Urban Water Management Plan* (AKEL Engineering Group 2016) there is a total reliable supply of 148,000 afy in the Forebay Subarea. It is also mentioned that the reliable supply will serve a projected 2035 demand of 143,250 afy (AKEL Engineering Group 2016). The development of the plan area will contribute to this demand and would be accommodated by the city's supply once planned infrastructure improvements are made to connect to the current municipal distribution system. The conceptual design of the new water delivery system is shown on Figure 5-2, Conceptual Water Plan, and a more detailed explanation of the new water distribution system can be found in the plan for services (incorporated herein by reference). Therefore, the current water supply can accommodate the increase in demand generated by development within the plan area.

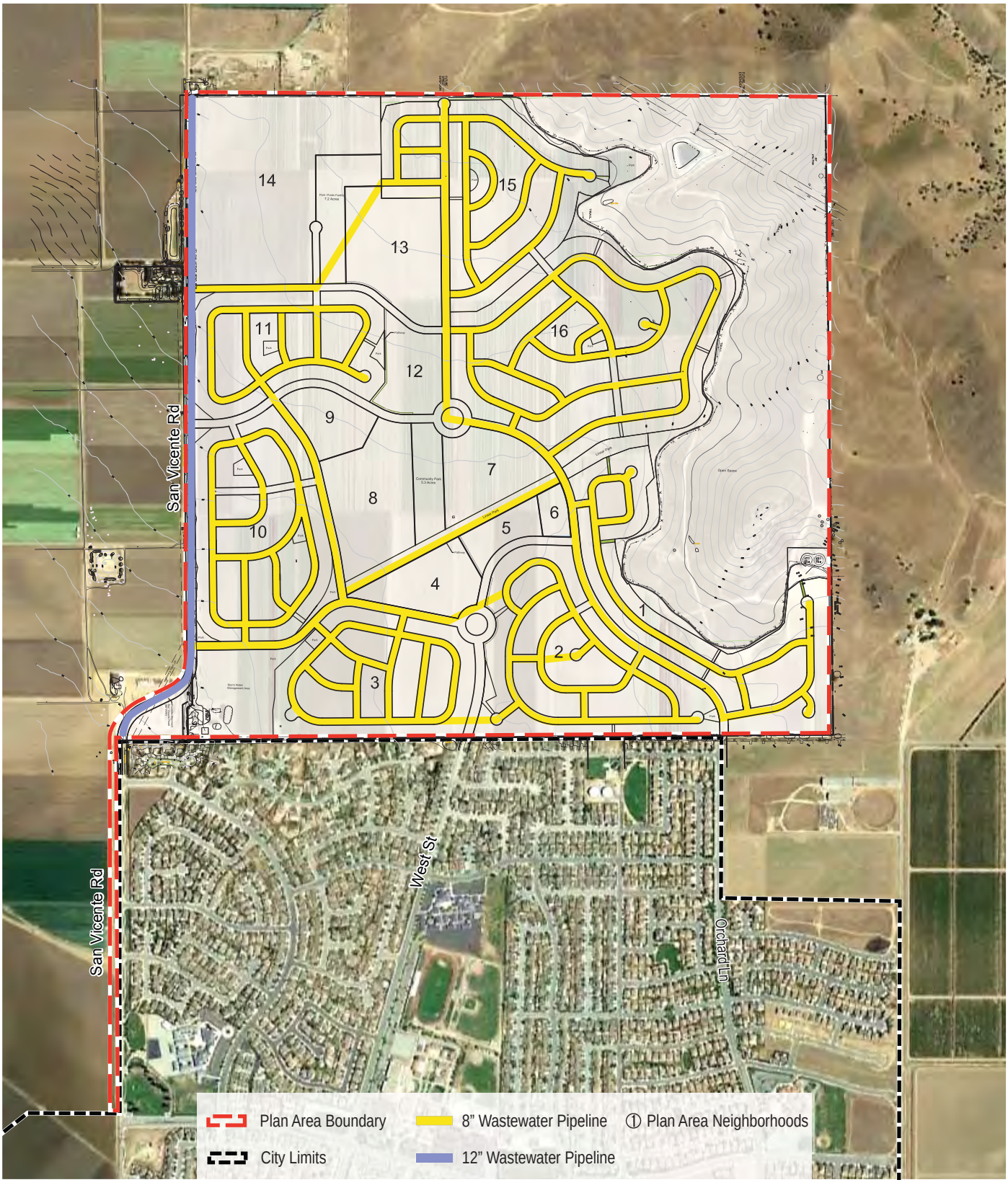
Storm Drain Infrastructure

The plan area includes the provision of storm drains, collection pipes, a drainage bio-swale within the linear park, a retention basin to capture post-development runoff, and other improvements to capture, retain, and percolate storm water within the plan area consistent with the requirements of the Central Coast Regional Water Quality Control Board. Plan area storm water flows will be collected in an underground piping system and directed to a bio swale within the linear park and then to the retention basin located within the southwest corner of the plan area. The basin, which will serve as a dual-use facility for recreational purposes, will be sized to accept the increase in flow due to the development and release runoff to the existing downstream storm water facilities at a rate equal to or less than the historic flow prior to development. This will ensure that there is no adverse impact to the existing storm drain system downstream of the plan area. Additionally, the proposed linear park would serve as a drainage bio-swale leading to the retention basin, and will help percolate water back to the groundwater basin and filter pollutants.



Erosion control measures including pre- and post- construction Best Management Practices will be implemented to protect the plan area from erosion and ensure that silt and sediment generated by the plan area are contained within the site and are not carried downstream. The conceptual design of the new storm drain delivery system is shown on Figure 5-3, Conceptual Storm Water Plan and a more detailed explanation of the new storm drain distribution system can be found in the plan for services (incorporated herein by reference).

The project developer(s) will design, finance, and construct backbone storm water infrastructure necessary to retain all post-construction storm water runoff in the first phase of development and the storm drain infrastructure in each neighborhood by phase as development proceeds. All infrastructure will be constructed by the developer(s) in accordance with city standards and would be in place prior to issuance of building permits for any structures, including paved roadways or parking areas.



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Source: Google Earth 2017

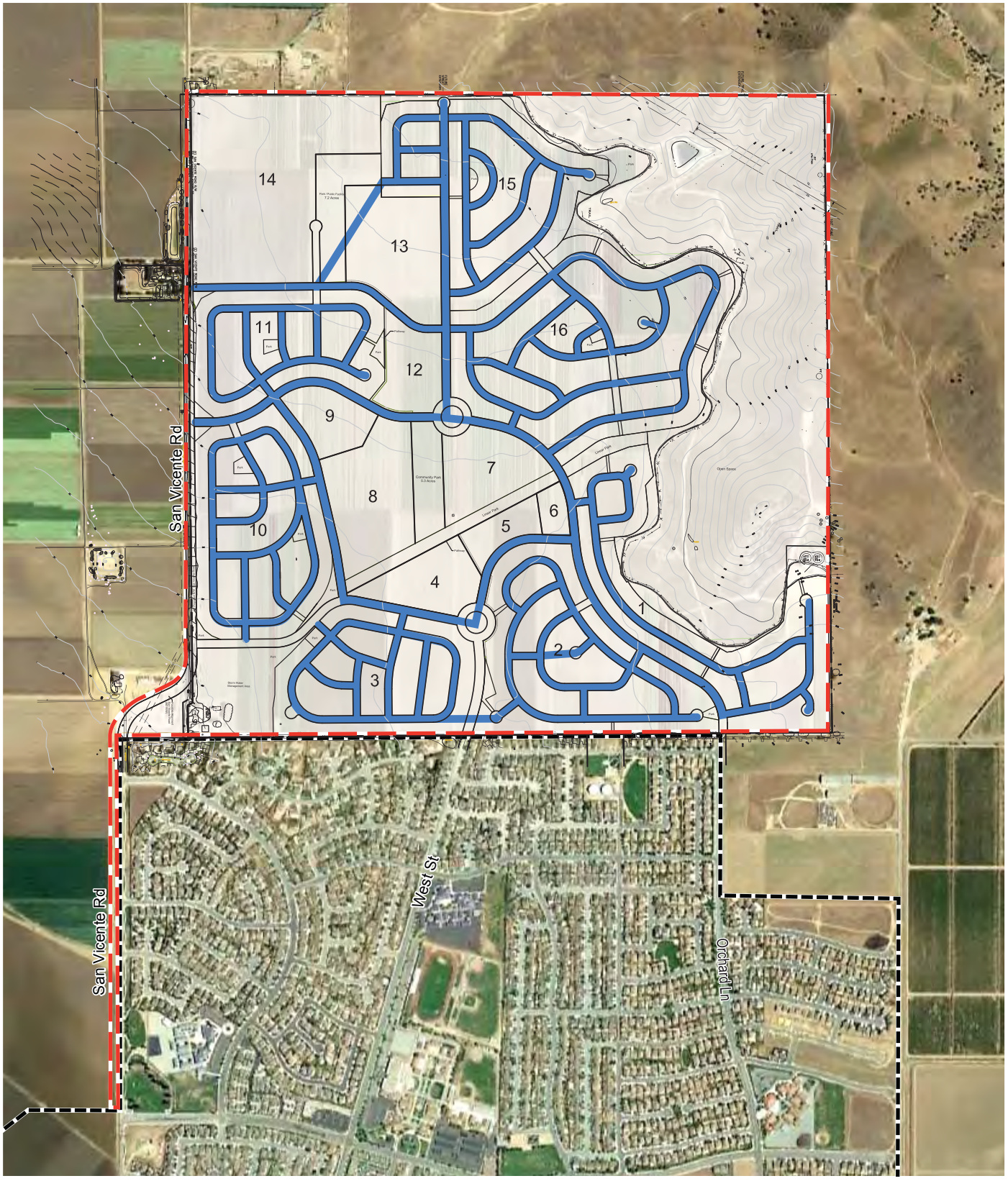
Figure 5-1

Conceptual Wastewater Plan

Miramonte Specific Plan

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Plan Area Boundary
City Limits
8" Water Pipeline
① Plan Area Neighborhoods

Source: Google Earth 2017

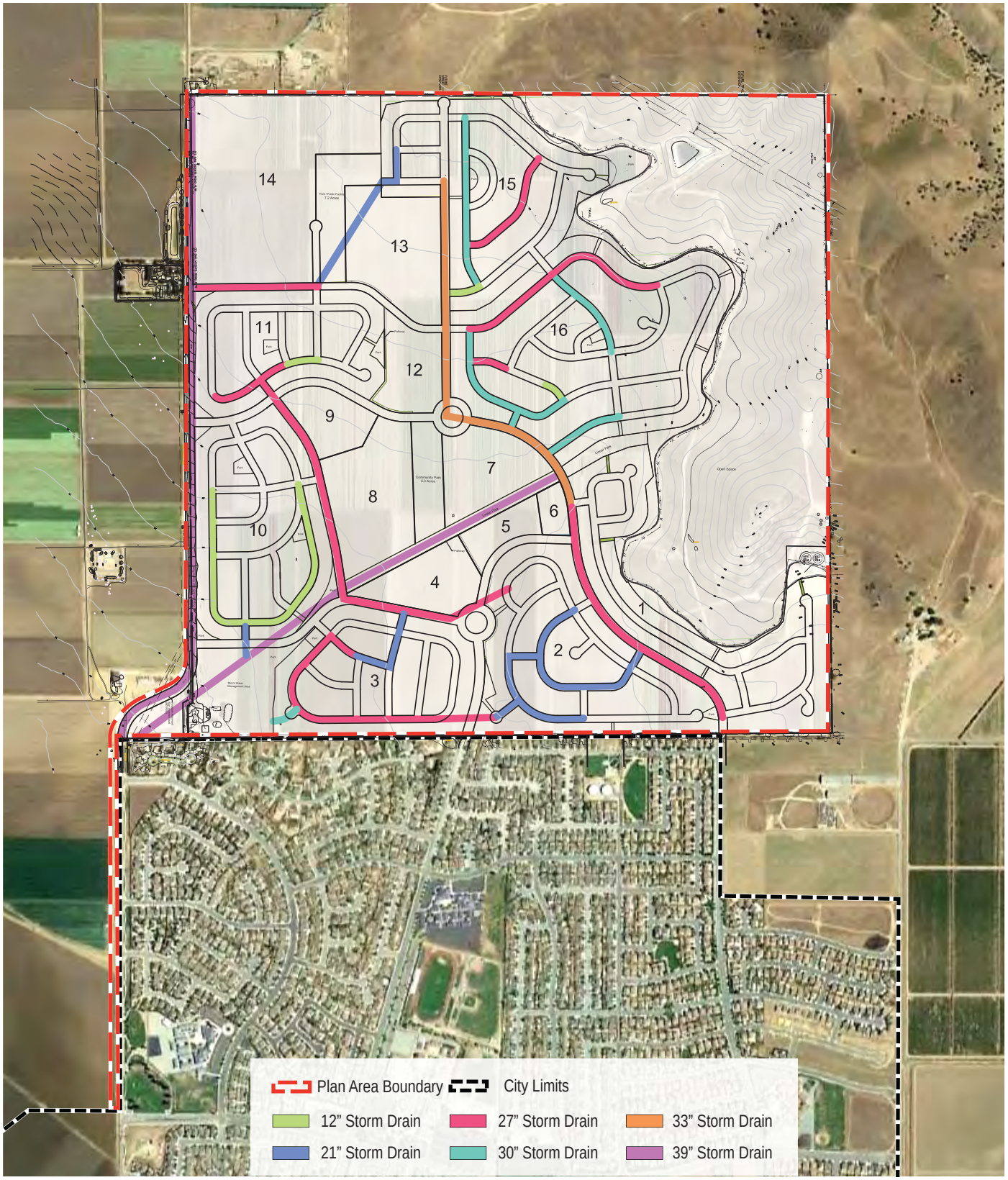
Figure 5-2

Conceptual Water Plan

Miramonte Specific Plan

EMC

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0 1,200 feet

Source: Google Earth 2017

Figure 5-3

Conceptual Stormwater Plan

Miramonte Specific Plan

E M C

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Storm Water Retention Ponds

The plan area will be completely self-supporting. Storm water from the entire developed area, as well as approximately 2,100 acres of upstream watershed, will be completely contained within the bio swale and percolation/retention pond. Flows in storms of greater intensity than approximately a 100-year return period may be discharged to the downstream city storm drainage facilities consistent with the 2015 Storm Drain Master Plan Update.



Energy and Communications

All new public energy and communications lines and equipment (excepting solar panels) within the plan area shall be placed underground pursuant to the standards and requirements of the city and/or appropriate State or Federal regulatory agencies. Planning and design of the new underground infrastructure, including phasing of the improvements will be coordinated with the local agency for each utility. The requirements for undergrounding of existing utilities and/or relocation of existing utilities will also be coordinated with the local utility agencies. Construction of the improvements within the plan area will be funded by the developer. It is anticipated that the following companies will be providing services to the plan area.



Natural gas lines and facilities	PG&E
Electricity	PG&E
Cable Television	Charter Communication
Telephone Land Line	AT&T

5. 3 Public Services

Schools

The plan area is served by Soledad Unified School District (SUSD) for grades K-12. At buildout, the specific plan is projected to generate a total of 1,063 students for grades K-6, 317 students for grades 7-8, and 460 students for grades 9-12 (a total of 1,840 students). Student generation estimates, as shown in Table 5-1, Student Generation below are based on the Miramonte Specific Plan land uses and the SUSD student generation estimates.

Table 5-1 Student Generation

Land Use Designation	Dwelling Units (DU)	K-6 Factor per DU	K-6 Students	7-8 Factor per DU	7-8 Students	9-12 HS Factor per DU	HS Students	Total Student Generation
Low Density Residential	1,353	0.47	636	0.14	190	0.203	275	1, 101
Medium Density and High Density Residential and *	507	0.47	239	0.14	71	0.203	103	413
Total	**1,860***		**875**		**261**		**378**	**1,514**

*The proposed 132 Senior dwelling units and the 400 farmworker housing units have been removed from total dwelling units.



The specific plan provides two school sites to serve the educational needs of plan area students. The middle school may also serve students from beyond the plan area. The elementary school site is 8.0 acres and the middle school site is 16.5 acres. Refer to Figure 1-4, Miramonte Specific Plan Land Use Diagram, for proposed site locations.

The applicant and/or developer(s) will provide an offer to dedicate the designated school sites. In addition to the dedication of land, the developer(s) will pay school impact fees as prescribed by the law in effect at the time of payment, unless otherwise dictated by a development agreement or permit conditions.

Law Enforcement and Fire Protection/ Medical Services

The Soledad Police Department, the California Highway Patrol (CHP), and the Monterey County Sheriff's Department serve the plan area. The Sheriff's Department provides general law enforcement services and traffic related enforcement services are provided by the CHP. The Soledad Police Department, which currently holds 18 sworn officers and 4 non-sworn personnel (Damon Wasson, telephone interview, June 1, 2017), is located at 236 Main Street. Services include animal control, parking enforcement, vehicle abatement, traffic control and criminal investigations. A new substation will be centrally located within the plan area to help serve and reduce response time to those future residents. This substation will be located approximately 1.6 miles north of the current city police station in downtown Soledad.



The Soledad Fire Department will serve the entire plan area, but continue the current mutual aid agreements in place with the California Department of Forestry and Fire Protection (CAL FIRE) and the Mission Soledad Fire Protection District. Current response averages are 2.6 firefighters per alarm or an equivalent of 0.5 firefighters on duty per 1,000 residents. The Soledad Fire Department is located in the fire station at 525 Monterey Street. This station is approximately 1.3 miles from the West Street entrance to the southern portion of the plan area and 1.7 miles to the Orchard Street entrance. The approximate response time to the West Street entrance of the plan area is 5 ½ minutes and the response time to the Orchard Street entrance is 6 ½ minutes. These times include dispatch, get-away and travel time.

A new police/fire sub-station site will be provided within the plan area, which will provide much shorter response times than from the existing police/fire sub-station. The police/fire sub-station site is central to the plan area, along the extension to Orchard Lane. This station location will also reduce the response time for future development west of in San Vicente Road and the remainder of the Mirrasou Specific Plan Area to the north.

Emergency Medical Services (EMS) are provided by the City of Soledad Fire Department. Fire personnel responding to a medical emergency

operate within the guidelines set forth by the Monterey County Emergency Services Agency.

The developer(s) of the plan area will be required to participate in a financing district to provide funds to build, operate, and maintain a police/fire sub-station on the dedicated site within the plan area. Finally, all development impact fees applicable at the time of issuance of a building permit can be offset by capital improvements designed, funded, and constructed by the developer(s).

Solid Waste Collection

Solid waste collection services will be provided by the Salinas Valley Solid Waste Authority. The Authority will utilize the Johnson Canyon Landfill, Marina Landfill, and the Foothill Sanitary Landfill for disposal purposes. The City of Soledad, however, primarily uses the Johnson Canyon facility located approximately 12 miles northeast of the city.



According to the information recorded in 2012 by CalRecycle, the current population of Soledad produces an average of 1.9 pounds of solid waste per person per day (PPD) (CalRecycle 2017). Future development of the plan area will consist of 2,392 residential units in total, with an approximate population of 9,833 people. This increase in population would generate about 18,682.7 pounds per day, or 3, 409.6 tons per year of solid waste from the plan area. When combining the maximum amount of 185,000 tons of solid waste received annually at the Johnson Canyon facility (Cesar Zuñiga, email message, July 19, 2017) with the 3,409.6 tons of solid waste projected to annually be generated by the plan area, the total solid waste the Johnson Canyon facility will receive annually at buildout is approximately 188,409.6 tons. With the current capacity of 13,871,250 tons, the Johnson Canyon Landfill will have the availability to serve the disposal needs of the plan area. For more detail on the existing and future solid waste collection of the city and the plan area, see the plan for services (incorporated herein by reference).

The City of Soledad promotes reuse of solid waste by providing programs for source reduction, recycling, composting and environmentally safe transformation of wastes. Soledad provides residential curbside greenwaste and recycling service, as well as commercial recyclable pickup.

Libraries

The Monterey County Free Libraries network supports Soledad residents with a branch at 401 Gabilan Drive, approximately ¼ mile south of the plan area. The funding is primarily from a share of the property tax collected within the county service area. The County also operates a books by mail program, tutoring, and a service called "Branchlet" within the current city limits (Monterey County Free Libraries 2017). The branchlet program involves mailboxes located in multiple locations where people can select a book for free and replace it with a book of their own (Jayanti Addleman, telephone interview, June 5, 2017). In Soledad, these branchlets are located at: CHISPA Market Street Townhomes (110 Market Street) and Monterey County Behavioral Health Clinic (359 Gabilan Drive). There are, however, other branchlets in the Salinas Valley. These branchlet locations in Monterey County can be found at http://www.co.monterey.ca.us/library/branchlets.html.

Upon annexation of the plan area to the city, development and growth in population would result in an increase in service demand on the county library services. Funding for library facilities will continue to come primarily from a share of the property tax collected. As a result of the current depletion of staffing levels, the city will be required to provide support for the county library facilities and services in the form of funding mechanisms (e.g. Community Facilities District, Assessment District, etc.) to provide staffing as well as additional capital facilities, on-going operations, and maintenance.

It may be appropriate to provide County library services at or near the two designated school sites and/or the commercial site within the plan area. Another potential location is to place a library within the Village Park, where it could also serve as a community center. Consideration should also be given to providing library services directly to the Farmers' Village. These options should be considered by the city as a part of a development agreement, improvement plans, and prior to approving final map(s), along with funding mechanisms to provide additional capital facilities, on-going operations, and maintenance.

6.0

IMPLEMENTATION

To realize the vision contained within this specific plan, implementation must be carefully addressed. This section addresses the components of a successful implementation plan, including existing conditions, procedural implementation of the plan, public facility improvements, phasing, and financing.

Section 6.0 is organized into the following subsections:

6.1 Existing Conditions

6.2 Procedural Implementation of Plan

6.3 Public Facility Improvements

6.4 Phasing

6.5 Financing

6.1 Existing Conditions

There is one residential unit located in the plan area, along with associated outbuildings. This existing development is located in the southwest corner of the plan area, where storm drainage facilities will be constructed, and will be removed early in the development phasing of the specific plan. The plan area also contains two existing agricultural wells owned by the property owner, two one million (each) domestic storage tanks owned by the city, a number of easements and unpaved farm access roads. The existing easements in the plan area will need to be removed or relocated as a part of the final subdivision map(s) and map(s) recordation. The two existing wells will be required to be contained in separate well parcels or in a public easement for ownership, use as an irrigation supply, and for on-going maintenance when the final map is prepared, adopted, and recorded.

Realignment of San Vicente Road

San Vicente Road currently makes a pair of 90 degree turns as it approaches the plan area. As an interim condition, this section of San Vicente Road will be widened as necessary to accommodate additional traffic. However, eventually the ultimate alignment with wide radius curves, will be required for smooth traffic operations. The land on which the realignment will occur is outside of the plan area and not owned by the current plan area property owner. This adjacent land will need to be obtained through fee simple title, or an agreement made with the



adjacent landowner to place an easement over the land prior to realignment. The specific plan phasing parameters includes triggers at which time the realignment must be completed.

Agriculture Interface

New residential units will about the existing Urban Expansion and Agriculture zones. Within a small portion of the east side of the plan area and on portions of the north and west boundaries some agricultural operations may take place. It is the declared policy of the County of Monterey, the governing jurisdiction to these parcels, to conserve, enhance, and encourage agricultural operations within the county, and to minimize potential conflict between agricultural and non- agricultural land uses within the county.

The Monterey County Code Chapter 16.40 - Protection of Agricultural Activity states:

> Where non-agricultural land uses, especially residential development, extend into agricultural lands or are located in the vicinity of agricultural lands, Agricultural Operations may be the subject of complaints. Such complaints may cause the curtailment of Agricultural Operations and discourage investments for the improvement of agricultural land to the detriment of the economic viability of the agricultural industry of the County. It is the purpose and intent of this Chapter (16.40) to prevent the loss to the County of its agricultural resources by limiting the circumstances under which Agricultural Operations may be considered a nuisance. This policy can best be implemented by educating residents about the laws protecting Agricultural Operations and Farm Operations from conflicts with non-agricultural uses, and by notifying residential users of property adjacent to or near Agricultural Operations and Farm Operations of circumstances relative to agricultural activities which may be objectionable to owners and/or users of non-agricultural properties. These potentially objectionable circumstances may include, but are not limited to, the noises, odors, dust, chemicals, smoke, and extended hours of operation that may accompany Agricultural Operations.

The plan area developer(s) shall disclose potential agricultural activities that may occur on the north, west, and eastern edges of the plan area, as well as in the open space designated lands, to future owners in keeping with the intention of the Monterey County code. An open space buffer, including a trail, will be constructed along the northern boundary of the plan area and San Vicente Road will provide a buffer along the western boundary of the specific plan edge to separate residences from agriculture uses.

It is anticipated that current agricultural operations within the plan area will continue in portions of the plan area that have not yet been developed. Buffers may be necessary, on an interim basis, to protect remaining farmland within the plan area. The linear park will provide a buffer in the early phases of development. In later phases, an undeveloped strip of land, a collector street, or other open space area will need to be identified by the developer(s) and the city to provide a buffer adequate to separate residential and agricultural uses.

6.2 Procedural Implementation of Plan

This specific plan identifies the following procedural implementation measures for development of the plan area to occur:

- The City Council must amend the General Plan concurrently with the adoption of the specific plan and certification of the Addendum to the previously certified Environmental Impact Report (EIR) to incorporate the land use designations and provisions of the specific plan.
- The City Council must approve sphere of influence and annexation requests and pre-zone the territory requested for annexation. Any related detachments will be requested concurrently.
- The City Council must adopt the water supply assessment, plan for services and fiscal analysis, and forward them to LAFCO of Monterey County along with the sphere of influence and annexation request.
- The City Council must adopt the vesting tentative map, subject to:
    - Changes proposed in and consistent with the specific plan;
    - Mitigations in the certified EIR, and the EIR Addendum;
    - Conditions of approval; and
    - Subject to LAFCO action on the requested sphere of influence change and reorganization.
- The city must file and obtain approval for a Sphere of Influence Amendment and subsequent annexations from LAFCO of Monterey County.
- Upon completion of annexation, the city must amend the Zoning Ordinance to rezone the property within the plan area consistent with Figure 2-2, Miramonte Specific Plan Zoning Map contained herein.
- The master developer/individual developer(s) shall prepare a final map(s), and improvement plans that reflect the development of the plan area pursuant to and consist with this specific plan. Figure 1-4, Miramonte Specific Plan Land Use Diagram, will dictate the approved land use and circulation pattern, and ultimate development of the plan area must be built to substantially conform and be consistent with the design and zoning standards described in this specific plan. Individual projects shall be developed consistent with the land use designations and circulation plans shown in the specific plan's land use and circulation chapters and with the policies and implementation measures contained within this specific plan.
- Requests to amend the specific plan, such as modifications to land use types, location, or zoning standards identified herein, are subject to review and approval of the city and must be in substantial conformance with the city's goals and the goals of the specific plan.

6.3 Public Facility Improvements

Section 5 of the Miramonte Specific Plan, along with the plan for services which is incorporated herein by reference, describes the "backbone" public facilities needed to accommodate the development of the plan area. The developer will install public improvements based on the timing and location of the proposed development or as identified in a city approved phasing plan. The following is a brief description of public facilities and infrastructure projects identified as being required with the full build-out of the Miramonte Specific Plan.

Infrastructure

Water Supply

Water service will be provided to the plan area by the City of Soledad and water delivery lines will be installed within the plan area street rights-of-way by the developer(s) and will connect with the

existing water lines that serve the city. The distribution system will consist of underground water mains in all streets, ranging from a 12- inch loop reaching the commercial and medium density residential areas, to eight-inch short extensions beyond fire hydrants. The existing water system will require upgrades to the existing distribution system and construction of new facilities within the plan area which will be funded by the developer(s). Such upgrades will include, but not be limited to, an additional 1.0mg water storage tank and new pump(s) at the east side of the plan area. New pump(s) are necessary to service all development above elevation 340 with city water. Actual infrastructure needs can be determined and designed into improvement plans prior to issuance of Final Map(s) approval.

Fire hydrants will be provided at not-to-exceed 500-foot spacing, and shall provide pressures exceeding 20psi residual. Each hydrant will contain three-outlets (one pumper connection and two hose connections) to fully comply with city standards. All new water mains will be subject to an individual study to confirm required fire flow rates and pressures prior to start of any residential construction within a development phase.

Sanitary Sewer

The City of Soledad is responsible for treatment and disposal of wastewater for the plan area. The sanitary sewer collection system is also operated and maintained by the city. All new sewer mains will be eight-inch or larger, as specified in City of Soledad standards, and will be designed as a part of improvement plans prior to approval and issuance of Final Map(s). Sanitary sewer lines will be located within the proposed street rights-of-way and connect to the existing sanitary sewer lines that serve the city. All sanitary collection system improvements will be designed, funded, and installed, per city standards, by the developer(s) at the time of each phase of development.

Storm Water Drainage

The Miramonte Plan Area storm drainage system will be designed to be completely self-supporting, with the implementation of a new storm drainage system. Storm water flows generated by the development will be collected in an underground piping system, bio-swales, and a retention basin. Storm water runoff will be directed to a large percolation/retention pond located adjacent to the existing San Vicente Road and in the extreme southwest corner of the plan area. The purpose of the bio-swales and retention basin is to capture all post development runoff on-site and percolate the runoff water into the groundwater basin. The only proposed connection to current city public storm drains is a relief line at the San Vicente Road retention basin, designed to not function until retained pond water has risen to near overflow level. Flows in storms of greater intensity than approximately a 100-year return period may be discharged to the city system at San Vicente Road. Both upstream runoff from outside the plan area and increased plan area runoff caused by development will be intercepted, percolated, and stored, so the ultimate runoff downstream of the plan area will be substantially reduced from its pre-project natural volumes. The developer(s) will design, fund, and construct all storm water drainage improvements within the plan area. Any storm water drainage improvements designed, funded, and constructed outside the plan area or if upstream runoff from outside the plan area and 100 percent of all storm water runoff from the plan area is captured on-site to a 100-year storm capacity, this may off-set normal city development impact fees for drainage.

Energy and Communications

All new public utilities and equipment within the plan area will be placed underground and will be designed, funded, and constructed by the developer(s) and reflected on improvement plans at the time of each development phase. All existing overhead utilities shall be converted to underground, with the exception of the existing steel tower structures and wires. It is anticipated that the following utility services will be provided for the project: 1) natural gas lines and facilities – PG&E; 2) electricity – PG&E; 3) cable television – Charter Communications; and 4) telephone – AT&T.

Parks and Open Space

By design, the Miramonte Specific Plan provides for a significant amount of public parkland and open space in the form of neighborhood pocket parks, a linear park, two community parks (one in the center of the development that connects the school sites to the core of the plan area, and one adjacent to San Vicente Road which will be a dual park and storm retention basin), additional parkland connected to the two school sites, park connectors (e.g. sidewalks, pathways, trails, etc.), landscaped buffers, and designated walking trails. All parkland design, funding, and improvements will be the responsibility of the developer(s) as will the landscaping, irrigation, and all structures and hardscape improvements within these areas. Parkland dedication and improvements may off-set city parkland impact fees, as long as the amount of parkland dedication and improvements meets or exceeds the city standard for parkland dedication. Park maintenance will be funded through a Benefits Assessment District or some other funding district mechanism and will be the responsibility of the city.

Circulation

The circulation system within the plan area consists of several primary collector roads and numerous in tract neighborhood streets. The design, funding, and construction of the circulation system will be the primary responsibility of the developer(s) on a phase by phase or neighborhood tract by tract basis. Street maintenance will be the responsibility of the city. Maintenance of common landscape, specialty hardscape and street trees will be funded by a Benefits Assessment District or some other District funding mechanism.

Public Safety Services

Fire Protection

An ancillary fire station site (along with a police sub-station) is designated within the plan area, located approximately 1.6 miles north of the present fire facilities in downtown Soledad. Once constructed and operational, this ancillary fire station should reduce response time for emergency fire department and/or ambulance response by three to four minutes.

Law Enforcement

A site for a City of Soledad police sub-station (along with an ancillary fire station) is designated within this plan, located approximately 1.6 miles (or three minutes normal driving time) north of the present police facilities on Main Street in downtown Soledad. This location is at the approximate center of the Miramonte Specific Plan and should greatly reduce emergency response time.

The land for the ancillary fire station and police sub-station will be dedicated by the developer(s) and the fire and police sub-station construction is a city responsibility.

Public Schools

Miramonte Specific Plan designates sites for one elementary school and one middle school, which will be made available to the Soledad Unified School District. Both school sites are located adjacent to collector streets and centrally located within the plan area. The applicant and/or developer(s) will provide an offer to dedicate the designated school sites. In addition to the dedication of land, the developer(s) will pay school impact fees as prescribed by the law in effect at the time of payment, unless otherwise dictated by a development agreement or permit conditions.

6.4 Phasing

Development phasing that responds to market conditions, ensures adequate infrastructure and services, and serves the needs of the community, is critical for orderly development to occur. The specific plan addresses the full range of public facilities including streets, utilities, and parks. Backbone public facilities required for the development of the planning area are described in the Plan for Services (incorporated herein by reference) and within Section 5 of this document.

Phasing Parameters

The city's intention is for the development to occur from south, along the current city urbanized edge, to the north. The first phases of development are expected to occur south of the linear parking in neighborhoods 1, 2, 3, and 4.

The need for adequate infrastructure and services will drive the development phasing more so than the location of development within the plan area. The need for these facilities and the cost of improvement implementation will greatly affect the extent, location, and timing of new development. As a result, the development of non-contiguous property may be permitted if the appropriate public facilities are installed. The following parameters shall guide phasing:

- Initial development will occur south of the linear park and be contiguous to existing development within the current city limits. The storm drainage infrastructure retention basin and lower portions of the linear park bio-swale will be developed within this initial phase and access to this initial phase may be obtained via Orchard Lane and West Street.

- Subsequent phased development shall be driven by the market and the availability of infrastructure/services; however, development of one of the neighborhoods (neighborhood 5, 8, 13, 14, or 15 as illustrated on the tentative map) in the northern portion of the plan area will require one street connection to San Vicente Road; development within two of these neighborhoods will require two connections to San Vicente Road; and development within three or more of these neighborhoods will require all three connections to San Vicente Road.

- Any housing development adjacent to, or within 600 feet of, San Vicente Road shall require at least one access to San Vicente Road.

- The San Vicente Road re-alignment shall be completed at the time of the second connection to San Vicente Road.

- The city's parks to population ratio of three acres per 1,000 people shall be maintained within the plan area at all times, during the phasing process of buildout.

- After the 250th house is occupied, an overall ratio of 15 percent high density (20 units per acre or greater), farmworker, senior, or deed restricted affordable housing units shall be maintained within the plan area. Developments that do not include high density, farmworker, senior, or deed restricted

affordable housing shall contribute a fair share payment to a fund for development of such housing.

- The applicant and/or developer(s) will provide an offer to dedicate the designated school sites. School sites shall be dedicated to the Soledad Unified School District within sixty (60) days of city approval and recordation of the first Final Map.
- The Farmer's Village may be constructed at any time that adequate services can be provided to the site.
- To the extent feasible, large and contiguous tracts of farmland shall be kept intact while development occurs elsewhere in the plan area.

The city may set other phasing parameters beyond those included herein, as a part of conditions on the vesting tentative map, Final Map approval, or as part of a separate development agreement. In all cases those parameters must be either consistent with or in substantial conformance with the intent of the parameters set herein.

6.5 Financing

All public infrastructure, roadways, and parkland will be designed, funded, and constructed by the developer(s) in a phased manner and in accordance with the phasing parameters contained herein. By the time that the final map is recorded, funding mechanisms will need to be in place to enable city police protection, fire protection, public works maintenance, engineering services, community center programs, and city Administration/overhead functions (including City Council, City Manager, City Attorney, City Clerk, Finance and City Treasurer). At this time the fiscal analysis on the Miramonte Specific Plan anticipates that the project will not generate sufficient General Fund revenue to cover projected costs. The exact extent of the fiscal gap is dependent on the on the city's share of the standard one percent property tax which will ultimately be determined by negotiations between the city and the county as part of the annexation/reorganization process.

Based on an assumed 4.7 percent share of the 1once percent property tax, plus additional property tax in lieu of vehicle license fees, the project at buildout will produce sufficient revenue to support General Fund services. However, the City of Soledad funds a number of maintenance functions for streets, storm drains, and parks through special assessment district, as described below. While the project does not adversely affect General Fund service, it would need to participate in a special assessment district in order to complete funding for all required services.

Community Facilities District

The Mello-Roos Community Facilities Act of 1982 authorized cities to establish a Community Facilities District (CFD) which aids in the financing of public services and facilities through a special tax. In order to secure long term funding dedicated to the provision of public facilities such as police protection, fire protection, public works maintenance, engineering services, community center programs, and city Administration/overhead functions needed by all new development within the area, the Miramonte Specific Plan Area will be included in a CFD. The purpose of the CFD is to help fund public facilities not included in an existing city wide fee program, but that are essential to the plan area's development. The CFD will be in addition to the other city adopted development fees. A special tax will be levied annually to cover the city's fees for these public facilities. The City of Soledad can pay for these improvements

through tax revenue, or with the bond financing secured by the tax.

Development Fees

Under the California Constitution, cities have the right to exact fees from developers in exchange for their receiving the privilege to develop. Development fees are a one-time charge. If the fees recovered are insufficient to cover the costs, the city must consider alternative methods of raising the additional funds. Development fees are paid incrementally as development occurs. Also, development fees cannot be used to fund existing capital deficiencies in the area or on-going maintenance.

For improvements that cannot be easily constructed on a small scale or incremental basis, it would be necessary to finance improvements through city-backed bonds (Mello-Roos). However, these bonds would have to be backed by the general fund, since there is no guarantee as to when or how much of these fees would be recovered. Specific development impact fees may be negotiated between the city and developer(s) as a part of a future Development Agreement.

Benefits Assessment District

Assessment districts are usually formed to pay for infrastructure projects, where there is a clear benefit to properties within the district and where there is a clear public purpose. The owners contribute based only on benefits they receive directly, not for all of the project's benefits. Special assessment districts may also be formed and be charged against future residential and commercial users to pay for operations and maintenance of privately owned improvements.

A Benefit Assessment District or some other similar funding mechanism may be formed as an implementation item of the Miramonte Specific Plan. The costs for maintaining the project's on-site infrastructure will be funded by this district and thus not result in a net impact to the city's General Fund. Consistent with the city's requirements for new development projects, it is assumed that the assessments would cover the following costs:

- Street light electricity and maintenance
- Storm drain maintenance
- Parks and other public landscape (e.g. street medians, etc.)
- Maintenance of the on-site pond
- Street maintenance

The city will float bonds to pay for such improvements; the debt is paid by assessing those property owners who will be served by the improvements. An individual property owner's portion of the debt is based on the owner's proportional benefit. Any method that reasonably measures these benefits can be used to spread the debt among property owners.

Private Financing

The proposed project may also include privately held open space to be used for agricultural grazing, alternative energy, and infrastructure support facilities for the rest of the plan area. This open space area may also contain public access easements for walking, hiking, and education. This portion of the specific plan Area will be privately maintained and will, therefore, not result in any cost impacts to the city. Maintenance of the public access easements and any infrastructure within the open space area may be included in the Community Facilities District for long-term maintenance.

7.0

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Miramonte Specific Plan Goals and Policies

A

APPENDIX

Miramonte Specific Plan Goals and Policies

LAND USE GOALS AND POLICIES

Land Use Goals

LU – 1 Include the plan area within the city's sphere of influence and city limits prior to the city accepting development plans (i.e. improvement plans, final maps, site plans, etc.).

LU – 2 Protect open space and agricultural areas by encouraging more dense development, reducing the geographic extent of the Mirrasou Specific Plan Area, and reducing the residential development potential of the Northwest Expansion Area.

LU – 3 Provide a range of land uses and facilities that meet the needs of plan area residents, that are economically beneficial to the city, and can be developed into an integrated and cohesive residential and recreation-oriented community centered around parks, trails, schools, and shopping and embracing and connecting to the hillside open spaces to the east.

LU – 4 Create new, attractive residential neighborhoods that are in close proximity to parks, open spaces, schools, and neighborhood commercial, and provide a variety of housing types and densities within low, medium, and high density neighborhoods to serve a range of housing needs and income levels, including low income levels, of the broader Soledad community and region.

LU – 5 Provide adequate open space, parks and recreational facilities that are centrally located and linked throughout the plan area, to meet the needs of the plan area residents and the community.

LU – 6 Include land uses that serve the local population and provide employment opportunities for residents of the plan area and immediate surrounding communities. And locate shopping, employment centers, recreation, and parks within walking distance from the homes that use these specific plan components.

LU – 7 Provide public facilities, infrastructure, and services commensurate with new development so as to adequately meet the needs of all development and future residents in the Plan Area in a manner that is financially self-supporting.

LU – 8 Provide an integrated storm drainage and open space system that incorporates best management practices to adequately control storm flooding problems, protect water quality, and provide park space.

LU – 9 Protect the scenic vistas of the hills above Soledad through careful siting and design standards that minimize grading and visibility of new hillside development, and keep development, unless otherwise specified herein, below the 400-foot elevation contour.

Land Use Policies

LU – A Utilize the development potential of the Mirrasou Specific Plan Area and reduce the development potential of the Northwest Expansion Area by 525 units.

LU – B Apply to LAFCO for inclusion in the city's sphere of influence and annex land in anticipation of development.

LU – C Incorporate affordable housing within the plan area, including housing for senior citizens, agricultural workers, and low and very low income households. Consistent with the Inclusionary Ordinance, provide at least six percent of units for very low income households, six percent for low income households, and eight percent for moderate income households. Of the total affordable units proposed for the plan area, 39 percent should be affordable to very low income households, 19 percent to low income households, and 42 percent to moderate income households; and 30 percent of multi-family housing units should be available as rentals.

LU – D Commercial buildings should be placed at or near the front setback and oriented toward the street to define and enliven the street. Commercial buildings and multifamily residential buildings should be oriented towards streets and where possible should not back onto parks, trails, plazas, or other public spaces. The "front" facade and building entrances and windows should wrap around all public elevations of the buildings. Where buildings do back onto public spaces, care must be taken to present a finished architectural design, and utilities, loading areas, trash receptacles, service doors, and similar must be integrated or screened in these areas.

LU – E Garages and parking lots should be de-emphasized and moved back from the street and/or out of direct view.

LU – F Climatic factors, such as prevailing winds, shade trees, window and door orientation, and the positioning of buildings on the site should all be coordinated to maximize energy conservation.

LU – G Landscaping should be installed between the street and the sidewalk buffering the sidewalk from traffic and providing a pedestrian scale to walkways and a landscaped parkway along the street edge. Breaks should be provided to allow pedestrian access from on-street parking spaces. Ample street trees should be provided.

LU – H Major and minor gateways should be designed to provide a consistent feel of arrival. Use of water, stone, and living landscape materials, along with signs and public art will provide for dynamic gateways within the plan area. Each residential neighborhood should be distinct, with neighborhood gateways that are unique to the neighborhood, but consistent with the overall specific plan character.

LU – I Residential buildings should provide an attractive architecture that emphasizes welcoming facades on all street- and public-facing elevations. Architecture and landscape should combine for a unified character within each neighborhood.

LU – J Concurrent with recordation of a final subdivision map, developers shall provide compensation for conversion of Prime Farmland or Farmland of Statewide Importance to urban uses using one of four methods, at the discretion of the city:

a) provide the in-kind direct purchase/acquisition of an agricultural mitigation easement at a 1:1 ratio and dedicate the easement to an agricultural land trust or other qualifying entity; and/or

b) if available, purchase agricultural banked mitigation credits at a 1:1 ratio from a qualifying entity; and/or

c) pay an in-lieu mitigation fee, which amount shall be determined by the city prior to project approval. The amount of the fee should reasonably be expected to lead to the reservation of agricultural land. Said fee shall be kept by the city in a fund established specifically for agricultural land mitigation purposes; and/or

d) implement other innovative approaches as approved by the city that results in the preservation of agricultural land within areas targeted by the city.

CIRCULATION GOALS AND POLICIES

Circulation Goals

C – 1 Provide the necessary circulation system and infrastructure to create a safe and efficient circulation network for motor vehicles, pedestrians, physically disabled persons, and alternative forms of transportation with an emphasis on creating a pedestrian friendly, walkable community.

C – 2 Provide a comprehensive bicycle and pedestrian network separate from street rights-of-way to facilitate quick and convenient non-motorized access.

C – 3 Provide seamless connections to adjacent areas, but encourage most automobile and all truck traffic to use San Vicente Road, rather than Orchard Lane or West Street.

Circulation Policies

C – A The general plan circulation concept should be adapted to the plan area in recognition of development limitations related to the 400-foot elevation contour and future traffic demands in the northwest quadrant of the city.

C – B All streets and circulation routes shall be consistent with Figure 3-1, Miramonte Specific Plan Circulation Diagram.

C – C San Vicente Road shall be connected to the plan area temporarily by way of following the existing alignment, and ultimately by large-radius curves to provide a smooth transition from the plan area south to the existing.

C – D Street widths shall be consistent with street section minimums indicated in Figures 3-2, Street Classifications Cross Sections.

C – E All street improvements shall be financed and installed by the developer. The developer may be credited by the city's Traffic Impact Fee program.

C – F All streets within the plan area shall be public and dedicated to the City of Soledad, and shall be constructed with curbs, gutters, landscape parkways, and sidewalks meeting City of Soledad Standard Plan specifications.

C – G City shall assume responsibility for the maintenance and repair of all street facilities with funding from a Benefits Assessment District or other appropriate funding mechanism.

C – H Funding for maintenance of lighting, street improvements, special paving surfaces, sewer, storm drain, common area landscape, open space, and hardscape shall be provided through a Public Facilities Maintenance District or a similar funding mechanism.

C – I All private streets and driveways within the plan area, such as within commercial and multi-family areas, shall be maintained and paid for by the property owners for those developed areas.

C – J All streets shall include a sidewalk at least four feet in width on each side of the street.

C – K Sidewalks adjacent to schools, commercial areas, and village residential areas (external road frontages only) shall be a minimum of eight feet wide, and may replace planting strip and landscaping included in the street sections with interspersed landscaping blocks.

C – L Sheltered bus stops including bus turn-outs, meeting MST (Monterey-Salinas Transit) specifications, shall be provided at appropriate locations within the plan area. The developer will develop these bus stops for use by the on-call service or future fixed route service.

C – M Bike lanes and paths shall be designed and maintained to improve bicycling safety and convenience, achieve integration with the street network, and encourage people to use bicycles to commute to work or school.

C – N New development shall provide bike lanes and paths, secure bicycle storage, and parking facilities.

C – O Bicycle parking should be provided in locations near building entrances or outdoor use areas with good public visibility.

C – P A minimum of two ingress/ egress will be provided for each neighborhood area. Access should be aligned with intersecting streets where possible.

PARKS, RECREATION, AND OPEN SPACE GOALS AND POLICIES

Parks, Recreation and Open Space Goals

P – 1 Ensure that the provision of adequate park, open space, and recreational facilities meets the varied needs of the plan area residents.

P – 2 Protect the visual and natural resource values of the hillside open space lands.

P – 3 Utilize park lands to link neighborhoods.

PARKS, RECREATION AND OPEN SPACE POLICIES

P – A Provide a variety of semi-active and passive recreational features that meet the needs of residents' abilities and interests.

P – B Each phase of development shall provide enough parkland to meet the needs of project residents in that phase or neighborhood being constructed.

P – C Parkland minimum requirements shall be determined at three acres per 1,000 residents (per General Plan policy PR-1(a)). With an estimated population of 9,833 residents, the parkland requirement is about 29.5 acres. Parkland and open space combined shall be required at a ratio of five acres per 1,000 residents, or a minimum of about 50 acres.

P – D Design and landscape parks for easy maintenance, water efficiency, wind protection, and shade. Utilize native plants when suitable selections are available.

P – E Interconnect parks, open space, schools, commercial areas, and the neighborhoods with sidewalks and/or trails.

P – F Include multi-functional spaces and facilities in the parks.

P – G Parks, open spaces, and recreation facilities should be designed to eliminate or avoid hidden and difficult-access areas where security problems would be likely to occur.

P – H Each of the neighborhood parks will include a small children's play area.

P – I Children's play areas and other appropriate park areas should have adequate shade, seating, and wind protection provided through landscaping and/or constructed elements, and if located near collector streets, a three- to four-foot fence to separate the play area from the street.

P – J The storm water basin will be a dual-purpose area with sport and recreation fields.

P – K A recreational field should be located near the middle school.

P – L Parks should be located and designed to minimize noise and activity conflicts with residential areas.

P – M A 100 foot wide low growing and low fuel vegetated buffer should be provided between residential lots and the larger hillside open space area. This 100-foot buffer will be located within the open space area, and will be maintained to keep fuel load low.

P – N Landscaping in the open space area, if needed to supplement existing vegetation, should utilize native plant materials that are both fire resistant and non-invasive.

PUBLIC SERVICES AND FACILITIES GOALS AND POLICIES

Public Services and Facilities Goals

PSF – 1 Provide an efficient, self-sustaining system of public facilities that accommodates the needs of the residents and businesses within the plan area through buildout.

PSF – 2 Provide adequate and reliable services and utilities to residents and business and ensure adequate maintenance of these utilities and services.

Public Services and Facilities Policies

Wastewater Policies

PSF – A Minimize wastewater flows through water conservation efforts.

PSF – B Design and construct the wastewater treatment system in accordance with applicable requirements of the Soledad Urban Water Management Plan and Long-Term Wastewater Management Plan.

PSF – C Wastewater lines shall be sized in anticipation of development in the remaining Mirrasou planning area to the north.

Water Policies

PSF – D Design and construct the specific plan water supply and distribution system to expand upon and integrate with the city's water distribution system to meet the needs of future plan area developments consistent with the Soledad Urban Water Management Plan and 2005 Water Master Plan.

PSF – E Reduce potable water consumption throughout the specific plan area through the use of recycled water for irrigation, emphasis on drought- tolerant plant materials for landscaping, and the incorporation of state-of- the art low water/high efficiency use fixtures and appliances in all new private development and public facility construction, including schools.

PSF – F Water lines extending to the north boundary of the plan area shall be sized in anticipation of development in the remaining Mirrasou Planning Area.

Storm Water Policies

PSF – G Ensure provision and sizing of adequate storm water facilities to accommodate the plan area and provide for water retention sufficient to limit peak flows to predevelopment levels.

PSF – H Design, fund, and construct a storm water collection and retention system, including an appropriately sized retention basin, that adequately retains peak storm flows onsite, avoids aggravating or causing storm water flow capacity problems offsite downstream from the plan area, ensures separation of storm water drainage from recycled water generated within the plan area, and is consistent with the city's Storm Drain Master Plan, the city's Storm Water Management Plan, and the City of Soledad Storm Water Ordinance No. 617.

PSF – I Limit the development of impervious surfaces, to the extent practical in order to reduce post-project runoff volumes.

PSF – J Require appropriate runoff control measures as part of development to minimize discharge of urban pollutants (such as oil and grease) into drainage areas, and design, fund, and construct a bio swale for the length of the linear park that connects to the retention basin in the plan area.

PSF – K Construction and grading activities shall comply with Best Management Practices and Storm Water Pollution Prevention Plan policies per applicable controls, standards and Regional Water Quality Control Board.

Energy and Communication Policies

PSF – L The city shall ensure that energy and communications services are provided, either through direct city provision, contract, or franchise.

PSF – M Electrical and gas services shall be provided by Pacific Gas & Electric (PG&E) or other authorized service providers.

PSF – N Telephone service shall be provided by AT&T or other authorized service providers.

PSF – O Cable television shall be provided by Charter Communications or other authorized service providers.

PSF – P No roof mounted or aerial antennas or receiver dishes shall be installed that are visible from beyond a parcel's property lines.

PSF – Q All utilities shall be installed underground.

PSF – R Provide new communication technologies such as fiber optics, which will provide future benefit to residents and businesses within the plan area.

PSF – S New development should include the provision of an I-net system, linking all city facilities, as a part of public improvements.

PSF – T Promote energy sources that will ensure reliability during high energy demands.

PSF – U Promote the use of solar energy devices and encourage solar orientation of residential and business buildings to facilitate passive and active solar systems and reduce the use of fossil fuels.

PSF – V Promote recycling of consumer and business waste to reduce landfill requirements and lengthen the service life of existing landfills.

School Policies

PSF – W New elementary and middle school facilities, or improvements to existing schools, shall be in place as needed to serve each phase of specific development prior to occupancy. Prior to approval of the first Final Map, an agreement shall be established between Developer and/or successors in interest and the Soledad Unified School District that establishes the timing of school construction or improvements and financing obligations. The applicant and/or developer(s) will provide an offer to dedicate the designated school sites. The school sites shall be dedicated to the Soledad Unified School District within sixty (60) days of city approval and recordation of the first final map.

PSF – X New school facilities shall be located and designed in accordance with Soledad Unified School District and/or State Department of Education sitting and design criteria.

PSF – Y Approval of final map(s) and improvement plans shall be predicated upon evaluation and findings by the City Council that adequate public services and infrastructure, including schools, are available to serve additional housing and residents.

PSF – Z New development shall provide stub-out utilities for schools so that new public improvements are not disturbed or removed during school construction.

Law Enforcement and Fire Protection/Medical Services Policies

PSF – AA Expand police and fire protection services and facilities as needed to adequately meet the needs of project residents. To serve build-out of the specific plan area, a 1.3 acre site has been centrally located and designated for development of a public safety facility.

PSF – BB Provide adequate lighting, visual corridors, and vehicle access along streets and nature trails to the extent feasible.

PSF – CC Select and maintain landscaping features and plant materials to minimize hiding spaces and other indefensible spaces.

PSF – DD Landscape, design and/or protect walls, fences and other publicly accessible flat surfaces to minimize areas that attract graffiti.

PSF – EE Design streets to City of Soledad Fire Department/Emergency Response standards, including fire hydrants, turn-outs, and cul-de-sac radii.

PSF – FF New development shall provide fire flow, emergency access, and hydrants consistent with Fire Department Requirements.

PSF – GG The plan area should include site planning which helps reduce crime potential through appropriate lighting, access, ease of surveillance, and other features such as alarms and security systems as may be required by the police department.

PSF – HH Police and Fire Services will be maintained with funding from a Public Safety Benefit Assessment District or similar funding mechanism.

Memorandum of Understanding

APPENDIX B

MEMORANDUM OF AGREEMENT BETWEEN THE CITY OF SOLEDAD AND THE COUNTY OF MONTEREY REGARDING WORKING COOPERATIVELY ON COMMON PLANNING, GROWTH AND DEVELOPMENT ISSUES IN ORDER TO BE AS EFFECTIVE AS POSSIBLE IN THE IMPLEMENTATION OF THEIR RESPECTIVE GENERAL PLANS

This Memorandum of Agreement, hereinafter referred to as ("Agreement"), is entered into on this ____ day of _____ 2016 (the "Effective Date") by and between the City of Soledad, a Municipal Corporation hereinafter referred to as ("City"), and County of Monterey, a political subdivision of the State of California, hereinafter referred to as ("County"), and together hereinafter referred to as the "Parties".

RECITALS

WHEREAS, the Parties declare that it is in their mutual interest to work cooperatively on issues of planning, growth, and development in order to provide more certainty regarding the future direction, extent, and conditions of urban development, to reduce unnecessary conflicts and to reduce costs for future development including affordable housing, to provide for the long term protection of valuable agricultural lands, and to be as effective as possible in the implementation of their respective General Plans; and

WHEREAS, as an expression of the intent to work cooperatively on common issues pertaining to planning, growth and development, the Parties have prepared this Memorandum of Agreement ("Agreement"), which serves to fulfill the requirements of California Government Code Section 56425(b), as an Agreement by and between the Parties regarding the expansion of the boundaries of the City's Sphere of Influence (SOI), and the establishment of planning principles by both Parties to promote logical and orderly development for purposes of the City's application to the Monterey County Local Agency Formation Commission (LAFCO) to update its Sphere of Influence; and

WHEREAS, the Parties recognize, pursuant to California Government Code Section 56425(c) that this Agreement itself does not commit the Parties to any particular form or pattern of development, but rather, if LAFCO's final determination is consistent with this Agreement, then the Agreement would need to be considered for approval by both the City and County after noticed public hearing. Once the Agreement has been adopted by the Parties and their respective general plans reflect the Agreement, then any development approved by the County within the adopted sphere shall be consistent with the terms of the Agreement; and

WHEREAS, this Agreement is not subject to environmental review under the California Environmental Quality Act (CEQA) because numerous actions must be taken pursuant to State and local laws and regulations before such policies can be implemented. Such actions include, in some instances, the need to complete financial nexus studies, comply with the California Environmental Quality Act (CEQA), the need to hold public hearings and/or otherwise seek public input before reaching binding decisions, and the need to obtain approvals from other agencies such as the Local Agency Formation Commission of Monterey County (LAFCO). For all such provisions, the MOA shall be understood to constitute tentative policy commitments that can only become fully binding after all such legal prerequisites have been satisfied; and

WHEREAS, the Parties recognize and understand that individually each has its own growth plans, priorities and approaches; however, it is of mutual benefit to enter into this Agreement to acknowledge their cooperation in a variety of key policy areas.

NOW THEREFORE BE IT RESOLVED, that the Parties find that establishment of this Agreement is an effective and beneficial means of reaching basic agreement regarding future planning, growth and development issues in and around the City of Soledad.

BE IT FURTHER RESOLVED that the Parties declare and agree as follows:

Section 1. Logical & Orderly Development.

1.1 The City has adopted the 2005 Soledad General Plan, which establishes a long range development plan for the City that identifies the "ultimate" City area that will enable the City to plan for efficient provision of public facilities and the delivery of services, provide clarity for property owners about the direction of future development and its extent, and direct development away from the best agricultural land.

1.2 The County recognizes that the City's long-range plan, as interpreted by the policy commitments found in this document, serves the mutual goal of conserving agricultural lands, by limiting urban development and its impacts on agricultural operations to a defined area. The City General Plan provides certainty for farmers and ranchers outside of the growth area that they can invest in and continue farming on a secure basis, without future pressure to convert their lands for urban development.

1.3 The County desires to implement its policies regarding City-Centered Growth (General Plan Policies LU – 2.14 through LU – 2.19) as discussed in the adopted 2010 County General

Plan, and reinforced by City General Plan Policies L-1 – L-9. The County recognizes that a commitment to City-Centered Growth principles implies long-term reliance on the City to accommodate housing and other urban needs, and relies on the City to be able to designate adequate land for its needs while developing in a logical, compact and orderly manner.

Section 2. Direction of Future Development.

2.1 The City agrees as follows:

a) To limit future long-term development within the area shown on Exhibit 'A' and designated as "Urban Growth Boundary" (the "**UGB**"). The purpose of the UGB is to bound and enclose the land intended for development within the 2005 Soledad General Plan.

b) To manage development of land within the UGB utilizing the best available "sustainable" practices. The intent of the City is supported by City's General Plan Policy L-2, which partially reads as follows:

> Further annexations to the City may occur when a) a substantial portion of the development capacity within the existing city limits has been developed, b) a substantial public benefit can be realized through the annexation, such as the provision of public open space, additional parkland, or the protection of scenic vistas, or natural resources…

c) To encourage proposals for infill development on vacant or underutilized sites within the existing City limits east of Highway 101 whenever possible, to avoid urban sprawl and postpone the conversion of agricultural land to urban uses.

d) To require Specific Plans to include residential densities that ensure a compact urban form that helps protect agricultural land from premature conversion.

e) To establish a permanent agricultural edge for the purpose of maintaining a clearly defined northwest and southeast boundary between the urbanized incorporated areas of City and the agricultural areas within the unincorporated County as shown on Exhibit 'A' and identified as "Permanent Agricultural Edge". A "Temporary Agricultural Edge" is hereby established east of Bryant Canyon Road, as specifically shown on Exhibit 'A'. The Temporary Agricultural Edge may be eliminated through an amendment to this Agreement.

f) To utilize agricultural buffers within the UGB to address the compatibility between the development of urban land uses and existing or planned agricultural uses. The City's General Plan requires development within or adjacent to designated agricultural areas to minimize conflicts with adjacent agricultural uses. The County requires an agricultural buffer as typically 200 feet in width and includes other vegetation, walls, or other screening deemed necessary to ensure that property owners on both sides of the buffer may enjoy full and unencumbered use of

their property for its designated use without experiencing significant deleterious effect from neighboring use.

g) To actively participate with the County, LAFCO and other cities within the Salinas Valley to develop a Valley-wide Agricultural Land Mitigation Program to address the loss of agricultural land due to development and conversion to urban uses.

h) To utilize permanent agricultural buffers along the UGB to ensure compatibility between the development of urban land uses and agricultural uses in the unincorporated area. The City agrees to actively participate with the County, LAFCO and other cities in the Salinas Valley to develop a Valley-wide Agricultural Buffer Program to ensure compatibility of urban land use with agricultural uses in the unincorporated area.

2.2 The County agrees as follows:

a) Consistent with County General Plan Policy LU – 2.14, mutually work with the City to support the City's proposals to manage its growth and gradually develop within UGB of the City General Plan in accordance with the approval of future Specific Plans that are prepared to implement a logical, orderly development pattern that matches the City's ability to provide urban services.

b) To consult with the City on development projects that are proposed within a Referral Area as illustrated on Exhibit 'B'. This obligation and agreement to consult shall not apply to structures or other improvements on agricultural land located in the Referral Area which are incidental to existing farming operations, including by way of example only, barns, storage sheds, shops, ranch administrative offices, ingress and egress, and irrigation and pumping facilities. The intent of the County is supported by the County's General Plan Policy LU – 2.19, which County intends to implement by 1) minimizing potentially competing development within the City's Planning Area Boundary (See Figure II-1, Soledad General Plan), 2) limiting approval of new agricultural-industrial or commercial projects and by directing such development to the City's agricultural business parks and/or light industrial areas, and 3) referring any discretionary development proposals within the City's Planning Area Boundary to the City for comment and, for larger projects, potential annexation.

c) To promote long-term conservation of commercial agriculture outside of the Soledad General Plan UGB (Exhibit 'A') and the area outside the development area described in section 2.1(e), above, for the purposes of regional economic stability and to maintain physical separation from other communities in the area, including Greenfield, the state prisons, and Gonzales. The intent of the County is expressed in the County's General Plan Policy LU – 2.17.

d) To not support the inclusion of land into a Williamson Act contract within the City's UGB.

Section 3. Specific Planning Actions.

3.1 During the negotiation of this Agreement, the Parties identified and discussed specific planning actions that the Parties intend to implement if the Sphere of Influence Amendment as proposed by the City is approved by LAFCO and if this Agreement is subsequently adopted following noticed public hearing, subject to all legal prerequisites as set forth in section 9.1 below. Each of those specific planning actions is described below.

a) Dole/Camphora Services. The Parties agree that, prior to any future connections of city infrastructure to unincorporated areas northwest of the current city limits, the Parties will discuss entering into an agreement setting appropriate fees for such service.

b) Adobe Site at Arroyo Seco Interchange (Los Coches Adobe site). The Parties agree to cooperatively identify methods to allow the City to fully utilize the site of the Adobe property at the northwest corner of the Arroyo Seco Road interchange with Highway 101 if the historic structure is able to be reused for a future use and for uses that serve the visiting public, such as a campground, inn, visitor center, use that supports the agricultural industry as an informational or educational use, or supports the winery corridor as outlined in the County General Plan. If the historic adobe cannot be retained, negotiations shall occur between the Parties prior to demolition, and shall include a review by the County's Historic Resources Review Board prior to issuance of any demolition permit. The intent of the discussions and review are to attempt to identify methods that may save the historic structure. The County supports the connection of the City and the Adobe through annexation of appropriate land, including the enlargement of the Adobe property site in order to facilitate the establishment of the public visitor serving uses set forth above.

c) The Parties agree to discuss the potential for future inclusion of the Heavy Industrial area, in the unincorporated area southeast of the Soledad Correctional Facilities, in the Sphere of Influence in the future. The area shall be considered for future annexation to the City of Soledad, if growth of the City occurs to the west into the Northwest Expansion Specific Plan area.

d) Agricultural Processing Facilities. If an agricultural processing facility is proposed for construction in the unincorporated area on a parcel adjacent to the City limits or SOI, the Parties shall discuss annexation of the site to the City as part of the discretionary permit actions. The intent of this Agreement is to have the site become part of the incorporated City.

e) The inclusion of the industrial area along McCoy Road in the City Planning Area Boundary and Sphere of Influence shall be discussed between the Parties as part of any future comprehensive update to the City General Plan.

f) Maintenance of a Positive Housing and Jobs Relationship. The Parties agree that the County shall continue to direct commercial and industrial growth proposed in the vicinity of the City to vacant City parcels providing the zoning and infrastructure to accommodate such uses, with the exception of the Heavy Industrial zoned land located southeast of the Soledad Correctional Facility, where low intensity agricultural support uses may be allowed by the County so long as City infrastructure is not necessary to allow the use.

g) By signing this Agreement, the City expresses its intent to not extend urban land uses to the southeast of the new bypass road described in Section 5.4 and into the Northwest Expansion Specific Plan area. However, if the Permanent Agricultural Edge, as described in this Agreement, should ever be proposed to be eliminated to allow the future extension of urban uses, the City shall discuss the matter with the Board of Supervisors prior to any City action; and the City shall require mitigation for the loss of prime agricultural land with an agricultural conservation easement at a ratio of 3:1, with the conservation easement deeded, at the sole discretion of the City, to a nonprofit public benefit corporation organized under Internal Revenue Code section 501(c)(3), or other appropriate legal entity, operating in Monterey County for the purpose of conserving and protecting land in agricultural production. Furthermore, should the Permanent Agricultural Edge be eliminated, the City agrees that, to the extent allowed by law, all local taxes collected from annexation of the property shall not accrue to the benefit of the City. Under that scenario, to the extent allowed by law, local taxes collected from areas annexed by the City shall be distributed in a manner as if the annexed area was not part of the City.

h) Access Limitations to San Vicente Road. The City agrees to coordinate with the County and plan the arterial roadways along San Vicente Road in a manner that supports the free-flow of both automobile and truck traffic, utilizing method(s) determined by a traffic engineer to be practical, including but not limited to: utilizing the existing City road as a frontage road/by-pass road, round-abouts, directional barriers or medians, trap lanes and right-turn-in and right-turn-out intersections.

The language of this section is to be interpreted in a manner that most facilitates the movement of agricultural vehicles from agricultural fields to the highway, agricultural plants, or rail yards with little to no interference from City traffic.

Section 4. Development Phasing & Annexations.

4.1 The City's adopted 2005 General Plan focuses future urban development to the east of Highway 101 and north/northwest of the current city and provides for the phasing of development through the use of Specific Plans within the area shown on Exhibit 'A'that is

designated as UGB. The timing of annexation applications submitted for consideration by LAFCO will be based upon the approval by the City of a Specific Plan, which includes a phasing plan, a plan for services and public facilities and financing plans that demonstrate compliance with LAFCO Standards.

4.2 The City shall develop Specific Plans that specifically address development phasing and sequence of improvements. The phasing programs shall ensure that adequate supporting public services, retail, parks, schools and other uses are in place to support residential, institutional, and commercial uses.

4.3 The City shall refer proposals for the preparation of Specific Plans within the UGB to the County for informal review and comment regarding the potential impacts of the proposed project upon the adjacent unincorporated area and associated County facilities. Environmental documents associated with the Specific Plan process shall be referred to the County for formal review and comment.

Section 5. Agricultural Land Compatibility.

5.1 The City agrees to maintain agriculture as the core of the local economy by conserving and protecting agricultural lands and operations within its Planning Area Boundary, and where agricultural land is planned for eventual urbanization, to work to keep such land in production up until the time when the land is converted to urban use.

5.2 The City agrees to emphasize agricultural land compatibility by implementing the following actions as described in the City General Plan, including:

> Policy C/OS-1 – The City shall discourage "leapfrog" development and development in peninsulas extending into agricultural lands to avoid adverse effects on agricultural operations.
>
> Policy C/OS-2 – The City shall retain the agricultural land use designation on lands within its planning area until the land is needed for urban development.
>
> Policy C/OS-3 – The City shall ensure that new development and public infrastructure projects do not encourage expansion of urban uses outside the general plan area into areas designated Agriculture by the Monterey County General Plan.
>
> Policy C/OS-4 – The City shall support the agricultural economy be encouraging the location of agricultural support industries in the City…
>
> Policy C/OS-5 – The City shall require a right-to-farm condition to all future

subdivision maps adjacent to farmlands.

Policy C/OS-6 – The City shall require development within or adjacent to agricultural areas to minimize conflicts with adjacent agricultural uses.

Policy L-1 – Preserve agriculture on large lots outside the City's sphere of influence …

Policy L-2 – Further annexations to the City may occur when…a substantial portion of the development capacity within the existing city limtes has been developed…

5.3 The City agrees to implement policies that require the City to be consistent with the County of Monterey's "Right-to-Farm" Ordinance and the policies with respect to farming rights and agricultural protection/compatibility found in the County General Plan, and consider revision of the City's Zoning Ordinance to require the recordation of a Right-to-Farm Notice as a condition of discretionary approval for residential development (including lots approved as part of a new residential subdivision) within 200 feet of an established agricultural operation.

5.4 The City agrees to develop and implement a plan, in consultation with the County, to separate and re-route truck traffic, primarily associated with agricultural operations, from local traffic routes. The City and County agree to mutually work to identify and obtain a new access road from State Highway 146 on the southeast end of the City to connect to Highway 101. The City and County will seek funding sources for construction of this new road while maintaining Business Highway 146 through the City's downtown.

Section 6. Agricultural Land Conservation Program.

6.1 The City agrees to maintain agricultural open space around the City as a means of giving form and definition to the City. The County desires this protection to ensure preservation of the agricultural economy so critical to Monterey County, including its cities. To this end, the City agrees to permit urban development only within the areas designated for urban uses on the City's General Plan Land Use Diagram and as described in this Memorandum of Agreement. Land immediately beyond this boundary should remain in agricultural use utilizing permanent agricultural easements, other mitigation measures that may arise as a result of project-level CEQA review, or any other feasible methods determined by the City to be feasible to preserve agricultural lands and define the limits of urban expansion for the City.

6.2 The City agrees to establish an Agricultural Land Conservation Program. The Program includes securing the dedication of agricultural land easements, purchase of banked mitigation

credits and/or levying a mitigation fee that could be used to purchase easements on lands outside of the City's General Plan Urban Growth Boundary.

6.3 Notwithstanding participation by the City in any other adopted program, by adopting this Agreement, the City agrees to implement an Agricultural Land Conservation Program as follows until the City establishes a Program pursuant to section 6.2 or section 2.1(g):

6.3.1 To the extent as permitted by law, for the development of land within the City's UGB as shown on Exhibit 'A', which lands have been annexed to the City and are designated by the California Department of Conservation's Farmland Mapping and Monitoring Program as "Prime" or "of Statewide Importance", but excepting all lands within the area denoted as "Existing Sphere of Influence" and the area west of Bryant Canyon Road, the owner/developer/successor-in-interest shall select one or any combination of the following items:

a) provide the in-kind direct purchase/acquisition of an agricultural mitigation easement at a 1:1 ratio and dedicate the easement to an agricultural land trust or other qualifying entity; and/or

b) if available, purchase agricultural banked mitigation credits at a 1:1 ratio from a qualifying entity; and/or

c) pay an in-lieu mitigation fee, which amount shall be determined by the City prior to project approval. The amount of the fee should reasonably be expected to lead to the preservation of agricultural land. Said fee shall be kept by the City in a fund established specifically for agricultural land mitigation purposes; and/or

d) implement other innovative approaches as approved by the City that results in the preservation of agricultural land within areas targeted by the City.

6.3.2 The method for mitigating the loss of agricultural land shall be implemented at the discretion of City to coincide with the time of the recordation of a final subdivision map, except where a final map is clearly labeled as a "Large-lot Subdivision Map" and the map and associated agreement clearly specify that the creation of parcels (a) is for purposes of resale and not intended for development, or (b) does not include any entitlements which would permit development of the subject parcels without recordation of subsequent subdivisions maps or prior to the issuance of a grading permit. The City may consider receiving mitigation fees for individual projects in annual installment payments plus interest on the outstanding balance as long as the full amount is secured by a bond held by the City or other enforceable method of security, in the City's sole discretion prior to filing the final map or commencement of use.

6.3.3 The filing of a parcel map that does not result in the conversion of land zoned for agricultural purposes does not require dedication or payment of in-lieu fees.

6.3.4 It is the intent of the City to oversee, collect and manage any and all fees collected through the implementation of its Agricultural Land Conservation Program to ensure the use of the fees and the selected form of mitigation represents the best interest of the City, and that the form of mitigation is the most effective in addressing the agricultural conservation goals and objectives of the City as expressed in the City General Plan. Such intent is subject to the requirements of the California Environmental Quality Act to provide actual mitigation and to report on utilized mitigation funds.

6.3.5 In establishing its Agricultural Land Conservation Program, it is the further intent of the City to establish a Committee, which is appointed by the City Council, to plan the use of mitigation fees and to make recommendations to the City Council on the use of those funds. The Committee's composition shall be determined by the City Council, and could be structured as follows: two members of the City Council, the City's Community Development Director, a representative for Agriculture, a representative of an Agriculture Conservation/Preservation organization, a representative of the Building Industry/Development Community, a representative of the County of Monterey Agricultural Commissioner's Office, and the 3rd District County Supervisor. This section applies until the County and City have an Agricultural Land Conservation Program agreed to by both parties.

6.3.6 Any agricultural mitigation fees assessed and collected by the City pursuant to its Agricultural Land Conservation Program may, in the City's sole discretion and reasonably acceptable to the County, be applied to activities designed to preserve and promote agriculture and the agricultural industry in the Greater Soledad Area, including but not limited to:

a) Scientific research for addressing agriculture's needs (e.g. food safety). Entities applying for research funding could include universities, colleges, research think tanks, non-profits, industry/business, government and schools;

b) Increased agricultural educational programs in the Soledad Unified School District;

c) Purchase of permanent agricultural buffers to alleviate potential physical conflicts between existing or planned agricultural uses (either within or outside the UGB) and urban land uses planned within the UGB;

d) Economic programs developed to expand markets for local agricultural products;

e) Programs promoting careers in agriculture;

f) Contributions to non-profit associations dedicated to agricultural education, promotion or preservation.

g) Funds for the acquisition of agricultural easements outside the City UGB.

6.3.7 Notwithstanding all of the foregoing measures described in Section 6.3.6 above, City and County agree that the first priority use of agricultural mitigation fees is for the acquisition of permanent conservation easements adjacent to the Permanent Agricultural Edge/UGB to the east, south and west, as shown on Exhibit 'A,' through the owner/developer/successor-in-interest securing an easement, as described in Section 6.3.1(a) of this Agreement, or through the use of mitigation fee funds collected pursuant to Section 6.3.1(c) of this Agreement.

6.4 The County will consider that the City's participation in an Agricultural Land Mitigation Program, for the purpose of this agreement, has been satisfied if the City can prove to County that land immediately adjacent to the City's northwestern, southwestern and eastern boundaries have been permanently secured by the recordation of an agricultural preservation easement or through the sale or dedication of land to a private land trust.

Section 7. Traffic Mitigation Fees.

7.1 The County agrees to prepare and consider a Traffic Impact Fee that would include a Zone that includes the Greater Soledad Area within 18 months of the effective date of the adoption of the Sphere of Influence by LAFCO. Proper notice shall be provided to the City and all affected property owners of the preparation of such a fee study, when and where discussions regarding the fee will occur and when the fee will be considered for adoption. The City agrees to consider adoption of the County's impact fee program, as may be amended from time to time, to fund improvements to County roads listed in the program. Until the Impact Fee is established, the City agrees to ensure that any new development project in the incorporated area, pursuant to the City's General Plan, that causes traffic impacts on local roads in the nearby unincorporated area, will pay its pro rata fair share to the County as mitigation for impacts on County roads.

7.2 The County agrees that for any development requiring a discretionary permit that would generate traffic through the City (except, on legal lots that existed as of the date of this agreement, single family dwellings), the County will consult with the City to determine if there are traffic impacts to the City. In the event that there are traffic impacts to the City, the County will require the development to pay its pro rata fair share to the City as mitigation of impacts on

City roads. The pro rata fair share shall be determined through a formula calculation prepared along with a project's traffic impact analysis.

Section 8. Tax Sharing.

8.1 By signing this Agreement, the City and County agree to discuss the provisions of the Master Tax Sharing Agreement prior to the annexation of any territory located in the City's UGB, excepting all lands within the area denoted by LAFCO on this date as "Sphere of Influence"

8.2 Unless mutually agreed to otherwise by both parties and to the extent allowed by law, the City and County agree that all local taxes collected from annexation of property not consistent with this Agreement shall not accrue to the benefit of the City. To the extent allowed by law, local taxes collected from areas annexed by the City not consistent with this Agreement shall be distributed in a manner as if the annexed area was not part of the City.

Section 9. Environmental Review, Public Hearing & Local Decision-making.

9.1 The Parties recognize that, with respect to some of the provisions set forth herein, numerous actions must be taken pursuant to State and local laws and regulations before such policies can be implemented. Such actions include, in some instances, the need to complete financial nexus studies, comply with the California Environmental Quality Act (CEQA), the need to hold public hearings and/or otherwise seek public input before reaching binding decisions, and the need to obtain approvals from other agencies such as the Local Agency Formation Commission of Monterey County (LAFCO). For all such provisions, the MOA shall be understood to constitute tentative policy commitments that can only become fully binding after all such legal prerequisites have been satisfied.

Section 10. Amendment.

10.1 The parties may desire to amend this Agreement from time to time. Any amendment, representing an alteration, or modification of any of the terms or provisions contained herein, or any amendment adding a new term or condition, shall not be binding upon the parties hereto unless made and executed in writing by the parties hereto and approved by both the County's Board of Supervisors and the Soledad City Council.

[Signatures on a separate page]

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed on the day and year first written above, and shall take effect following adoption and the placing of signatures by all Parties.

City of Soledad, a Municipal Corporation

_____
Fred Ledesma
The Honorable Mayor

APPROVED AS TO FORM:

_____
Michael Rodriguez
City Attorney

ATTEST:

_____
Adela P. Gonzalez
City Clerk

County of Monterey, a political Subdivision of the State of California

_____
Jane Parker
Chair, Monterey County Board of Supervisors

APPROVED AS TO FORM:
Charles McKee
County Counsel

By: _____
Wendy Strimling, Senior Deputy County Counsel

ATTEST:

_____
Gail T. Borkowski, CCB
Clerk of the Board

By: _____
Deputy

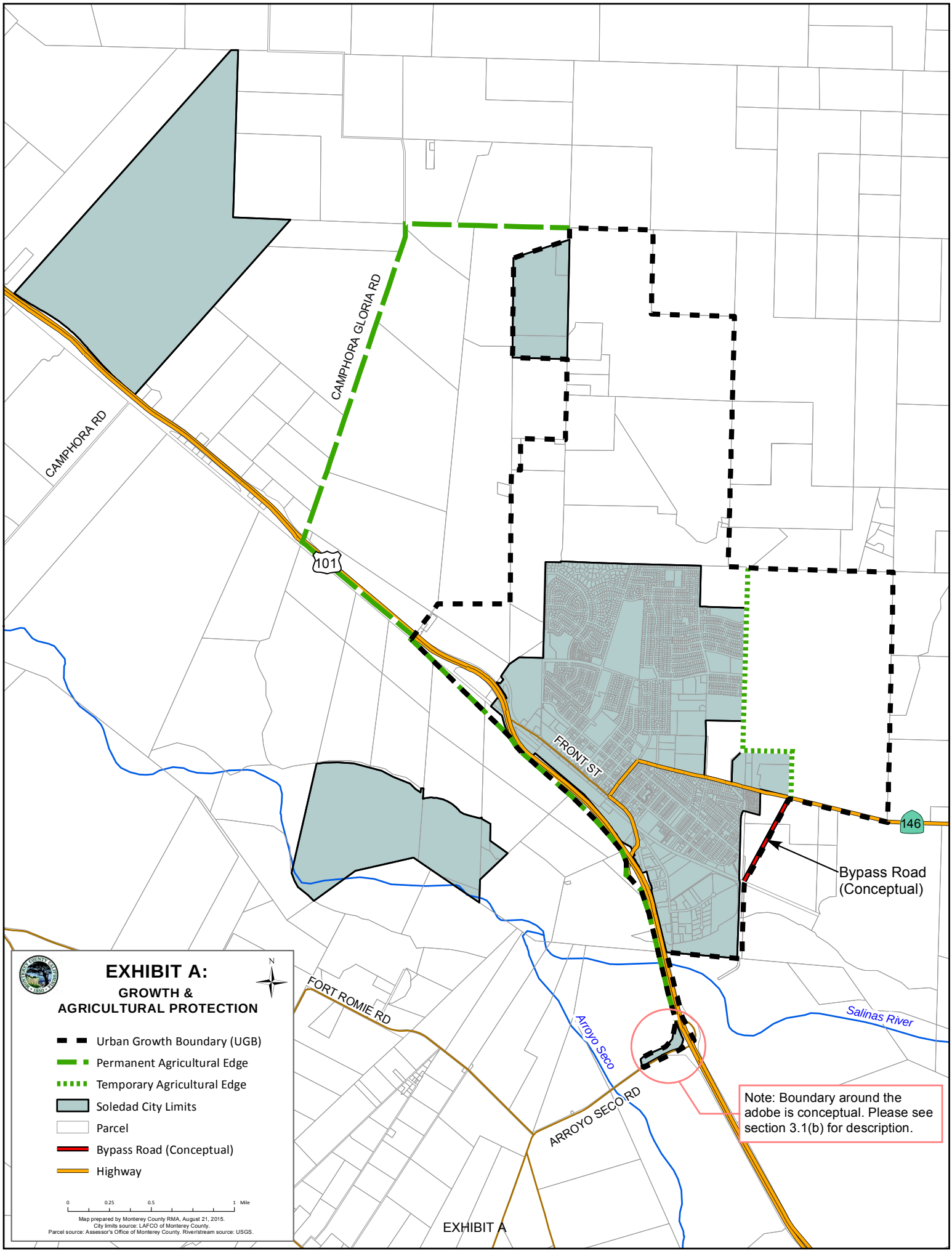

CAMPHORA GLORIA RD
CAMPHORA RD
101
FRONT ST
146
Bypass Road
(Conceptual)
FORT ROMIE RD
Arroyo Seco
Salinas River
ARROYO SECO RD
Note: Boundary around the adobe is conceptual. Please see section 3.1(b) for description.
EXHIBIT A:
GROWTH &
AGRICULTURAL PROTECTION
N
Urban Growth Boundary (UGB)
Permanent Agricultural Edge
Temporary Agricultural Edge
Soledad City Limits
Parcel
Bypass Road (Conceptual)
Highway
0 0.25 0.5 1 Mile
Map prepared by Monterey County RMA, August 21, 2015.
City limits source: LAFCO of Monterey County.
Parcel source: Assessor's Office of Monterey County. River/stream source: USGS.
EXHIBIT A

EXHIBIT B:
REFERRAL AREA

N

- Referral Area
- City Limits
- Monterey County Boundary
- Parcel
- Highway
- Major Road
- River or Stream

0 0.5 1 2 Miles

Map prepared by Monterey County RMA, August 21, 2015.
City limits source: LAFCO of Monterey County.
Parcel source: Assessor's Office of Monterey County. River/stream source: USGS.

GONZALES
GONZALES RIVER RD
GLORIA RD
SOLEDAD
SOLEDAD
SOLEDAD
SOLEDAD
101
RIVER RD
146
SAN BENITO COUNTY
FORT ROMIE RD
SOLEDAD
Salinas River
FOOTHILL RD
ARROYO SECO RD
Arroyo Seco
METZ RD
GREENFIELD

Note: Also refer discretionary applications for Paraiso Hot Springs.

EXHIBIT B

APPENDIX C

GENERAL PLAN CONSISTENCY ANALYSIS

General Plan Consistency Analysis

General Plan Policy		Consistency
Land Use		
L-2	Further annexations to the City may occur when a) a substantial portion of the development capacity within the existing city limits has been developed, b) a substantial public benefit can be realized through the annexation, such as the provision of public open space, additional parkland, or the protection of scenic vistas, or natural resources, or c) a special type of use is proposed that cannot be practically accommodated in the existing city limits, and d) the project can be found to provide a financial benefit to the City or to be fiscally neutral. The Planning Commission shall review the merits of a request for annexation based on these criteria, and make a recommendation to the City Council.	The general plan designates the Miramonte Specific Plan Area (Plan Area) which includes portions of the Mirassou Specific Plan Area, Northwest Expansion Area, and San Vicente West Specific Plan Expansion Area as areas for future growth. The opportunities available for residential development are limited within the existing city limit. The Miramonte Specific Plan (specific plan) preserves scenic hillsides of the site above the 400 foot elevation contour, provides public open space, and protects scenic and natural resources within this are of the site. The proposed specific plan also designates two school facility sites and sites for expansion of police and fire facilities, neither of which are available within the city limit. The project provides affordable housing, parks, revenue-generating uses and trails. A fiscal analysis has been prepared that identifies available methods and recommendations for development to achieve revenue neutrality. The fiscal analysis indicates that the specific plan would not have an adverse fiscal impact on the Soledad General Fund. Further, the specific plan requires the development to create a community facilities district to fund construction of certain public facilities and infrastructure in addition to funding operations and maintenance of public infrastructure (i.e., streets, storm drains, and parks). The financing/funding source would be outside of the Soledad General Fund. The fiscal analysis recommends the preparation of a comprehensive financing plan by the project developer. The fiscal impact on the city will be reviewed as part of the City Council consideration of the project upon recommendation by the Planning Commission, having reviewed the merits of the project and its consistency with the general plan. Refer to specific plan policies LU-A, LU-B, and LU-C. The project is consistent this policy.
L-3	A specific plan shall be required for all annexations and development of properties designated *Expansion Area*. Specific plans shall be prepared in accordance with the standards provided in Appendix B.	The specific plan has been prepared to ensure compliance with policy and in accordance with the standards provided in Appendix B of the Soledad General Plan. Se also the discussion of consistency with general plan policy L-43. Subject to review by the Planning Commission and approval by the City Council, the project is consistent with this policy.
L-4	The City shall promote patterns of development that allow for the efficient and timely extension of infrastructure and services.	Development of specific plan uses will occur as identified in Chapter 6.4 of the plan. The plan for services Section 2.5 anticipates several major phases for the purpose of implementing backbone infrastructure (e.g. storm water collection system, water system, wastewater collection, roadways, etc.) that serves the larger plan area. An example would be completing all backbone infrastructure south of the linear park and adjacent to the existing city limits as an initial phase of backbone infrastructure. According to the specific plan the project developers will design, finance, and construct backbone wastewater and storm water infrastructure in the first phase of development. Additionally, the developers will construct and finance the collector wastewater infrastructure in each neighborhood as

General Plan Policy		Consistency
		the development proceeds. Additional development level parameters are identified in Section 3.14 of the Addendum to the Miravale III Specific Plan EIR related to traffic facility improvements. Refer also to specific plan policies C-A, C-C, P-B, P-E, PSF-C, PSF_D, PSF-F, PSF-Y, and PSF-Z. Subject to approval by the City Council, the project is consistent with this policy.
L-5	New development shall not be allowed unless adequate public services are available to serve such new development, or that can be provided at the time of development.	The specific plan policies call for the provision of public facilities, infrastructure, and services commensurate with new development so as to adequately meet the needs of all development and future residents in the Plan Area in a manner that is financially self-supporting. The project developers will design, finance, and construct backbone water, wastewater, and storm drain infrastructure in the first phase of development. Additionally, the developers will construct and finance infrastructure improvements in each neighborhood (plan sub-area) by phase as the development proceeds. The plan for services identifies the project's effect to existing levels of service and infrastructure improvements necessary to ensure adequate provision of services. The Addendum to the Miravale III Specific Plan EIR determined that with implementation of the identified mitigation measures adequate public services are available for the project with mitigation (see Addendum Section 3.13, Public Services and Section 3.15, Utilities). The specific plan and fiscal analysis require preparation of a comprehensive financing plan, phasing, and infrastructure improvement plans that ensure development does not outpace the provision of public services. The comprehensive financing plan will provide a mechanism for identifying the costs of capital improvements and ongoing maintenance and operations of public service provision to the site and will provide a site-specific development impact fee structure to ensure that the project is revenue neutral and that adequate services can be provided to the development. Refer also to specific plan policies C-C, P-B, PSF-D,PSF-G, PSF-W, PSF-Y, and PSF-AA. The project is consistent with this policy.
L-6	New development shall pay its fair share of providing additional public services needed to accommodate such development.	See discussion of consistency with general plan policy L-5, above. Development of the project is required to submit payment of its fair share of the costs of public services needed to accommodate project development, per the Soledad Municipal Code Chapter 14.06. The comprehensive financing plan will identify the costs of capital improvements and ongoing operations and maintenance costs that will be funded by formation of a community facilities district, the payment of fair share fees, up front construction of identified infrastructure improvements subject to potential reimbursement, and the payment of development impact fees. The applicant and/or developer(s) will provide an offer to dedicate the designated school sites. In addition to the dedication of land, the developer(s) will pay school impact fees as prescribed by the law in effect at the time of payment, unless otherwise dictated by a development agreement or permit conditions. The project is consistent with this policy.

General Plan Policy		Consistency
L-7	Master plans for sewer, water, roads, drainage and other public improvements shall be required for new development on large undeveloped parcels and may be included in the specific plan required by policy L3, and as determined by the City.	The specific plan and plan for services require the provision of backbone infrastructure prior to approval of final map(s). All improvements shall be designed and constructed in conformance to the city's master plans and design standards. Approval of final map(s) and improvement plans shall be predicated upon evaluation and findings by the City Council that adequate public services and infrastructure, are available to serve additional housing and residents. Refer also to specific plan policies PS–B, PSF–D, PSF–H, and PSF–Y The project is consistent with this policy.
L-8	The City shall permit only low intensity land uses in areas where natural conditions such as floodplains and steep hillsides are likely to pose a threat to public safety or produce excessive maintenance costs.	As reported in the Addendum to the Miravale III Specific Plan EIR, the specific plan does not place higher intensity uses (residential, schools, commercial, etc.) in floodplains or steep hillsides, or in other areas likely to pose a threat to public safety or produce excessive maintenance costs. The specific plan designates hillsides above the 400 foot elevation contour as open space where only low intensity uses would be allowed through a use permit process. The project is consistent with this policy.
L-10	The City shall monitor development and adjust land use designations and new residential project approvals as needed to promote a reasonable balance between employment generating land uses and housing.	Development of the specific plan commercial uses and public services (e.g. schools, parks, public safety, etc.) and the increase in population resulting from new residential units creating demand, will result in the establishment of new jobs within the plan area and in the community of Soledad. The project is consistent with this policy.
L-11	The City shall encourage large residential development projects to be phased or timed with development that will provide primary wage earner jobs.	The specific plan proposes commercial and office job opportunities, as well as new schools, police and fire facility opportunities in phases that will provide sources of employment within the project area as residential build-out occurs. Refer also to specific plan policies PSF-W and PSF-AA. The project is consistent with this policy.
L-13	The City shall require that residential projects be designed to reflect and consider the relationship of the project to surrounding uses. Residential densities and lot patterns will be determined by these and other factors. As a result, the maximum density specified by the General Plan land use designations or zoning for a given parcel of land may not be realized.	The specific plan proposes approximately 2,392 units within the Plan Area. Density is a minimum of 10 units and maximum of 30 units per gross acre, consistent with the density designation of the land use concept map. The specific plan Chapter 2.0, Land Use, identifies zone districts and development standards that reflect awareness of surrounding land uses. Only low intensity uses are allowed above the 400 foot elevation contour, and San Vicente Road improvements provide a buffer to agricultural operations to the east. Residential land use densities are similar to existing uses within the city limit south of the project site. The specific plan Chapter 2.0, Land Use, includes development standards and architectural and site design standards to ensure compatibility between uses and neighborhoods. The project is consistent with this policy.
L-14	The maximum allowable residential density for new residential subdivisions or development projects shall be computed based on the gross area of the lot before dedications for highway setbacks, parks, streets, or other requirements.	The maximum residential density for the project is 23 units per acre. Dedications for parks, streets, etc. have been considered and are part of the project. The project is consistent with this provision.

General Plan Policy		Consistency
L-15	The City shall require new subdivided lots to be adequate in size and shape for the range of primary and accessory uses designated for the area.	The project provides lots of varying size and shape for the range of primary and accessory uses per new zoning designations as provided in the Specific Plan. The Specific Plan architectural guidelines and design standards promote the use of varied lot sizes to promote visual and product diversity. The project is consistent with this policy.
L-16	The pace of new residential development should be such that new residents can be absorbed into the fabric of the town and existing residents are not overwhelmed by newcomers. This can be accomplished in part by requiring phasing of larger residential projects and by ensuring that adequate infrastructure and public improvements are in place concurrently, or in advance of new development.	The project will be constructed in phases. Development of the Specific Plan uses will occur as identified in Chapter 6.4 of the plan. The plan for services Section 2.5 anticipates several major phases for the purpose of implementing backbone infrastructure (e.g. storm water collection system, water system, wastewater collection, roadways, etc.) that serves the larger plan area. Initial development is anticipated to occur adjacent to existing development within the existing city limit. The early phases of development will integrate roadways with Orchard Lane, West Street and San Vicente Road. The Addendum to the Miravale III Specific Plan EIR also identifies development triggers for the construction of traffic improvements that are necessary to accommodate project traffic and contributions to cumulative traffic conditions and incentivize higher commuter traffic volumes on San Vicente Road, rather than existing neighborhood streets. These triggers are reflected in the fiscal analysis prepared for the project and require monitoring of development and related traffic conditions to ensure that facilities operate at acceptable levels before additional development may proceed. Consequently, development is anticipated to proceed over many years, during which adequate infrastructure and improvements would be made concurrently or prior to traffic trigger development levels identified in the Addendum to the Miravale III EIR. The project is consistent with this policy.
L-17	Major new residential development is appropriate in the areas on the east and north sides of the developed portions of the City.	The specific plan area lies north of the developed portions of the City in a portion of the Mirassou Specific Plan Area identified for development in the general plan. The project is consistent with this policy.
L-19	In general, higher densities of residential development shall be located in areas served by the widest range of urban services, and shall be preferred along collector and arterial streets, within walking distance of schools, city parks and transit stops.	The Plan provides three higher density "Village Residential" neighborhoods that are within walking distance to commercial uses, open spaces, parks and schools. The project is consistent with this policy.
L-20	The approval of new residential subdivisions shall incorporate provisions to ensure that an appropriate amount of new multifamily development is constructed concurrently, or in advance of, new single family residences.	The development agreement will include provisions that multi-family development will be constructed concurrently, or in advance of, new single family residences. Subject to approval of the development agreement by the City Council prior to acceptance of final map(s), the project is consistent with this policy.

General Plan Policy		Consistency
L-21	New commercial development shall be encouraged in Soledad near the freeway interchanges with Highway 101. Limited new neighborhood commercial development will be allowed within areas designated *Expansion Area*, and/or at specified nodes to provide for the everyday needs of the surrounding residential neighborhoods.	The project includes an approximate nine-acre neighborhood/commercial site core area adjacent to the West Street roundabout. Commercial uses may also be integrated into the adjacent portions of the medium and high density housing site, and high density housing may be integrated into the commercial site. Allowed uses refer to Specific Plan Table 2-6 include neighborhood-serving retail uses such as grocery stores, sundries, hardware, coffee shops/bakeries, restaurants, pet supplies and gift shops, and professional services such as barber/beauty shops, dentists, attorneys, accountants, veterinarians, etc. The project is consistent with this policy.
L-23	In general, new retail commercial development should provide a wider range of shopping opportunities for the community.	The Village Commercial Center would contain a variety of shopping and professional services opportunities as identified in specific plan Table 2-6 for the community. The project is consistent with this policy.
L-24	New commercial development shall be designed to encourage safe and efficient pedestrian circulation within and between commercial sites and nearby residential neighborhoods.	Design guidelines for commercial development are included in the specific plan Chapter 2.0, Land Use. The design guidelines focus on pedestrian-oriented development with clearly defined pedestrian walkways between residential neighborhoods, adjacent parks and open space, schools, and commercial areas. Refer also to specific plan policy LU-D. The project is consistent with this policy.
L-25	New commercial development shall be designed to minimize the visibility of parking areas from public roadways.	Commercial buildings should be oriented toward the street. garages and parking lots should be de-emphasized and moved back from the street and/or out of direct view. The specific plan calls for shade trees and landscaping within parking lots. Village Commercial design guidelines call for screening treatments such as earth berms, low screen walls, landscaping, changes in elevation, or combinations of the above. Refer also to specific plan policy LU-D and LU-E. the project is consistent with this policy.
L-32	The City shall designate adequate, appropriately located land for the development of City and County facilities and offices, schools, medical facilities, water facilities, and public safety facilities.	The project will provide adequate public facilities, including parks, open space, schools and a police and fire station. Small-scale medical facilities such as dentists and clinics are uses allowed in the Village Commercial zone district (refer to the specific Plan Table 2-6). The project is consistent with this policy.
L-34	When considering plans for large scale development, the City shall designate adequate, appropriately located land for the development of quasi-public land uses, such as, hospitals, churches, private schools, cemeteries, and utility uses.	Although the project does not specifically include designated sites for quasi-public facilities, these uses could be conditionally allowed in the public facility zone district in conformance to Soledad Municipal Code Section 17.34.020, which conditionally allows quasi-public uses including churches, utilities structures hospitals and medical offices and facilities including rest homes and public and private schools, subject to first obtaining use permit approval. Subject approval by the City Council, the project is consistent with this policy.

General Plan Policy		Consistency
L-35	The City shall promote the clustering of public and quasi-public uses such as schools and parks, libraries, child care facilities, and community activity centers. Joint use of public facilities shall be promoted, and agreements for sharing costs and operational responsibilities among public service providers shall be encouraged.	The specific plan promotes joint recreational and storm water management uses in the 15.1-acre storm water retention basin. Potential joint use of school district facilities and the parks managed by the city would be guided by a joint use agreement between these entities. Policies have been incorporated into the Specific Plan to promote joint use of public facilities. Refer also to specific plan policies P-J and P-K. The project is consistent with this policy.
L-36	The City shall encourage efforts to locate adequate emergency services and other types of health care facilities in Soledad to meet the present and future needs of its residents.	The plan provides a site for a potential police substation and a fire station. Dental offices and other health care services are identified as allowable uses in adjacent commercial areas. Refer also to specific plan policy PSF-AA. The project is consistent with this policy.
L-37	Health care and dental care services, including residential care facilities and senior care services, shall be expanded to meet the needs of the City's population.	Residential care facilities and group homes are permitted uses in the Specific Plan Village Residential zone district. Dental offices and other health care services are identified as allowable uses in adjacent commercial areas. The project is consistent with this policy.
L-42	The City shall use *Community Design Guidelines* as a decision-making tool to ensure that new development incorporates the qualities and character desired by Soledad residents.	The specific plan includes design guidelines for all zone districts within the plan area. The guidelines are consistent with the concepts presented in the *Community Design Guidelines*. The project is consistent with this policy.
L-43	Specific plans prepared for major expansion areas shall incorporate the standards described in Appendix B – Standards for Specific Plans. In general: a. New residential projects should be designed to integrate with existing neighborhoods to ensure that they do not destroy the established character. Subdivisions in City expansion areas should be designed so that individual, separately developed projects work together to create true neighborhoods with a sense of identity, instead of disjointed or isolated enclaves. b. Subdivision design should emphasize pedestrian connectivity within each project, and to adjacent neighborhoods, and nearby schools and parks. All streets and walkways should be designed to provide safe and pleasant conditions for pedestrians. Streets within neighborhoods should be no wider than needed to accommodate parking and two low speed travel lanes. Sidewalks should be separated from curbs by parkway strips of at least four feet in width; and the parkways should be planted with canopy street trees. c. Specific plans should provide a range of residential housing types affordable to the widest range of income groups, consistent with the goals, policies and programs of the Housing Element of the General Plan.	a. The neighborhoods adjacent to existing development propose similar residential product types along the southern portion of the Plan Area and the extension of West Street and San Vicente Road to create neighborhoods that are integrated and linked with existing residential development. b. A network of pathways is integrated into the specific plan. Two major pathway spines cross the plan area. The linear park connects San Vicente Road northeastward to residential areas north of Orchard Lane, and a second spine pathway begins at the linear park and extends northward. These two spines serve all of the medium and high density residential areas, the commercial area, both schools, and park areas. Plan area sidewalks generally consist of five-foot wide sidewalk area separated from the adjacent street by a landscaped planting strip. c. A variety of housing types are planned including single family detached, attached duplex, townhouses and for rent apartments. The provision of affordable housing is consistent with the Housing Element of the City's General Plan. d. The project design includes public open space and parks, and pedestrian and bike facilities. The project will provide adequate public facilities to meet project demand.

General Plan Policy		Consistency
	d. Subdivisions should be designed to provide usable public open spaces in the form of parks, linear bicycle and pedestrian trails, squares, and greens, as appropriate.	The specific plan has been prepared in conformance to the standards identified in Appendix B of the general plan. The project is consistent with this policy.
L-44	The City shall require that all new development be designed to complement the scale and character of existing development. Views of the surrounding hills and mountains shall be preserved through such means as design review, sign control, undergrounding of utilities, grading and tree removal standards.	Development of the project, while physically transforming a previously undeveloped project site into a new development, would complement the existing residential character of Soledad. The project preserves views of the surrounding hills and mountains because it does not include development above the 400 foot elevation contour. Development will occur on lower elevations and is subject to conformance with the specific plan design guidelines, and city standards for new utilities, grading, and tree removal. Implementation of the mitigation measures identified in the Addendum to the Miravale III Specific Plan EIR further reduce the project's impact to the aesthetic value and visual character of Soledad. The project is consistent with this policy.
L-45	The City shall require all new development to be planned and designed in a manner which employs design, construction and maintenance techniques that: a. Avoids locating structures along ridgelines and steep slopes. b. Incorporates design and screening measures to minimize the visibility of structures and graded areas. c. Maintains the character and visual quality of the area.	Development of the uses identified in the specific plan does not include development above the 400 foot elevation contour, therefore no grading of new roads or ridgeline development would occur in the portions of the site above the 400 foot elevation contour. As noted above, Development will occur on lower elevations and is subject to conformance with the specific plan design guidelines, and city standards for new utilities, grading, and tree removal. Implementation of the mitigation measures identified in the Addendum to the Miravale III Specific Plan EIR further reduce the project's impact to the aesthetic value and visual character of Soledad. The project is consistent with this policy.
L-46	New development on hillsides shall employ design, construction and maintenance techniques that: a. Ensure that development near or on portions of hillsides do not cause or worsen natural hazards such as erosion, sedimentation, or fire hazards. b. Minimize risk to life and property from slope failure, landslides and flooding. c. Include erosion and sediment control measures including temporary vegetation sufficient to stabilize disturbed areas. d. Maintain the character and visual quality of the hillside.	The project does not include development above the 400 foot elevation contour. Mitigation measures to reduce geologic and other hazards associated with hillside development are identified in the Miravale III Specific Plan EIR Sections 4.1, 4.6, 4.8, and 4.14, The Addendum to the Miravale III Specific Plan EIR found that the project would not increase risks greater than the risks identified and mitigated in the Miravale III Specific Plan EIR. With implementation of the mitigation measures identified in these sections the project is consistent with this policy.
L-47	The City may, where appropriate, require new development to provide pedestrian amenities along public sidewalks, such as seating and 'pocket parks'.	The specific plan includes the provision of public amenities such as benches will be provided around commercial centers and parks. Residents of each neighborhood will have access to a park within or immediately adjacent to the neighborhood. The provision of neighborhood parks is included in the Specific Plan. These parks may be pocket parks, expanded neighborhood/park connector corridors, portions of larger parks, or portions of the linear parkway that include neighborhood park features. The focus of these parks will be on providing convenient playgrounds, sitting areas, and other gathering opportunities

General Plan Policy		Consistency
		for neighborhood residents. Refer also to specific plan policy LU-G. The project is consistent with this policy.
L-49	The form, scale and character of new residential development shall emulate the best characteristics of the existing residential neighborhoods, such as single and two-story dwellings with adequate off street parking, landscaped front yards with trees, and sidewalks.	The specific plan provides design guidelines for residential development consistent with the intent of this policy. The specific plan requires that residential buildings provide an attractive architecture that emphasizes welcoming facades on all street- and public-facing elevations. The Specific Plan promotes a unified character within each neighborhood through architecture and landscaping. Local residential streets are required to provide street trees separated by planting strips. Single family units are also required to provide adequate off street parking and landscaped front yards. Refer also to specific plan policy LU-I. The project is consistent with this policy.
L-50	Multi-family development shall include usable open space for each dwelling and shall be designed to be integrated with the surrounding neighborhood.	The design guidelines for the Village Residential areas are consistent with the intent of this policy. According to the Specific Plan, a minimum of 48 square feet of private space shall be provided for each unit. Multi-family housing will be integrated with low density residential development in form, scale, and architectural character. Refer also to specific plan policy LU-I and Table 2-5. The project is consistent with this policy.
L-51	All exterior lighting in new development shall be located and designed so as to avoid shining directly onto nearby residential properties, and shall minimize offsite glare. Proponents of commercial or industrial projects on property adjacent to residential areas shall submit a lighting plan to the City for review and approval; said plan shall incorporate features such low level, downward directed exterior lights to achieve the intent of this policy.	The Miravale III Specific Plan EIR and Addendum to the Miravale III Specific Plan EIR include a mitigation measure that requires all buildings are designed so that exterior lighting is down-lit and illuminates the intended area only. Building applications for new structures would be required to include an exterior lighting plan subject to approval of the Soledad Planning Department. The project, as mitigated, is consistent with this policy. Refer also to specific plan policy LU-D.
L-52	Historically or architecturally significant buildings shall not be demolished or substantially changed in outward appearance in a way that diminishes the historical character, unless doing so is necessary to remove a threat to health and safety and other means to avoid the threat are infeasible.	The project site contains a historically significant structure referred to as the Lorentzen house. The Miravale III EIR and Addendum to the Miravale III EIR identified mitigation measures including relocation of the house, protective measures, and repair of any inadvertent damage to ensure that the historical character of the structure would not be diminished. The project, as mitigated, is consistent with this policy.
Housing		
H-1	The City of Soledad shall promote the expansion of its LAFCO Sphere of Influence and annexation of additional land consistent with its General Plan Land Use Element to accommodate long-term demand for residential development.	The project includes expansion of the City's LAFCO Sphere of Influence, reorganization/annexation of the site to accommodate long-term demand for residential development consistent with City's regional housing needs as identified by the Association of Monterey Bay Area Governments, and buildout goals for the Mirassou Specific Plan Area and other Expansion Areas identified in the general plan. .Consistent with the city's general plan, which identifies the plan area as part of the Mirassou Specific Plan Area, the specific plan includes numerous densities and types of residential units, including more than 33 percent medium and high density (up to about 23 units per acre) units, which will

General Plan Policy		Consistency
		provide for an efficient land use development pattern. The specific plan includes more units within its boundaries than were planned for the overall Mirassou Specific Plan Area, and includes elimination of the remaining Mirassou Specific Plan Area as a future urban development area. Refer also to specific plan policy LU-B. The specific plan is consistent with this policy
H-2	The City of Soledad shall ensure adequate vacant land suitably zoned for residential development and/or redevelopment is available to meet the city's housing need as identified by the Association of Monterey Bay Area Governments.	The project includes residentially zoned property that would be developed with a variety of residential uses. This will aid the city in reaching its regional housing needs as identified by the Association of Monterey Bay Area Governments. The project is consistent with this policy.
H-3	The City of Soledad shall require new residential areas to contain a mix of housing types targeted to very low, low, moderate, and above moderate households in approximately the proportion that each of these income categories represent in the AMBAG Fair Share Housing Allocation.	Approximately 800 affordable units, including 40 units within the 35.9-acre Residential Study Area (Sub-area 13) are provided for within the Plan Area. Specific Plan Policy LU – C requires affordable housing to include at least six percent of units for very low income households, six percent for low income households, and eight percent for moderate income households. At least 30 percent of medium density housing units should be available as rentals. The affordable housing units shall be constructed concurrently with the market rate housing units. The City Council shall review specific development project consistency with the city's affordable housing requirements per the housing element and inclusionary housing ordinance in its consideration of required development agreement and housing agreements. Subject to City Council approval of these agreements, the project is consistent with this policy..
H-6	The City shall require housing developers to offer an optional design to homebuyers whose household has one or more disabled person.	The Specific Plan Design Guidelines for the Village Residential designation includes a provision for design options to homebuyers with a physical disability. The project is consistent with this policy.
H-9	The City of Soledad shall ensure that city site improvement standards, development review procedures, and development fees do not unreasonably constrain the development, conservation, and rehabilitation of housing.	The project is responsible for it fair share of costs for capital improvements and ongoing city services. The City Council will consider the timing of development, payment of applicable impact fees, construction of required infrastructure or other capital improvements and potential reimbursement program, and ongoing operational and maintenance costs for city services while reviewing the comprehensive financing plan and development agreement prior to approval of the final map(s). The project is consistent with this policy.
H-10	The City of Soledad shall ensure the availability of adequate public facilities for the expected housing need of the city.	The plan for services outlines the service demands of the project and infrastructure improvements necessary to meet demand, consistent with the City's master plans for the provision of public services. The specific plan includes an implementation plan and provides two school sites and one public facility site for potential police substation and a fire station. The City Council will consider the Plan for Services, Fiscal Analysis, and specific plan implementation plan while reviewing the applicant's development agreement

General Plan Policy		Consistency
		prior to approval of final map(s). As noted elsewhere the Miravale III Specific Plan EIR and Addendum to the Miravale III Specific Plan EIR include mitigation measure that ensure that the project, as mitigated, would be adequately served by public facilities. Refer also to specific plan policy PSF-Y. The project is consistent with this policy.
H-11	The City of Soledad shall support and initiate, where feasible, public and private energy conservation programs which will reduce the energy needs of housing in Soledad and so increase housing affordability.	The Specific Plan contains design guidelines for residential and non-residential buildings to maximize energy conservation through site and building design that considers prevailing winds, shade trees, window and door orientation, and the positioning of buildings. Additionally, Mitigation Measure 4.3-3 requires the preparation of a greenhouse gas emissions reduction plan prior to _construction that outlines emissions reducing measures that will be incorporated into all development on the site. The emissions reduction plan will likely include energy conserving measures. Refer also to specific plan policies LU-F, PSF-T and PSF-U. The project is consistent with this policy.
Circulation Element		
C-1	Level of Service "D" or better shall generally be maintained on all streets and intersections. Lower levels of service may be accepted during peak times or as a temporary condition, if improvements to address the problem are programmed to be developed. To identify potential impacts of new development on traffic service levels, the City shall require the preparation of traffic impact analyses generally at the sole expense of the developer for developments determined to be large enough to have potentially significant traffic impacts.	A traffic impact analysis was prepared for the project. The traffic analysis found that traffic generated by the project would cause levels of service to decline at a number of intersections and roadways (refer to the Addendum to the Miravale III Specific Plan EIR), and that mitigation is required to maintain or create acceptable levels of service on affected intersections. Mitigation Measures 4.13-2 – 4.13-14 are identified in the Addendum that require specific facility improvements or the payment of fees to address the project's direct impacts to facilities or contribution to cumulative impacts to facilities based on development level triggers for the provision of improvements. The project, as mitigated, is consistent with this policy.
C-2	Streets shall be dedicated, widened, extended and constructed in accordance with City standards. Dedication and improvements of full rights-of-way shall not be required in existing developed areas where the City determines such improvements are infeasible or undesirable. New development shall be responsible for improving a minimum one-half Street along the outer-boundaries of each subdivision along subdivision property where street extensions are identified. Other deviations from these standards shall be permitted upon a determination by the City Engineer that safe and adequate public access and circulation are preserved by such deviations.	All streets within the plan area will be public and dedicated to the City of Soledad, and will be constructed with curbs, gutters, landscape parkways, and sidewalks meeting City of Soledad Standard Plan specifications. Refer also to specific plan policy C-F. The project is consistent with this policy.
C-3	The City shall require that roadway rights-of-way be wide enough to accommodate the travel lanes needed to carry long-range forecasted traffic volumes, as well as any planned bikeways and required drainage, utilities, landscaping, and suitable separations.	The specific plan requires all streets and facility improvements to be constructed to City standards, including standards for right-of-way widths for each roadway category, subject to the review and approval of the Director of Public Works. Refer also to specific plan policy C-F. The project is consistent with this policy.

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C-4	On arterial roadways, intersection spacing shall be maximized. New driveways along collector and arterial roadways shall be minimized or prohibited completely.	The specific plan requires all streets and facility improvements to be constructed to City standards, including intersection spacing along collector and arterial roadways subject to the review and approval of the Director of Public Works. Refer also to specific plan policy C-F. The project is consistent with this policy.
C-5	The street system in residential neighborhoods shall provide safe and logical connections to the existing street pattern, and connectivity to the range of complementary land uses within neighborhoods (housing, schools, parks, neighborhood shopping, etc.). The use of multiple collector streets shall be favored over the use of arterials in new residential subdivisions.	Connections to the existing street pattern have been provided via the extension of Orchard Lane, West Street and San Vicente Road. New circulation alignments within the Plan Area have been designed to effectively connect residential neighborhoods to commercial and recreational areas. Sidewalks adjacent to commercial centers and schools will be wider to accommodate higher levels of pedestrian traffic. The specific plan requires all streets and facility improvements to be constructed to City standards, including the use of collector and arterial roadways subject to the review and approval of the Director of Public Works. Refer also to specific plan policy C-B. The project is consistent with this policy.
C-6	The City shall not approve new commercial or industrial development that encourages customers, employees or deliveries to use residential streets. The circulation system shall be designed so that nonresidential traffic (especially truck traffic) is confined to nonresidential areas.	Commercial development is anticipated to be constructed in the later phases of the project after improvements to San Vicente Road are made. Mitigation measures 4.13-2 - 4.13-14 include construction of required facility improvements or the payment of the project's fair share of traffic impact fees. Several of the mitigation measures are based on development level triggers beyond which no further traffic-generating development could proceed unless improvements are made. The project, as mitigated, is consistent with this policy.
C-8	The City shall manage the street network so that the standards presented in policies C1 and C12 are not exceeded. The City will require new development to mitigate the traffic impacts it causes, or the City will limit development along streets where congestion levels are unacceptable.	Mitigation measures 4.13-2 - 4.13-14 include construction of required facility improvements or the payment of the project's fair share of traffic impact fees. Several of the mitigation measures are based on development level triggers beyond which no further traffic-generating development could proceed unless improvements are made. The project, as mitigated, is consistent with this policy.
C-9	New local streets shall be developed consistent with the goals, policies and programs of the Land Use Element of the General Plan.	Local streets within the Miramonte Plan Area have been designed per City standards. The project is consistent with this policy.
C-10	Facilities that promote the use of alternate modes of transportation, including bicycle lanes, pedestrian and hiking trails, park-and-ride lots and facilities for public transit shall be incorporated into new development, and shall be encouraged in existing development.	The Specific Plan will provide the necessary circulation system and infrastructure to create a safe and efficient circulation network for motor vehicles, pedestrians, physically disabled persons, and alternative forms of transportation with an emphasis on creating a pedestrian friendly, walkable community. Trail, sidewalks, and bicycle lanes will be provided to promote alternative modes of transportation. Six Transit stops are also planned. Refer also to specific plan policy C-1, C-J through C-P. The project is consistent with this policy.
C-13	The City shall ensure through a combination of traffic impact fees and other funding mechanisms that new development pays its fair share of the costs of circulation improvements required by such development.	All street improvements will be financed and installed by the developer. The developer may be credited by the city's Traffic Impact Fee program. Mitigation measures 4.13-2–4.13-14 require either the construction of improvements or the payment of applicable traffic impact fees to mitigate project impacts to various traffic facilities to ensure that the

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		development pays its fair share of the costs of circulation improvements necessary to accommodate the project. The project, as mitigated, is consistent with this policy. Refer also to specific plan policy C-E.
C-14	The City shall prohibit the development of private streets in new residential projects, unless approved on a project specific basis where circumstances support such a use and the streets are privately maintained.	All streets in the plan area will be public. All private streets, if proposed and approved, and driveways within the plan area, such as within commercial and medium density areas, shall be maintained and paid for by the property owners for those developed areas. Refer also to specific plan policies C-F and C-I. The project is consistent with this policy.
C-15	New development shall continue the existing street pattern, where logical.	The project continues the existing street pattern with the planned extensions of Orchard Lane and West Street into the project site. Improvements to San Vicente Road and the construction of the Gabilan Drive extension to Moranda Road U.S. Highway 101 interchange will be required to reduce the project's impacts to local streets, including Front Street. Mitigation measures based on development level triggers require the project to contribute fair share costs or construct the San Vicente realignment and Gabilan Drive extension to the Moranda Road U.S. Highway 101 interchange. Development beyond the applicable triggers would not be allowed to proceed beyond the levels outlined in the mitigation measures unless the San Vicente Road is realigned and the Gabilan Drive Extension is constructed. The project is consistent with this policy.
C-16	Roundabouts will be considered as an alternative to traditional intersection controls.	Two roundabouts will accommodate collector street traffic flow without the need for signal lights or stop signs. The project is consistent with this policy.
C-17	The City shall require the provision of adequate off-street parking in conjunction with all new development. Parking shall be located convenient to new development and shall be easily accessible from the street. The adequacy and appropriateness of parking requirements in the Zoning Ordinance shall be periodically evaluated.	The specific plan includes off-street parking requirements for each land use consistent with Soledad Municipal Code Section 17.36.020, Off-street parking. Refer also to specific plan policy LU-E. The project is consistent with this policy.
C-21	Bicycle routes shall emphasize paths separate from vehicle traffic to the maximum extent feasible, but shall also include bicycle lanes within public streets.	The specific plan includes a network of pedestrian and bicycle pathways with two major pathway spines crossing the plan area (refer to the specific plan Figure 3-3). . Numerous short connecting pathways provide connections between the low density residential neighborhoods and these two spines or to schools. The linear parkway includes a Class 1 bicycle/ pedestrian trail as its main feature. The West Street roundabout will also accommodate a Class I pathway along the eastern edge to connect the north-south pathway spine to residential areas. Additionally, Class II bicycle lanes are provided on all collector streets within the plan area. Bicycle lanes will be a minimum five feet wide and will be separated from the vehicle travel lane by a painted stripe, generally solid, but dashed approaching intersections. The project is consistent with this policy.

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C-22	Bike lanes and paths shall be designed and maintained to improve bicycling safety, and convenience, and encourage people to use bicycles to commute to work or school.	Cross sections of public streets are included in the specific plan that shows the separation of pedestrian sidewalks from roadways and dimensions of bicycle facilities. All streets will be designed and constructed to city standards. The linear park pathway connects from San Vicente Road northeastward to the residential areas north of Orchard Lane, and a second spine pathway begins at the linear park and extends northward.. These two spines serve all of the medium and high density residential areas, the commercial area, both schools, and park areas. Numerous short connecting pathways provide connections between the low density residential neighborhoods and these two spines or to schools or adjacent streets. Additionally, Class III bicycle lanes will be provided on all collector streets in the plan area. Refer also to specific plan policy C-M. The project is consistent with this policy.
C-25	New development shall provide bike lanes and paths, secure bicycle storage and parking facilities.	The project includes Class I and II bike lanes within the project area. The specific plan includes policies that require future development within the commercial and village residential areas to provide additional bike facilities, including storage racks, consistent with this policy. Refer also to specific plan policy C-N.
C-27	The City shall complete a continuous network of sidewalks and separated pedestrian paths connecting housing areas with major activity centers and with trails leading into City and county open space areas.	The specific plan includes a network of pedestrian and bicycle pathways with two major pathway spines crossing the plan area. Cross sections of public streets are included in the specific plan that shows the separation of pedestrian sidewalks from roadways and dimensions of bicycle facilities. All streets will be designed and constructed to city standards. Internal circulation infrastructure plans are required prior to approval of the final map(s) and are subject to the review and approval by the Director of Public Works. Subject to review and approval by the Director of Public Works the project is consistent with this policy. Refer also to specific plan policy P-E.
C-28	New commercial development and development in Specific Plan areas shall provide sidewalks and pedestrian paths consistent with applicable State, federal and local plans, programs and standards.	Figure 3-3 of the specific plan illustrates the location of pedestrian amenities such as sidewalks and pedestrian paths. The Village Commercial Design Guidelines (refer to specific plan Chapter 2, Land Use), includes standards for the provision of pedestrian sidewalks and paths. All pedestrian infrastructure will be designed and constructed to city standards, which reflect state and federal programs and standards. Internal circulation infrastructure plans are required prior to approval of the final map(s) and are subject to the review and approval by the Director of Public Works. Subject to review and approval by the Director of Public Works, the project is consistent with this policy. Refer also to specific plan policy C-F.
C-29	Pedestrian crossings at heavily traveled intersections shall be made as safe as possible, utilizing neck-downs/bulb-outs where feasible. Crossing controls shall be installed when traffic levels warrant.	The specific plan circulation plan includes mid-block bulb-outs at the intersection between the two school sites, the intersection near the senior housing, and at the four major pathway/street crossings, as well as the point where the trail system transitions onto West Street. The project is consistent with this policy.

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Parks and Recreation		
PR-1	The City will acquire future park and recreation land and facilities by: a. Requiring park dedications from future residential subdivisions at the rate of three acres per 1,000 population anticipated in the project; b. Requiring payment of a park impact fee, or requiring the dedication of land and improvements in-lieu of fees, from all new development; c. Cooperating with Monterey County to acquire land for a new regional park in the Soledad planning area; d. Acquiring parkland near existing or potential public park or recreation sites, or near quasi-public or private sites that have a good opportunity for a joint use agreement. Acquired parkland should be contiguous to proposed or existing park and recreation facilities or provide a logical connection. e. Pursuing joint use agreements with public and private schools, other public government agencies, private park and recreation providers, and institutions with potential parkland to make existing or proposed park and recreation facilities available to the community on an extended basis.	Specific plan polices and the plan for services require each phase of development to provide enough parkland to meet the needs of project residents in that phase or neighborhood. The project, consistent with the requirements of this policy, provides public park and recreational opportunities as follows: a. The specific plan provides approximately 56 acres of parkland and approximately 140 acres of open space. The parkland is provided at a ratio that is greater than five acres per 1,000 new residents. b. The project developer(s) will be required to pay park impact fees, in addition to the dedication of land. c. Not applicable. d. Parks and recreational facilities are located throughout the proposed development and several facilities are planned adjacent to educational facilities. e. A joint use agreement may be established between the City and the School District for shared use of school recreational facilities. Refer also to specific plan policies P-B and P-C. The project is consistent with this policy.
PR-2	The City will pursue the development of parks, open space and trails in areas subject to natural or human caused hazards such as natural or developed flood channels, hillsides and sensitive resource areas.	Approximately 140.4 acres of open space have been provided within the plan area, representing approximately one-quarter of the plan area. Open space lands encompass the natural hillsides above the 400-foot elevation contour. The Hillside Open Space area is intended to be preserved in perpetuity under a conservation easement, with maintenance funded through a community facilities district. Additionally, a 15.1 acre recreation area is located at the lowest elevation within the plan area, and will collect storm water run-off during periods of rain. Refer also to specific plan policy P-J. The project is consistent with this policy.
PR-10	The City should provide a pedestrian network within the City Limits. The system should: a. Accommodate pedestrians and bicycles. b. Connect residential neighborhoods with: 1) Soledad's downtown, 2) schools, 3) City park and recreation facilities, and 4) regional trails.	The specific plan includes a network of pedestrian and bicycle pathways with two major pathway spines crossing the plan area. One runs through the Linear Park. The other runs along the edges of the two schools, through the Village Park, and between the commercial and multifamily area. These trails and sidewalks will provide connectivity to other residential neighborhoods within the City via extensions of West Street and Orchard Lane, proposed improvements to San Vicente Road, in addition to implementation of intersection improvements required by mitigation measures identified in the Addendum to the Miravale III Specific Plan EIR. Refer also to specific plan policy P-E. The project is consistent with this policy.

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PR-15	Parks shall include adequate support facilities such as parking and restrooms.	The specific plan calls for the provision of restroom facilities, picnic areas, play fields, and parking in all parks. The proposed Village Park site uses could include turf areas for recreation, tennis or basketball courts, picnic and sitting areas, a dog park, a community garden, a water play area, a playground, or a community center, in addition to restrooms and parking. Refer also to specific plan policy P-F. The project is consistent with this policy.
PR-16	Parks shall be designed to be compatible with the neighborhoods in which they are located, and shall provide security and privacy to adjoining properties. Where necessary, buffers shall be provided between park and recreation lands and adjacent development to provide privacy and a physical separation between uses. Buffers may include setbacks, landscaping, fencing, and/or dramatic breaks or changes in topography.	The parks will be designed to minimize noise and activity conflicts with residential areas. The specific plan promotes the use of a 100-foot-wide low growing and low fuel vegetated buffer between residential lots and the larger hillside open space area. These parks will be lit to ensure security. All park improvement plans are subject to the review and approval by the City of Soledad Planning Director and Director of Public Works. Refer also to specific plan policies P-G and P-M. The project is consistent with this policy.
PR-24	New development shall be required to add to proposed or existing park and recreation projects where legally feasible. Public or private development shall provide, as appropriate and legally feasible: 1) a buffer between proposed development and existing park, recreation and/or open space parcels to minimize conflicts between development and existing facilities; and 2) gates, fences, or other deterrents when such facilities are deemed necessary to discourage prohibited or non-compatible uses from entering park, recreation or open space lands.	Where new parks are proposed fencing will be provided as a component of the residential development. The Specific Plan promotes the use of a 100 foot wide low growing and low fuel vegetated buffer between residential lots and the larger hillside open space area. All park improvement plans are subject to the review and approval by the City of Soledad Planning Director and Director of Public Works. Refer also to specific plan policy P-M. The project is consistent with this policy.
PR-25	New development shall not adversely impact adjacent park, recreation or open space lands.	The specific plan includes residential and commercial design guidelines and policies to guide development of public parks with the Plan Area, and ensure compatibility between specific plan land uses. There are no parks or designated open space or recreation lands adjacent to the Plan Area. Refer also to specific plan policy P-M. The project is consistent with this policy.
PR-33	New development shall be required where legally feasible to provide its fair share of public park and recreation opportunities. New development within the City shall be required to provide park and recreation lands or facilities consistent with this Element. Conditions placed on new development shall be reasonable and consistent with the nature and extent of such development plans. The City shall require the dedication and improvement of park land even in circumstances where the total cost to improve such parkland exceeds the value of the corresponding development impact fee.	The project includes dedication of approximately 56 acres of public parkland and will provide approximately 140.4 acres of public open space consistent with the general plan requirements for the provision of parkland. The fiscal analysis prepared for the project recommends preparation of a comprehensive financing plan that will identify project-specific development impact fees, including the project's required share of parkland dedications and/or fees. City Council approval of the comprehensive financing plan is required prior to approval of final map(s). The project is consistent with this policy,

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Public Services and Facilities		
S-1	The City shall ensure through the development review process that adequate public facilities and services are available to serve new development. New development shall not be allowed until adequate public services and facilities to serve such development are provided. Where existing facilities are inadequate, new development may only be approved when the following conditions are met: a. The developer and/or City can demonstrate that all necessary public facilities will be adequately financed and installed in time (through fees or other means); and b. The facilities improvements are consistent with applicable facility plans approved by the City or other agencies in which the City is a participant.	According to the plan for services the project would construct all required utility and roadway infrastructure improvements will be designed and constructed in conformance to the city's design criteria and performance standards. The Addendum to the Miravale III Specific Plan EIR found that adequate public services will be available as the project proceeds, with implementation of the mitigation measures identified in the Addendum Section 3.0 and 4.0 related to the provision of public services This is a required condition of project approval. Subject to City Council approval of the comprehensive financing plan and development agreement prior to approval of final map(s) necessary facilities improvements will be adequately financed and installed in time to serve the needs of the project. The project is consistent with this policy,
S-2	The City shall plan for the expansion of needed water and sewer infrastructure including, but not limited to, the expansion of water production, storage and distribution facilities, the expansion of wastewater collection and treatment capacity, and storm drainage facility expansion.	As shown in the plan for services, the water supply assessment and the Addendum to the Miravale III Specific Plan EIR, adequate public services are available to meet project demands with implementation of mitigation measures. Final infrastructure improvement plans are subject to the review and approval of the Director of Public Works prior to the recordation of the final map to insure that infrastructure design and construction conforms to the city's applicable design criteria and performance standards. The project is consistent with this policy.
S-3	Public facilities, such as wells, pumps, tanks, and yards shall be located and designed so that noise, light, odors, and appearances do not adversely affect nearby land uses.	Final infrastructure improvement plans, including the locations of any proposed wells, tanks, and/or yards are subject to the review and approval of the Planning Director and Director of Public Works prior to the recordation of the final map to insure that infrastructure design and construction conforms to the city's applicable design criteria and performance standards, and are compatible with adjacent land uses. Subject to City staff review and approval the project is consistent with this policy.
S-4	Where new development requires the construction of new public facilities, the new development shall pay its fair share of the construction. Where necessary, the City shall require the dedication of land within newly developing areas for public facilities.	The project is subject to participation in the city's development impact fee program, as modified by the comprehensive financing plan. The project also includes land dedications for fire and police facilities development, schools and parks, and includes the provision of public facilities for storm water, water supply and distribution, wastewater collection systems, and park improvements. As discussed in the Addendum to the Miravale III Specific Plan EIR Section 3.14, the project is also responsible for the payment of fair share costs of regional and local traffic facility improvements necessary to accommodate project traffic and for the construction of several intersection modifications. The project is consistent with this policy.

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S-5	The City shall require that new development pay its fair share of the cost of all existing facilities it uses based on the demand for these facilities attributable to the new development; exceptions may be made when new development provides alternative sources of funding or equipment to offset any shortfall in revenues.	Development of the project is responsible for the payment of development impact fees in effect at the time of building permit issuance. The project is consistent with this policy.
S-8	The City shall promote the efficient use of water and reduced water demand by: a. Requiring water-conserving design and equipment in new construction; b. Encouraging water-conserving landscaping and other conservation measures; c. Encouraging the retrofitting of existing fixtures with water-conserving fixtures;	The specific plan includes policies that require development to implement water conservation measures. The Addendum to the Miravale III Specific Plan EIR found that implementation of Mitigation Measure 4.3-3 requires the preparation of a greenhouse gas emissions reduction plan prior to _construction that outlines emissions reducing measures that will be incorporated into all development on the site. The emissions reduction plan will likely include additional water-conserving measures. Refer also to specific plan policy PSF-A and PSF-E. The project is consistent with this policy.
S-10	The City will manage the increase in water demand from new development to help insure groundwater resources are not over drafted. The City will work with Monterey County and public and private water entities to plan for the efficient, long term management of groundwater resources.	According to the City of Soledad Water Supply Assessment for specific plan, the city's available groundwater and recycled water supplies can accommodate the increase in demand generated by development within the plan area. Refer also to specific plan policy PSF-D. The project is consistent with this policy.
S-11	Gravity flow for sewer and water service shall be employed wherever feasible.	Gravity flow for sewer and water services will be employed where feasible. Final design of project infrastructure will be required prior to the recordation of the final map and will be subject to the review and approval of the Director of Public works. The project is consistent with this policy.
S-12	The City shall encourage the use of natural drainage systems where feasible to preserve and enhance natural features.	The proposed linear park follows a natural drainage and would serve as a drainage bio-swale leading to the retention basin, and will help percolate water back to the groundwater basin and filter pollutants. The project is consistent with this policy.
S-14	The City shall strive to improve the quality of urban storm water runoff and quality of groundwater recharge through the use of appropriate mitigation measures including, but not limited to, infiltration/sedimentation basins, oil/grit separators, and other management practices, including storm water retention.	Successful implementation of mitigation measures identified in the Addendum to the Miravale III Specific Plan EIR Section 3.9. Hydrology and Water Quality, will ensure that all storm water facilities and storm drain improvements are designed and constructed to meet City of Soledad and Central Coast Regional Water Quality control Board design criteria and performance standards for storm water retention and treatment, and other management practices. The project is consistent with this policy.
S-15	The City shall require new development to adequately mitigate increases in stormwater peak flows and/or volume. Mitigation measures shall take into consideration impacts on the adjoining properties and impacts on groundwater recharge related to existing and proposed water wells.	Successful implementation of mitigation measures identified in the Addendum to the Miravale III Specific Plan EIR Section 3.9 Hydrology and Water Quality, ensure that all storm water facilities and storm drain improvements are designed and constructed to meet City of Soledad and Central Coast Regional Water Quality control Board design criteria

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		and performance standards for peak flow and volume. The project is consistent with this policy.
S-16	The City shall encourage project designs that minimize drainage concentrations and impervious coverage and maintain, to the extent feasible, natural site drainage conditions. Drainage onto adjacent properties shall be restricted to pre-project levels minus any runoff from the area to be developed.	Successful implementation of mitigation measures identified in the Addendum to the Miravale III Specific Plan EIR Section 3.9 Hydrology and Water Quality, ensure that all storm water facilities and storm drain improvements are designed and constructed to meet City of Soledad and Central Coast Regional Water Quality control Board design criteria and performance standards for peak flow and volume. The project is consistent with this policy..
S-17	The City shall require projects to allocate land as necessary for the purpose of retaining flows and/or for the incorporation of mitigation measures for water quality and supply impacts related to urban runoff.	The project includes a 12.7-acre retention basing near the southwest corner of the project site. Successful implementation of mitigation measures identified in the Addendum to the Miravale III Specific Plan EIR Section 3.9 Hydrology and Water Quality, ensure that all storm water facilities and storm drain improvements are designed and constructed to meet City of Soledad and Central Coast Regional Water Quality control Board design criteria and performance standards for peak flow and volume. The project is consistent with this policy.
S-18	The City shall coordinate mitigation measures with responsible agencies (including California Regional Water Quality Control Board, Monterey County Environmental Health Department, and Monterey County Water Resources Department) for the control of storm drains, the monitoring of discharges and the implementation of measures to control pollutant loads in urban storm water runoff.	The specific plan includes requirements for the provision of storm water collection and conveyance and includes policy standards for design and performance of the storm drain and storm water facilities system, and for implementation of pre- and post-construction best management practices and low impact design to capture and retain flows on the site consistent with the requirements of the Central Coast Regional Water Quality Control Board. Successful implementation of mitigation measures identified in the Addendum to the Miravale III Specific Plan EIR Section 3.9 Hydrology and Water Quality, ensure that all storm water facilities and storm drain improvements are designed and constructed to meet City of Soledad and Central Coast Regional Water Quality Control Board design criteria and performance standards for peak flow and volume. The project is consistent with this policy. The project is consistent with this policy.
S-19	Engineered drainage plans shall be required for all development projects. Engineered drainage plans shall incorporate a collection and treatment system for stormwater runoff consistent with applicable federal and State laws.	As a standard condition of approval the project applicant will be required to submit an engineered drainage plan consistent with the City's adopted Storm-water Drainage Master Plan, and requirements of the Central Coast Regional Water Quality Control Board. The project is consistent with this policy.
S-20	The City will work cooperatively with the Soledad Unified School District to monitor housing, population and school enrollment trends and in planning for future school facility needs. The City shall assist the District in locating new school sites.	The specific plan requires that new elementary school facilities, or improvements to existing schools are in place as needed to serve each phase of development prior to occupancy. Prior to approval of the first final map, an agreement must be established between developer and/or successors in interest and the Soledad Unified School District that establishes the timing of school construction or improvements and financing obligations. The applicant and/or developer(s) will provide an offer to dedicate the

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		designated school sites to the Soledad Unified School District within 60 days of city approval and recordation of the first final map. The specific plan requires that new school facilities are located and designed in accordance with Soledad Unified School District and/or State Department of Education sitting and design criteria. Refer also to specific plan policies PSF-W and PSF-X. The project is consistent with this policy.
S-21	The siting of new schools shall be coordinated with the City's Circulation Element to ensure that traffic conflicts are avoided, the safety of students is addressed and roadway function is not reduced, including provisions for off street student drop-off/ pick up.	The two schools have been located along collector and local streets in order to provide safe student drop-off/pick up locations. All new school facilities provided in conjunction with the project would be required to adhere to this policy consistent with the general plan. Additionally, as noted in the discussion of consistency with general plan circulation element policies, all roadway infrastructure improvements will be designed and constructed in compliance with the City of Soledad design criteria and performance standards for new local, collector and arterial streets. All street and traffic facility improvement plans are subject to review and approval by the director of Public Works prior construction. Refer also to specific plan policy PSF-X. The project is consistent with this policy.
S-22	The City will work closely with the school district to secure adequate funding for new school facilities, and where legally feasible, shall provide a mechanism which requires development projects to mitigate the cost of providing school facilities needed to serve such development, consistent with relevant provisions of State law.	As identified in specific plan Section 5.3 Public Services, the project applicant/developer will be required to submit payment of a school impact fee for each type of development within the project area. Refer also to specific plan policy PSF-W. The project is consistent with this policy.
S-23	The City, to the extent feasible, shall ensure that new school facilities are constructed and operating prior to the occupation of residences which the schools are intended to serve.	The specific plan requires that the new elementary school facilities, or improvements to existing schools are in place as needed to serve each phase of development prior to occupancy. Prior to approval of the first final map, an agreement must be established between Developer and/or successors in interest and the Soledad Unified School District that establishes the timing of new school construction or improvements to existing schools and accompanying financing obligations. The project is consistent with this policy.
S-27	The City shall require that all new development complies with applicable provisions of the Monterey County Integrated Waste Management Plan.	Solid waste collection services will be provided by the Salinas Valley Solid Waste Authority. The specific plan promotes recycling of consumer and business waste to reduce landfill requirements and lengthen the service life of existing landfills. The specific plan requires development within the Plan Area to comply with Monterey County Integrated Waste Management Plan provisions. Refer also to specific plan policy PSF-V. The project is consistent with this policy.

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S-28	The City, to the extent feasible, will enforce the applicable provisions of the Monterey County Hazardous Waste Management Plan and all other applicable State, federal and local regulations dealing with the use, storage, disposal and transportation of hazardous materials.	The development must comply with the provisions of the Monterey County Hazardous Waste Management Plan and other applicable State, federal, and local regulations for any use, storage, disposal, and transportation of hazardous materials, in addition to implementing the necessary mitigation measures identified in the Addendum to the Miravale III Specific Plan EIR Section 3.8, Hazards and Hazardous Materials. The project is consistent with this policy.
S-29	The City shall strive to achieve and maintain a ratio of a minimum of 1 police officer per 1,000 residents.	The plan for services Chapter 8.0, states that the project population will require 10 officers to meet this policy; however, the city's Facilities Master Plan notes that additional facilities would be needed for additional employees and police operations. In addition to providing a site within the Plan Area for potential use as police substation and/or a fire station, police and fire services will be constructed and maintained with funding from a public safety benefit assessment district, community facilities district or similar funding mechanism identified in the comprehensive financing plan. City Council approval of the plan is required prior to approval of the first final map(s). . Additionally, all development impact fees applicable at the time of issuance of a building permit are required, but may be offset by capital improvements designed, funded, and constructed by the developer(s). Refer also to specific plan policy PSF-AA. The project is consistent with this policy.
S-30	The City shall strive to achieve and maintain emergency response time to a maximum of 5 minutes for police emergencies.	The Plan Area will include a new, centrally located substation to help serve and reduce response time to those future residents. This substation will be located approximately 1.6 miles north of the current city police station in downtown Soledad. The plan for services states that with implementation of the substation, response times would be reduced. Refer also to specific plan policy PSF-AA. The project is consistent with this policy.
S-32	The City shall require new development to pay its fair share of providing or funding facilities that, at a minimum, achieve and maintain the above police protection standards.	The developer(s) of the plan area will be required to participate in a financing district to provide funds to build, operate, and maintain a police sub-station on the dedicated site within the plan area. Additionally, all development impact fees applicable at the time of issuance of a building permit are required, but may be offset by capital improvements designed, funded, and constructed by the developer(s). As identified in specific plan Section 5.3 Public Services, the project applicant/developer will be required to submit payment of all applicable fees in order to maintain the police protection standards enumerated above. The project is consistent with this policy.
S-33	The City shall consider public safety issues in all aspects of commercial and residential project design, including crime prevention through design.	The Specific Plan promotes site planning which helps reduce crime potential through appropriate lighting, access, ease of surveillance, and other features such as alarms and security systems as may be required by the police department. Refer also to specific plan policies PSF-BB, PSF-DD, PSF-DD, and PSF-GG. The project is consistent with this policy.

General Plan Policy		Consistency
S-36	The City shall strive to achieve and maintain an emergency response time of 5 minutes or less for fire emergencies over 90% of the City.	The project contains measures to provide adequate public facilities to ensure that emergency response time are within the established target range. The project includes a site for construction of both a police and fire substation within the project area to accommodate fire prevention/protection and emergency services demand from project build-out. The specific plan includes policies for design considerations that meet fire department design criteria and performance standards for access and fire flow water supplies. Refer also to specific plan policies PSF–EE and PSF–FF. The project is consistent with this policy.
S-37	The City shall require new development to pay its fair share of providing or funding facilities that, at a minimum, achieve and maintain the fire protection standards identified in Policies S35 and S36.	The developer(s) of the plan area will be required to participate in a financing district to provide funds to build, operate, and maintain a new fire station facility within the Plan Area. Additionally, all development impact fees applicable at the time of issuance of a building permit are required, but may be offset by capital improvements designed, funded, and constructed by the developer(s). As identified in specific plan Section 5.3 Public Services, the project applicant/developer will be required to submit payment of all applicable fees in order to maintain the response time standards enumerated above. The project is consistent with this policy.
S-38	The City shall ensure that all proposed developments are reviewed for compliance with fire safety standards per the Uniform Fire Code and other City standards and ordinances.	All improvement plans will be reviewed for compliance with fire safety standards per the Uniform Fire Code and city standards. The project is consistent with this policy.
S-39	New non-residential development and non-residential additions of over 100 square feet of habitable space shall provide fire sprinklers in accordance with City standards, and as determined by the Fire Marshal. New residential development shall be provided with fire sprinklers unless the developer provides studies that prove the standard identified in Policy S35 is not negatively affected.	Development of the project site is subject to compliance with the most recent version of the Uniform Fire Code and city standards for fire sprinkler systems at the time of improvement plan submittal. The project is consistent with this policy.
S-40	The City will support efforts to expand library services within Soledad.	County library services will be provided at or near the two designated school sites and/or the commercial site within the plan area. Another potential location is to place a library within the Village Park, where it could also serve as a community center. The project is consistent with this policy.
Conservation and Open Space		
C/OS-1	The City shall discourage “leapfrog” development and development in peninsulas extending into agricultural lands to avoid adverse effects on agricultural operations.	The city’s general plan EIR found that development associated with general plan buildout would result in significant impacts to agricultural resources resulting from the conversion of land within the general plan Expansion Areas. The project site is contiguous with the north and west City of Soledad city limit. The project site does not include parcels subject to Williamson Act agricultural conservation easements. Although the project would result in

General Plan Policy		Consistency
		significant impacts to agricultural resources resulting from the loss of prime farmland on the site and the eventual right-of-way acquisition for improvements to San Vicente Road. The Addendum to Miravale III Specific Plan EIR includes mitigation that would reduce the project's impacts, but not to a less-than-significant level. However, the project would not result in impacts greater than those identified and addressed in the general plan EIR. The project is consistent with this policy.
C/OS-2	The City shall retain the agricultural land use designation on lands within its planning area until the land is needed for urban development.	The project site is currently located within the County of Monterey and is zoned for agricultural use. The subject site, however, is designated within the City of Soledad General Plan as a future expansion area to accommodate projected growth as envisioned under the 2005 General Plan. Upon annexation, the subject site would be appropriately zoned for commercial and residential uses consistent with the specific plan land use concept. The project is consistent with this policy.
C/OS-3	The City shall ensure that new development and public infrastructure projects do not encourage expansion of urban uses outside the general plan area into areas designated *Agriculture* by the Monterey County General Plan.	The project site is located within the general plan expansion area boundaries as designated in the Land Use Diagram of the General Plan. The project is consistent with this policy.
C/OS-4	The City shall support the agricultural economy by encouraging the location of agricultural support industries in the City, establishing and promoting marketing of local farm products, and providing its regional fair share of adequate housing to meet the needs of agricultural labor.	The specific plan provides 800 affordable housing units to meet south Monterey County's housing needs for the city's residents, which may include individuals in the agricultural labor industry. Additionally, at least 30 percent of medium density housing units should be available as rentals. Refer also to specific plan policy LU-C. The project is consistent with this policy.
C/OS-5	The City shall require a right-to-farm condition to all future subdivision maps adjacent to farmlands.	As identified in the Addendum to the Miravale III Specific Plan EIR Mitigation Measure 4.2-5, the project is subject to compliance with the city's right to farm policies including notification to potential buyers through recorded deed restrictions. Compliance with the city's right-to-farm policies consistent with Section 5.3 of the memorandum of understanding with Monterey County is also required as a project condition of approval. The project is consistent with this policy.
C/OS-6	The City shall require development within or adjacent to designated agricultural areas to minimize conflicts with adjacent agricultural uses.	An open space buffer, including a trail, will be constructed along the northern boundary of the plan area and San Vicente Road will provide a buffer along the western boundary of the specific plan edge to separate residences from agriculture uses. A 100-foot wide buffer is required on the northern boundary of Sub-area 13. As identified in the Addendum to the Miravale III Specific Plan EIR Mitigation Measure 4.2-5, the project is subject to compliance with the city's right to farm policies consistent with Section 5.3 of the memorandum of understanding with Monterey County. Refer also to specific plan policy P-M. The project is consistent with this policy.

General Plan Policy		Consistency
C/OS-7	The City shall require new public and private development to protect scenic resources by: a. Prohibiting structures along ridgelines, steep slopes (above the 400 foot elevation contour), or in other highly visible locations unless no practical alternative is available, or such a location is necessary to protect public health and safety; b. Utilizing natural landforms and vegetation for screening structures, access roads, building foundations, and cut and fill slopes; c. Requiring landscaping which provides a landscape transition between developed areas and adjacent open space or undeveloped areas; and is compatible with the scenic resource being protected; d. Incorporating sound Soil Conservation Service practices and minimizing land alterations. Land alterations shall be minimized by: keeping cuts and fills to a minimum; limiting grading to the smallest practical area of land; limiting land exposure to the shortest practical amount of time; replanting graded areas to insure establishment of plant cover before the next rainy season; and creating grading contours that blend with the natural contours on site or look like contours that would naturally occur; e. Designing roads, parking, and utilities to minimize visual impacts. If possible, utilities shall be underground. Roadways and parking shall fit the natural terrain; and f. Designing projects to fit the site's scale and character. Structures shall be designed and located so: they do not silhouette against ridgelines, or hilltops; roof lines and vertical architectural features blend with and do not detract from the natural background or ridge outline; residential density and massing is decreased with increased elevation where it would mar the scenic quality of the scenic resource; they fit the natural terrain, and they utilize building materials, colors, and textures that blend with the natural landscape and avoid the creation of high-contrast situations.	a. The specific plan does not include ridgeline development. Development in the Plan Area below the 400-foot elevation contour would be similar in scale and form as existing development within the city limit adjacent to the site. All development is subject to conformance with the specific plan design guidelines for each zone district. All areas above the 400 foot elevation contour are designated as open space. The specific plan includes design guidelines for low-intensity uses within the Open Space zone district that limit irrigation, pathways, signage and fencing. Unless otherwise noted in the specific plan, uses and standards for the areas zoned OS Open Space shall be as provided in Chapter 17.32 of the Soledad Zoning Code. The specific plan otherwise includes detailed design guidelines to ensure development with attractive, high quality architecture, screening methods, and landscaping. b. The specific plan includes detailed design guidelines for each zone district to ensure development with attractive, high quality architecture, screening methods, and landscaping. c. In addition to the design guidelines for each zone district, the specific plan requires buffers between adjacent open space and residential development. d. Limitations on development above the 400 foot elevation contour minimize risks associated with grading on hillside areas. Geotechnical reports are required for new development as part of the improvement plan review, prior to issuance of any grading permit. Development associated with the specific plan is subject to this requirement as a condition of specific plan approval. The Addendum to the Miravale III EIR includes mitigation measures that require compliance with recommendations contained in the geotechnical report(s) to ensure sound soil conservation practices are implemented. e. The limitations on development in highly scenic areas of the site above the 400 foot elevation contour minimize the visual impact of the project. The specific plan design guidelines encourage underground parking where feasible, requires utilities to be placed underground, requires all existing overhead utilities to be converted to underground, with the exception of existing steel tower structures and wires, and restricts the visibility of roof-mounted utility equipment. f. The limitations on development in highly scenic areas of the site above the 400 foot elevation contour minimize the visual impact of the project. The specific plan includes detailed design guidelines for each zone district to ensure development with attractive, high quality architecture, screening methods, and landscaping. Refer also to specific plan policies PSF-K, PSF-P, and PSF-Q. The project is consistent with this policy.

General Plan Policy		Consistency
C/OS-8	The City shall require public or private development to: a. The City shall designate hillside areas above the 400 foot elevation contour as *Open Space/Grazing, Public Facility* (parkland) or *Agricultur*e. b. Locate primary structures, accessory structures, paving, and grading at the base of a hill (generally that are below the 400 foot contour or 15 percent slope) unless: (1) no practicable alternative is available, (2) the location on a greater slope or at a greater elevation provides more aesthetic quality, or (3) the location is necessary to protect public health and safety. c. Utilize design, construction, and maintenance techniques that: (1) preserve and enhance the hillsides; (2) ensure that development near or on portions of a hill do not cause, or make worse natural hazards (such as erosion, sedimentation, fire, or water quality concerns); (3) include erosion and sediment control practices including temporary vegetation sufficient to stabilize disturbed areas; (4) minimize risk to life and property from slope failure, landslides, and flooding; (5) maintain the character and visual quality of the adjacent hillside. d. Incorporate recreation and public access on or near hillsides consistent with this Element.	a. Areas of the project site above the 400 foot elevation contour are identified as Hillside Open Space by the specific plan. b. The topography is comprised of a natural slope from the southwest corner of the plan area to the northeast, with steeper slopes located at the eastern boundary. The majority of the plan area ranges in elevation between approximately 180 and 600 feet above mean sea level. Mitigation Measure 4.1-7 requires the preparation and submittal of a site-specific geotechnical report for new development on hillsides in order to ensure that the development will not cause or worsen natural hazards, such as erosion and sedimentation, and will minimize risk to life and property from slope failure, landslides, and flooding. The report shall include erosion and sediment control measures, such as temporary vegetation sufficient to stabilize disturbed areas. The report is subject to review and approval by the Chief Building Official and Director of Public Works prior to issuance of a grading permit. c. Implementation of Mitigation Measure 4.1-7 ensures consistency with this policy. d. The specific plan circulation concept includes the provision of access along an existing access road above the 400 foot elevation contour and connections to adjacent neighborhoods. Refer also to specific plan policies C-A, P-A, P-F, and P-M. The project is consistent with this policy.
C/OS-9	The City shall support the preservation and enhancement of natural land forms, natural vegetation, and natural resources to the maximum extent feasible.	The project includes preservation in perpetuity of 150 acres of open space to ensure the preservation and enhancement of natural land forms. Refer also to specific plan policy LU-J. The project is consistent with this policy.
C/OS-10	The City shall support State and federal laws and policies to preserve populations of rare, threatened, and endangered species by ensuring development does not adversely affect such species in a significant way or by fully mitigating adverse effects.	The project development will be required to adhere to all applicable State and Federal requirements pertaining to biological resources within the project area. The Addendum to the Miravale III EIR includes addition mitigation measures to ensure the protection of rare, threatened, and endangered species. The project is consistent with this policy.
C/OS-11	The City shall require that significant natural, open space, and cultural resources be identified in advance of development and incorporated into site-specific development project design to the extent feasible.	The Miravale III Specific Plan EIR and its 2017 Addendum evaluated project impacts to environmental resources including aesthetic resources, parks and open space resources, cultural resources. Implementation of the mitigation measures identified in the Addendum to the Miravale III Specific Plan EIR will be required as conditions of approval and will be incorporated into the project. The project is consistent with this policy.

General Plan Policy		Consistency
C/OS-12	The City shall require developers to use native and compatible nonnative species, especially drought-tolerant species, to the extent possible in fulfilling landscaping requirements imposed as conditions of project approvals or project mitigations.	The specific plan policies call for the use of native and drought-tolerant plant species in all development landscaping. Refer also to specific plan policies P-N and PSF-E. The project is consistent with this policy.
C/OS-13	The City will encourage the improvement of air quality in Soledad and in the region by implementing the measures described in the Monterey County Air Quality Management Plan. Such measures include, but are not limited to, measures to reduce dependence on the automobile and encourage the use of alternate modes of transportation such as buses, bicycles and walking.	The specific plan policies encourage the improvement of air quality by providing easily accessible non-motorized amenities such as pedestrian and bicycle trails, bicycle lanes, and transit stops. Refer also to specific plan policies C-K, C-L, C-M, and C-N. The project is consistent with this policy.
C/OS-14	The City shall, to the extent feasible, separate sensitive land uses from significant sources of air pollution.	The Addendum to the Miravale III Specific Plan EIR evaluated the project's contributions to emissions that affect local and regional air quality and found that implementation of mitigation measures 4.3-1 – 4.3-4 mitigate the project impacts to air quality. The project is consistent with this policy.
C/OS-16	The City shall promote and encourage the use of alternate modes of transportation by incorporating public transit, bicycle, and pedestrian modes in City transportation planning and by requiring new development to provide adequate pedestrian and bikeway facilities.	The specific plan circulation concept provides transit stops, bicycle lanes, and pedestrian amenities such as separated sidewalks and trails. The project is consistent with this policy.
C/OS-17	a. When considering the approval of activities that result in the removal of mature trees, the following factors shall be considered: The size, age, health and species of tree(s) to be removed. Whether or not the removal of the tree(s) is necessary for the reasonable development and use of the site. Whether the tree(s) to be removed is (are) a native or introduced species.	The Addendum to the Miravale III Specific Plan EIR analyzed the environmental effects of tree removal necessary to accommodate the project and determined that the project's impact is less than significant. The project is consistent with this policy.
C/OS-18	The City shall institute and promote a vigorous program of tree planting in new development areas and in older portions of the City to increase the number and density of tree cover.	Final landscaping plans will be required for development within the specific plan area. As identified in the specific plan, numerous policies have been incorporated requiring the use of street trees and accent trees. Refer also to specific plan policy LU-G. The project is consistent with this policy.
C/OS-19	When mature trees are removed to accommodate new development, they shall be replaced at a ratio of at least two new trees for every one tree removed, or such additional number and size of trees as considered appropriate by the reviewing body at the time of approval of such development.	Development of the project would result in the removal of several mature trees. Mitigation Measure 4.1-9 identified in the Addendum to the Miravale III Specific Plan EIR requires the retention of mature trees to the extent feasible and requires approval of a tree replacement plan for review and approval by the Planning Director prior to issuance of grading or building permits. The project is consistent with this policy.

General Plan Policy		Consistency
C/OS-21	Landscaping plans for new development incorporate water conservation methods and shall employ native varieties of plants that are drought tolerant.	The specific plan will reduce potable water consumption throughout the specific plan area through the use of recycled water for irrigation, emphasis on drought- tolerant plant materials for landscaping, and the incorporation of state-of- the art low water/high efficiency use fixtures and appliances in all new private development and public facility construction, including schools. Refer also to specific plan policies P-N and PSF-E. The project is consistent with this policy.
C/OS-23	If development of a site uncovers cultural resources, the recommendations of Appendix K of the Guidelines for Implementation of the California Environmental Quality Act (Public Resources Code Section 15000 et seq.) shall be followed for identification, documentation, and preservation of the resource.	This policy is included as a mitigation measure required during project construction. The project is consistent with this policy.
C/OS-24	The City shall document and record data or information relevant to prehistoric and historic cultural resources which may be impacted by proposed development. The accumulation of such data shall act as a tool to assist decision-makers in determinations of the potential development effects to prehistoric and historical resources located within the City.	A single historic structure is located on the site and mitigation measures are identified in the Addendum to the Miravale III Specific Plan EIR to ensure adequate recordation of data and protection of the resource. The house will be relocated from its current location. The project is consistent with this policy.
C/OS-26	The City and County shall discourage urban uses adjacent to State-designated regional resource deposits if such uses would be incompatible with mining operations, or would restrict future extraction of significant mineral resources.	The project site is not located adjacent to State-designated regional resource deposits. The project is consistent with this policy.
Safety		
HZ-1	The City shall promote flood control measures that maintain the drainage courses in their natural conditions within the 100-year floodplain.	As reported in the Miravale III Specific Plan EIR, the project is not located in the 100-year floodplain. The specific plan provides an integrated storm drainage and open space system that incorporates best management practices to adequately control storm flooding problems, protect water quality, and provide park space. Successful implementation of mitigation measures identified in the Addendum to the Miravale III Specific Plan EIR Section 3.9. Hydrology and Water Quality, will ensure that all storm water facilities and storm drain improvements are designed and constructed to meet City of Soledad and Central Coast Regional Water Quality control Board design criteria and performance standards for retention capacity and volume. Refer also to specific plan policy LU–8The project is consistent with this policy.
HZ-2	The City shall prohibit the construction of facilities essential for emergencies and large public assembly in the 100-year floodplain, unless the structure and access to the structure are free from flood inundation.	The project site is not located within a 100-year floodplain. The project is consistent with this policy.

General Plan Policy		Consistency
HZ-3	The City shall require flood control structures, facilities, and improvements to be designed to conserve resources, incorporate and preserve scenic values, and to incorporate opportunities for recreation, where appropriate.	The project provides an integrated storm drainage and open space system that incorporates best management practices to adequately control storm flooding problems, protect water quality, and provide park space. The project is consistent with this policy.
HZ-4	The City shall manage flood prone areas consistent with the requirements of the Federal Emergency Management Agency (FEMA) and the Monterey County Water Resources Agency.	The project is not located within an area that is prone to flooding as defined by the Federal Emergency Management Agency of the Monterey County Water Resources Agency. Successful implementation of mitigation measures identified in the Addendum to the Miravale III Specific Plan EIR Section 3.9. Hydrology and Water Quality, will ensure that all storm water facilities and storm drain improvements are designed and constructed to meet City of Soledad and Central Coast Regional Water Quality control Board design criteria and performance standards for storm water volumes to minimize the potential for localized flooding. The project is consistent with this policy.
HZ-5	All new development shall satisfy the applicable requirements of the Uniform Building Code.	Compliance with the most recent version of the uniform building code is required for all development. The project is consistent with this policy.
HZ-6	The City shall require the preparation of a soils engineering and geologic-seismic analysis prior to permitting development in areas prone to geologic or seismic hazards (i.e., ground shaking, landslides, liquefaction, expansive soils).	A soils engineering and geological/seismic analysis was prepared for the project. The final-design level plans will be developed in accordance with individual project-specific geotechnical evaluations. The project is consistent with this policy.
HZ-7	The City shall limit development in areas of steep or unstable slopes to minimize hazards by landslides or liquefaction.	The specific plan designates the hillside areas above the 400 foot elevation contour as open space and will permanently preserve 150 acres of hillside open space. A soils engineering and geological/seismic analysis was prepared for the project, which did not find areas that would be prone landslides or liquefaction. The final-design level plans will be developed in accordance with individual project-specific geotechnical evaluations. The project is consistent with this policy
HZ-8	In landslide hazard areas, the City shall prohibit alteration of land in a manner that could increase the hazard, including concentration of water through drainage or irrigation systems; removal of vegetative cover; and steepening of slopes and undercutting the bases of slopes.	See above response.
HZ-9	New development shall provide fire flow, emergency access and hydrants consistent with Fire Department requirements.	All new development shall provide fire flow, emergency, access and hydrants consistent with Fire Department Requirements. Refer also to specific plan policy PSF-FF The project is consistent with this policy.
HZ-12	The City will encourage site planning which helps reduce crime potential through appropriate lighting, access, ease of surveillance, and other features such as alarms and security systems as may be required by the police department.	All new development shall help to reduce crime potential through appropriate lighting, access, ease of surveillance, and other features such as alarms and security systems as may be required by the police department. Refer also to specific plan policy PSF-GG The project is consistent with this policy.

General Plan Policy		Consistency
Noise		
N-1	The City shall not allow development of new noise-sensitive land uses where existing or ambient noise levels exceed those shown on Figure X1, as measured immediately within the property line of the new development, unless effective noise mitigation measures have been incorporated into the development design to achieve the standards set by Figure X1.	Successful implementation of the noise mitigation measures identified in the Addendum to the Miravale III Specific Plan EIR Section 3.11, Noise, will achieve standards in Table 4.10-1 of the City's Noise Element. The project is consistent with this policy.
N-2	Where nonresidential land uses are likely to generate noise levels exceeding those shown on Figure X1 on adjacent or nearby existing or planned noise-sensitive uses, the City shall require preparation of an acoustical analysis as part of the environmental review process so that noise mitigation may be included in the project design.	An acoustical analysis has been prepared by Illingworth & Rodkin, Inc. for the Miravale III project and the mitigation measures identified in their report have been incorporated into Miravale III EIR and Addendum to the Miravale III EIR. Implementation of the noise mitigation measures identified in the Addendum to the Miravale III Specific Plan EIR Section 3.11, Noise, will be required as conditions of project approval for all phases. The project is consistent with this policy.
N-3	New residential development shall comply with State Noise Insulation Standards.	Development of the project will be required to comply with all applicable State Noise Insulation Standards as part of the improvement plan and building permit application process. The project is consistent with this policy.
N-4	New commercial and industrial development shall incorporate design elements to minimize the noise impact when residential neighborhoods are nearby.	The specific plan includes design guidelines for the Village Commercial district and Mixed Use Opportunity Overlay to minimize noise impacts. The project is consistent with this policy.
N-5	Where noise mitigation measures are required to achieve the standards described in Figure X2, the emphasis of such measures shall be placed on site planning and project design. The use of noise barriers shall be considered as a means of achieving the noise standards only after all other practical design-related mitigation measures have been integrated into the project.	Successful implementation of the noise mitigation measures identified in the Addendum to the Miravale III Specific Plan EIR Section 3.11, Noise, will ensure project-related noise impacts are reduced to the extent feasible. While some noise sensitive land uses would be exposed to noise in excess of applicable standards, mitigation measures emphasize site planning and project design principles, including the use of building materials to minimize noise related impacts. The project is consistent with this policy.

SOURCE: City of Soledad 2005 General Plan, EMC Planning Group 2017

APPENDIX D

2017 TRAFFIC REPORT AND SUPPLEMENTAL LETTER
2018 SUPPLEMENTAL EVALUATION

Keith Higgins
Traffic Engineer

MIRAMONTE SPECIFIC PLAN
TRAFFIC IMPACT ANALYSIS

ADMINISTRATIVE DRAFT REPORT

SOLEDAD, CALIFORNIA

Prepared for
EMC PLANNING GROUP

Prepared by
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August 11, 2017

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1. INTRODUCTION

This report is an update of "Miravale Phase III Mixed-Use Development Transportation Impact Analysis," prepared for the City of Soledad by Hexagon Transportation Consultants, May 4, 2007, herein after referred to as the "2007 TIA". The project site is located in the northern outskirts of the city generally between San Vicente Road and Orchard Lane. The currently proposed project is substantially smaller in land area and amount of development. The previous proposal, entitled "Miravale III", included 1,470 single-family homes, 2,430 multi-family units, 300 senior housing units, 120 hotel rooms, and 275,000 square feet of supporting retail. A golf course, schools, and parks were also a part of the 920-acre project. The current project will consist of 1,522 single-family homes, 338 multi-family units, 132 senior housing units, 400 farmer's community units, no hotel, and 99,000 square feet of supporting retail. Parks, will also be part of the current 634-acre site.

Access to the site will be provided via extensions of San Vicente Road, West Street, and Orchard Lane, which is unchanged from the previous proposal. Long term future access also will be provided via planned roadways to Camphora/Gloria Road when other development is completed several decades from now. The roadways are illustrated conceptually on Figure V-2 and long term future development areas are illustrated on Figure II-9 of the 2005 Soledad General Plan, which are included herein as **Appendix A**.

The City of Soledad certified an Environmental Impact Report (EIR) for the previous project, but the project was not approved The current reduced project, which is about 60% of the size of the previous proposal, will clearly have correspondingly less impacts. In addition, as will be discussed in detail in the following sections the Background and Cumulative development conditions will be essentially the same as those analyzed in the previous Traffic Impact Analysis (TIA). It is therefore appropriate to simply update the previous report and excerpt the sections that still apply. This report uses the format of the previous report and updates existing conditions from 2007 to 2017, adjusts the project trip generation, distribution and assignment, verifies Background and Cumulative conditions and extends the Year 2030 analysis to the Year 2035. The impacts of the project were evaluated following the standards and methodologies set forth by the City of Soledad.

The traffic analysis also includes an evaluation of peak-hour signal warrants and roadway and freeway level of service analysis. This traffic analysis is based on PM peak-hour levels of service. The AM peak hour is not analyzed because the previous study documented that the PM peak hour was the higher volume, controlling condition. In other words, no future impacts will be experienced during the AM peak hour that are not also experienced during the PM peak hour.

1.1. Scope of Study

The project site and the surrounding study area are shown on **Figure 1**. The project site plan is shown on **Figure 2**. The study facilities are identified below:

Study Intersections

1 Moranda Road and US 101 Northbound Ramps

2 Moranda Road and Front Street

3 San Vicente Road and Front Street

4 West Street and Front Street

5 Main Street and Front Street

6 East Street and Front Street

7 Front Street and Nestles Road

8 Front Street and US 101 Northbound Ramps

9 Front Street and US 101 Southbound Ramps

10 Front Street and Morisoli Road

11 San Vicente Road and Market Street

12 West Street and Market Street

13 Main Street and Market Street

14 East Street and Market Street

15 East Street and Metz Road

16 San Vicente Road and Gabilan Drive

17 West Street and Gabilan Drive

18 Main Street and Gabilan Drive

19 Andalucia Drive and Gabilan Drive

Roadway Segments

1 Front Street, between Front Street and San Vicente Road

2 Front Street, between San Vicente Road and West Street

3 Front Street, between West Street and Main Street

4 Front Street, between Main Street and East Street

5 Front Street, between East Street and Front Street

6 Gabilan Drive, between San Vicente Road and West Street

7 Gabilan Drive, between West Street and Andalucia Drive

8 San Vicente Road, between Market Street and Gabilan Drive

9 San Vicente Road, North of Gabilan Drive

10 West Street, between Market Street and Gabilan Drive

11 West Street, North of Gabilan Drive

Freeway Segments

1 US 101 between North Gonzalez and 5th Street

2 US 101 between 5th Street and Gloria Road

3 US 101 between Gloria Road and Soledad Prison

4 US 101 between Soledad Prison and Camphora

5 US 101 between Camphora and North Soledad

6 US 101 between North Soledad and South Soledad

7 US 101 between South Soledad and Arroyo Seco Road

8 US 101 between Arroyo Seco Road and North Greenfield

9 US 101 between North Greenfield and Walnut Avenue

10 US 101 between Walnut Avenue and Oak Avenue

11 US 101 between Oak Avenue and South Greenfield

In summary, the study includes an analysis of 19 intersections, 11 roadway segments, and 11 freeway segments in the vicinity of the project site. Traffic conditions at the intersections were analyzed for the weekday PM peak hour of traffic. The PM peak hour is typically between 4:00 and 6:00 PM. It is during this period that the most congested traffic conditions occur on an average day.

Traffic conditions were evaluated for the following scenarios:

Scenario 1: Existing Conditions. Existing conditions were represented by existing peak-hour traffic volumes on the existing roadway network. Existing traffic volumes were obtained from recent (May 2017 and June 2013) traffic counts. Existing counts were compared with 2006 counts and the Background scenario traffic volumes forecasted in the 2007 TIA. Traffic volumes have increased City-wide by about 24.3% since 2006.

Scenario 2: Background Conditions. Background conditions were represented by future background traffic volumes on the near-term roadway network. Background traffic volumes were estimated by adding to existing peak-hour volumes the projected volumes from approved but not yet completed developments. The latter component was developed based on a list of approved projects provided by the City of Soledad.

Scenario 3: Background With Project Conditions. Background With Project conditions were represented by future traffic volumes, with the project, on the near-term future roadway network. Future traffic volumes with the project (hereafter called project traffic volumes) were estimated by adding to background traffic volumes the additional traffic generated by the project. Background With Project conditions were evaluated relative to background conditions with improvements in order to determine potential project impacts.

Scenario 4: Cumulative Growth No Project Conditions. Traffic volumes for cumulative conditions without the project were estimated by adding traffic associated with pending developments in the City of Soledad to background traffic volumes. The analysis of cumulative growth conditions was conducted at the request of the City of Soledad.

Scenario 5: Cumulative Growth With Project Conditions. Cumulative traffic volumes with the project were estimated by adding to cumulative no project traffic volumes the additional traffic generated by the project.

Scenario 6: Year 2035 traffic volumes on the Soledad street system are assumed to be equal with the 2030 forecasts in the 2007 TIA. This is valid because development is occurring at a much slower rate than anticipated in 2007.

US 101 volumes were developed by adding five years of straight line growth of 1% per year (5% total) in through traffic volumes on US 101 to recent 2030 forecasts for interchange planning. This growth rate is greater than the approximately 0.3% per year that occurred between 2005 and 2015, according to Caltrans traffic counts.

1.2. Methodology

This section presents the methods used to determine the traffic conditions for each scenario described above. It includes descriptions of the data requirements, the analysis methodologies, and the applicable level of service standards.

Data Requirements

The data required for the analysis were obtained from new traffic counts and field observations. The following data were collected from these sources:

• existing traffic volumes

• lane configurations

• roadway widths

• intersection control

Analysis Methodologies and Level of Service Standards

Traffic conditions at the study intersections were evaluated using level of service (LOS). Level of Service is a qualitative description of operating conditions ranging from LOS A, or free-flow conditions with little or no delay, to LOS F, or jammed conditions with excessive delays. The various analysis methods are described below.

Unsignalized Intersections

The study intersections are analyzed by interpolating the levels of service estimated in the 2007 TIA (which used the TRAFFIX level of service software, which uses the Highway Capacity Manual (HCM) 2000 methodology for unsignalized intersections). A description of unsignalized levels of service is included in **Table 1**.

Signal Warrant

Unsignalized intersections are also assessed for the need of signalization. This assessment is made on the basis of the Peak-hour Volume Signal Warrant, Warrant #11, described in the Caltrans Traffic Manual. This method makes no evaluation of intersection level of service, but simply provides an indication whether peak-hour traffic volumes are, or would be, sufficient to justify installation of a traffic signal.

Signalized Intersections

When it was found that study intersections meet signal warrants and/or require signalization based on level of service analysis, the intersections were analyzed in the 2007 TIA with standard signalized intersection methodology. The levels of service in the current study were prorated where appropriate based on current volumes and forecasts. The intersections were analyzed in the 2007 TIA using TRAFFIX, which is based on the Highway Capacity Manual (HCM) 2000 method for signalized intersections. TRAFFIX evaluates signalized intersection operations on the basis of average control delay time

for all vehicles at the intersection. The correlation between average control delay for signalized intersections and level of service is shown in **Table 2**.

1.3. Freeway Segment Analysis

Freeway segments that serve the Soledad area were also analyzed as part of the study. Similar to the selected study intersections, freeway segments were analyzed for the weekday AM and PM peak hours of traffic.

Freeway Segment Level of Service Methodology

Standard methodology for the analysis of freeway segments consists of the evaluation of the segments based on the density method. The density method requires measurement of vehicle travel speeds on the freeway segments. Unfortunately, the use of vehicle density does not lend itself well to the calculation of future levels of service for freeway segments. It is not possible to project the future travel speeds on the segments, due to changes in traffic conditions. Therefore, levels of service for freeway segments were calculated based on a volume-to-capacity ratio (V/C). The V/C method is simpler and does not use travel speed as a variable in its calculation. Freeway segment level of service based on V/C is shown in **Table 3**. Caltrans level of service standard for freeway segments is LOS C.

1.4. Report Organization

The remainder of this report is divided into six chapters, following the format of the 2007 TIA. Chapter 2 describes existing conditions in terms of the existing roadway network, transit service, and existing bicycle and pedestrian facilities. Chapter 3 presents the intersection operations under background conditions. Chapter 4 describes the method used to estimate project traffic and its impact on the transportation system and describes the recommended mitigation measures. Chapter 5 discusses the traffic conditions resulting from additional cumulative growth. Chapter 6 presents the long-term Year 2035 analysis. Chapter 7 presents the conclusions of the traffic impact analysis.

2. EXISTING CONDITIONS

This chapter describes the existing conditions for all of the major transportation facilities in the vicinity of the site, including the roadway network, and bicycle and pedestrian facilities.

2.1 Existing Roadway Network

Regional access to the project site is provided solely via US 101. This facility is described below.

US 101 is a four-lane freeway within the City of Soledad. It extends north through Salinas and south through King City. Access to the site is provided via its interchanges with Moranda Road and Front Street within the City of Soledad.

Local access to the site is provided by Moranda Road, Front Street, San Vicente Road, West Street, Orchard Lane, and Gabilan Drive. These roadways are described below.

Moranda Road is a north/south roadway that runs from Front Street to US 101. Moranda Road serves as the access road to and from the US 101 northbound ramps in the northern part of the city. The roadway is one lane in each direction with a 35-mph speed limit.

Front Street is an arterial that runs parallel to and along the eastside of US 101 and the Union Pacific Railroad tracks, between Moranda Road and Oak Street. South of the Oak Street, Front Street crosses under the tracks and terminates at the US 101 northbound off ramp at Hector De La Rosa Sr. Street. The roadway varies in width between its north and south termination points at US 101. Between the US 101 northbound off-ramps in the southern part of Soledad and West Street, Front Street is two lanes wide. Between West Street and Moranda Road, the roadway widens to four lanes prior to narrowing once again to two lanes at its intersection with Moranda Road. The roadway has a 25-mph speed limit through downtown and increases to 35-mph north and south of downtown.

San Vicente Road is a north/south collector roadway that extends north from Front Street to the project boundary. The roadway is one lane in each direction with a 25-mph speed limit. The project includes the extension of San Vicente Road into the site providing direct access to the project area from northern Soledad. The extension is illustrated on the site plan included as **Figure 2**. A brief discussion of this extension is provided in Section 4.4 - Project Roadway Segment Analysis.

West Street is a north/south collector roadway that runs from Front Street to the project boundary and will extend from the project boundary to Metz Road in the future, as part of the Miravale II development. The roadway is four lanes wide with speed limit ranging from 25 to 35 mph. The roadway is lined by residential uses. The project includes the extension

of West Street into the site providing direct access to the project area from central Soledad.

Orchard Lane is a north/south roadway that runs from Gabilan Drive to the project boundary. As part of the Miravale Phase II development, Orchard lane will be extended from the project boundary to Metz Road. The roadway is one lane in each direction with a 25-mph speed limit. The roadway is lined by residential uses. The project includes the extension of Orchard Lane into the site providing direct access to the project area from southern Soledad.

Gabilan Drive is an east/west arterial roadway that extends from Orchard lane to San Vicente Road. The roadway is four lanes wide with a 25 mph speed limit between San Vicente Road and Prado Drive. Gabilan Drive narrows to one lane in each direction from Toledo Street to its terminus as a cul-de-sac just west of Bryant Canyon Road.

2.2 Existing Bicycle, Pedestrian and Transit Facilities

Bike lanes are provided along Front Street between East Street and Nestles Road and along Gabilan Drive from San Vicente Road to West Street and from Toledo Street to Orchard Lane; and along Orchard Lane from the projects south boundary to Gabilan Drive with future extension of Orchard Lane to Metz Road.

Pedestrian facilities in the study area consist primarily of sidewalks and crosswalks at intersections. Sidewalks are found along all previously described local roadways in the study area and along the local residential streets and collectors surrounding the study area.

Monterey Salinas Transit serves the City of Soledad with Lines 23, 82, 84 and 86. They all stop at the Soledad Mission Shopping Center and along Front Street between the north and south US 101 interchanges.

2.3 Existing Intersection Lane Configurations

The existing lane configurations at the study intersections were obtained by observations in the field. The existing intersection lane configurations are shown on **Figure 3**.

2.4 Existing Traffic Volumes

The existing peak-hour intersection volumes are shown on **Figure 4**. The traffic count data are included in **Appendix B**. A tabular summary of existing (2013 and 2017) PM peak hour volumes at the study intersections is included in **Appendix C**. The 2013/2017 volumes are compared to the 2006 volumes in **Appendix D**. Traffic volumes have increased City-wide by about 24.3% since 2006. This is an annual straight-line growth rate of about 2.2%. Some difference could also be seasonal because the 2006 counts

were conducted in July, when agricultural operations are at capacity, but school was not in session. The 2017 counts were conducted in May when agricultural operations are in full production and school was in session. **Appendix E** provides a comparison of 2017 volumes to the Background volumes forecasted in 2006. The 2007 Background volumes are about 18.4% higher than the 2017 volumes. The 2006 PM peak hour counts totaled 13,683, the 2017 counts totaled 17,011 and the 2007 Background forecast totaled 20,137. The 2017 counts were about 52% of the anticipated increase from the 2006 to the Background volumes.

2.5 Existing Intersection Analysis

The results of the level of service analysis under existing conditions are summarized in **Table 4**. The results show that, measured against the City of Soledad level of service standards, all study intersections currently operate at an acceptable LOS D or better. The following four intersections are currently signalized. These were not signalized in 2007.

3 San Vicente Road and Front Street

7 Front Street and Nestles Road

8 Front Street and US 101 NB Ramps

17 West Street and Gabilan Drive

Peak-hour signal warrant checks were completed for all study intersections to determine whether signalization would be justified on the basis peak-hour volumes. A summary of the signal warrant checks is shown in **Table 5**. The analysis showed that the Caltrans peak-hour volume warrant is met during the PM peak hour at the following intersections under existing conditions:

2 Moranda Road and Front Street

6 East Street and Front Street

Both of these intersections met peak hour signal warrants in 2007.

2.6 Existing Roadway Segment Analysis

Daily roadway segment volumes on all major roadways serving the selected study intersections were estimated from the PM peak hour turning movements counts (assuming the PM peak hour volumes are 10% of the daily volumes) and are shown in **Figure 5.** The PM peak hour segment volumes were derived from the PM peak hour turning movement counts and used to evaluate roadway segment operations. Since there are no evaluation criteria for roadway segments, the roadway segment analysis is presented for informative purposes only. The roadway segment analysis indicates that all

studied roadway segments continue to operate at LOS A. **Table 6** presents the roadway segment analysis.

2.7 Existing Freeway Segment Analysis

Traffic volumes for the studied freeway segments were obtained from 2015 data collected by the Traffic and Vehicle Data Systems Unit for Caltrans District 5. The collected data provides average annual daily and peak hour volumes along each freeway segment for both directions of travel. Peak hour splits for each segment were developed using directional peak-hour volume data collected by Caltrans. The directional peak hour volume provides a percentage of total peak hour traffic by direction. The freeway segment analysis indicates that all freeway segments analyzed continue to operate at LOS C or better. Freeway segment analysis is presented in **Table 7**.

2.8 Existing Freeway Ramp Analysis

Traffic volumes for the studied freeway ramps were obtained from the traffic counts collected at each of the interchange intersections. The collected counts were compared to historical Caltrans ramp counts and found to be greater than Caltrans counts. The freeway ramp analysis indicates that all freeway ramps analyzed currently operate at LOS B or better. Freeway ramp analysis is presented in **Table 8**. Though the levels of service analyses do not indicate deficient operations on the ramps based on the ramps' capacities, there are existing operational deficiencies due to inadequate ramp configurations to serve existing traffic volumes. The ramps at both the Moranda Road and Front Street interchanges with US 101 were constructed years ago and not designed to accommodate existing traffic volumes. The existing ramp alignments are inadequate to feed the large ramp volumes onto the mainline that also has seen increased volumes.

3. BACKGROUND CONDITIONS

This chapter describes background traffic conditions. Background conditions are defined as conditions just prior to completion of the proposed development. Traffic volumes for background conditions comprise volumes from existing traffic counts plus traffic generated by other approved developments in the vicinity of the site. This chapter describes the procedure used to determine background traffic volumes and the resulting traffic conditions.

3.1 Background Transportation Network

It is assumed in this analysis that the transportation network under background conditions would be the same as the existing transportation network.

Background Traffic Volumes

Background peak-hour traffic volumes were estimated by adding to existing volumes the estimated traffic from approved, but not yet constructed, developments. In 2007, City staff provided a list of five approved developments within the City of Soledad.

• Miravale II – 453 single-family homes and 323 Townhomes/Apartments, the site will be bound by Bryant Canyon Road, Orchard Lane, Santa Clara Street and Metz Road.

• Orchard Villas – 172 single-family homes, located along the west side of Orchard Lane north of Metz Road.

These two projects had a combined total of about 948 dwelling units. There are currently about 250 dwelling units remaining to be built in these two projects.

The following three projects have been built and occupied since 2007:

• Gabilan Square – 9,960 square feet of commercial space and 183 Townhomes/Apartments, located south of Gabilan Drive at Orchard Lane.

• Monterey Street Public Housing Facility – 52 multi-family units, located along the north side of Monterey Street between First and Second Streets.

• Benito Street Public Housing – 143 units, located between West and Benito Streets, and Gabilan and North Street.

Several new projects, including AutoZone, ARCO Gas Station and Los Coches Mini Storage were approved but not complete at the time of traffic counts for the current study. These impact the vicinity of the US 101 / South Front Street interchange. The traffic

generated by those projects was added to estimate Background conditions in that part of the study area.

It is interesting to note that the increase in traffic between the 2007 TIA and 2017 is about 52% of the anticipated increase between the 2017 TIA existing and Background volumes. This implies that 52% of the 2007 Background trips have been added to the street system. Assuming no more development than the current Background projects the remaining 48% should represent the remaining Background project trip generation. It happens to be almost identical to this estimate.

The added traffic associated with the approved projects was developed based on trip generation estimates and assignments produced in the 2007 TIA. The magnitude of traffic added to the roadway system by each of the approved developments is estimated by multiplying the applicable trip generation rates to the size of the development. The trip generation rates published in the Institute of Transportation Engineers (ITE) manual entitled Trip Generation, ninth edition, 2012, were used for this analysis. On the basis of these rates, it is estimated that the approved projects would generate a combined total of 4,847 daily trips, with 463 occurring during the PM peak hour. The type of land use, size, and trip estimates of each approved development is presented in **Table 9**. Background traffic volumes are shown on **Figure 6**. **Appendix F** indicates that Background traffic volumes resulting from currently approved development traffic added to 2017 volumes are about 8.5% higher than those predicted in the 2007 TIA.

3.2 Background Intersection Levels of Service

The results of the intersection level of service analysis under background conditions are summarized in **Table 10**. The results show that, measured against the City of Soledad level of service standards, two of the study intersections are projected to operate at an unacceptable LOS E or worse during at least one peak hour under background conditions.

2 Moranda Road and Front Street

6 East Street and Front Street

Peak-hour signal warrant checks were completed for all study intersections to determine whether signalization would be justified on the basis of background peak-hour volumes. A summary of the signal warrant checks is shown in **Table 11**. The analysis showed that the Caltrans peak-hour volume warrant is projected to be met during at least one peak hour at the following three intersections under Background conditions:

2 Moranda Road and Front Street

6 East Street and Front Street

15 East Street and North Street/Metz Road

3.3 Background Conditions Necessary Improvements

Based on the results of the background conditions level of service analysis and signal warrant checks, necessary improvements to support approved project traffic volumes were determined for the study intersections projected to operate at LOS D or worse and/or meet signal warrants. The resulting background with improvement conditions will serve as a basis from which to determine impacts attributable to the Miramonte development. Without the improvements in place, level of service conditions with the Miramonte development will not accurately reflect impacts due to project traffic, but rather show problem areas under background conditions compounded by the Miramonte project. Described below and presented in **Figure 7** are the necessary improvements to improve background conditions levels of service to acceptable levels.

(2) Moranda Road and Front Street

Necessary Improvements: The intersection is projected to operate at LOS F during the PM peak hour and meet signal warrants under background conditions. The necessary improvements consist of the signalization of the intersection with protected left-turn phasing on Front Street and the addition of a second eastbound right-turn lane. Intersection operation levels would improve to LOS C with implementation of these improvements.

(6) East Street and Front Street

Necessary Improvements: The intersection is projected to operate at LOS F during the PM peak hour and meet signal warrants under background conditions. The necessary improvements consist of the signalization of the intersection with protected left-turn phasing on Front Street and the addition of a second southbound left-turn lane and exclusive westbound right-turn lane. Intersection operation levels would improve to LOS C with implementation of these improvements.

(15) East Street and North Street/Metz Road

Necessary Improvements: The intersection is projected to meet signal warrants under background conditions. The necessary improvements consist of the signalization of the intersection with protected left-turn phasing on Metz Road.

Intersections 3 (San Vicente Road and Front Street) and 7 (Front Street and Nestles Road) were expected to be deficient in the 2007 TIA. They are no longer deficient

because the mitigation, traffic signalization has already been implemented at those locations.

3.4 Background Roadway Segment Analysis

Traffic volumes for background conditions on each of the studied roadway segments were developed by adding to existing volumes the trips associated with each of the approved developments. The approved project trips were assigned to the roadway system in the same manner as with intersections. The roadway segment analysis indicates that all studied roadway segments are projected to continue to operate at LOS B or better during both peak hours under background conditions. **Table 12** presents the roadway segment analysis.

3.5 Background Freeway Segment Analysis

Traffic volumes for background conditions on each of the studied freeway segments were developed by adding to existing volumes the trips associated with each of the approved developments. The approved project trips were assigned to the freeway system in the same manner as with intersections. The freeway segment analysis indicates that all freeway segments analyzed are projected to operate at LOS C or better under background conditions. Freeway segment analysis is presented in **Table 13**.

3.6 Background Freeway Ramp Analysis

Traffic volumes for background conditions on each of the studied freeway ramps were developed by adding to existing volumes the trips associated with each of the approved developments. The approved project trips were assigned to the freeway ramps in the same manner as with intersections. The freeway ramp analysis indicates that all freeway ramps analyzed are projected to operate at LOS C or better under background conditions. Freeway ramp analysis is presented in **Table 14.**

As stated under existing conditions, the existing ramp configurations are inadequate to serve existing traffic volumes. The ramps at both the Moranda Road and Front Street interchanges with US 101 were constructed years ago and not designed to accommodate existing traffic volumes. The existing ramp alignments are inadequate to feed the large ramp volumes onto the mainline that also has seen increased volumes. The traffic associated with the approved projects will worsen conditions on each of the ramps.

4. PROJECT IMPACTS AND MITIGATION MEASURES

This chapter describes project traffic conditions, significant project impacts, and measures that are recommended to mitigate project impacts. Included are descriptions of the significance criteria that define an impact, estimates of project-generated traffic, identification of the impacts, and descriptions of the mitigation measures. Project conditions are represented by background traffic conditions with the addition of traffic generated by the project.

4.1 Significant Impact Criteria

Significance criteria are used to establish what constitutes an impact. The impact criteria are based on the City of Soledad level of service standards. The project is said to create a significant adverse impact on traffic conditions at an intersection if for either peak hour:

• The level of service at the intersection degrades from an acceptable LOS D or better under background conditions to an unacceptable LOS E or worse under project conditions.

A significant intersection impact is said to be satisfactorily mitigated when measures are implemented that would restore intersection level of service to LOS D conditions or better.

Future Roadway Network Under Project Conditions

It is assumed in this analysis that the roadway network and intersection configurations under project conditions would be the same as described under background with improvements conditions.

4.2 Project Trip Estimates

The magnitude of traffic produced by a new development and the locations where that traffic would appear are estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In determining project trip generation, the magnitude of traffic entering and exiting the site is estimated for the AM and PM peak hours. As part of the project trip distribution, an estimate is made of the directions to and from which the project trips would travel. In the project trip assignment, the project trips are assigned to specific streets and intersections. These procedures are described further in the following sections.

Trip Generation

Through empirical research, data have been collected that correlate to common land uses their propensity for producing traffic. Thus, for the most common land uses there are standard trip generation rates that can be applied to help predict the future traffic increases that would result from a new development. The magnitude of traffic added to

the roadway system by a particular development is estimated by multiplying the applicable trip generation rates to the size of the development. The trip generation rates published in the Institute of Transportation Engineers (ITE) manual entitled Trip Generation, 9th edition, 2012, were used for this analysis. On the basis of these rates, it is estimated that the project would generate 18,549 daily trips, with 1,912 occurring during the PM peak hour. Using the specified inbound/outbound splits, the project would produce 1,187 inbound and 725 outbound trips during the PM peak hour.

The trip generation estimates do not include estimates for the proposed schools and other types of complimentary land uses. Therefore, it is assumed that trips to the schools and parks, would originate from within the project area and the proposed residential units.

Similarly, the trip estimates for residential land uses of the project were reduced to account for internalization, or interaction, between the retail and residential land uses. The project is proposing a total of 99,000 square feet of retail space. The retail space will be located centrally within the project area and proposed residential units. The retail land uses are intended to be neighborhood serving retail, not major retail establishments. As such, it is assumed that the majority of trips generated by the retail space will originate from within the project area. The residential uses of the project were reduced by a magnitude equal to 90% of the estimated trips for the retail space. Nearly all trips to the retail area would originate from surrounding neighborhoods within the project area. The project trip generation estimates are presented in **Table 15**. The currently proposed project is expected to generate about 52% of the anticipated daily trips and 59% of the anticipated PM peak hour trips from Miravale III (a net total of 35,504 daily trips with 2,036 during the evening peak hour).

Trip Distribution

The trip distribution pattern for the proposed project was estimated based on existing travel patterns in the area and the locations of complementary land uses. Two separate trip distributions were used for the residential and non-residential land uses of the site. Generally, the non-residential trip distribution contains trips produced by the project within city limits. On the other hand, it is expected that the majority of residential trips will leave city limits for employment zones north and south of Soledad. The trip distribution patterns for each land use type are shown graphically on **Figure 8**. These are identical to the distribution and assignment percentages of Miravale III. The PM peak hour Miramonte impacts at each location in the study area is about 59% of the Miravale III impacts.

Trip Assignment

The peak-hour trips generated by the proposed development were assigned to the roadway system in accordance with the trip distribution pattern discussed above. **Figure 9** shows the project trip assignment.

Project Traffic Volumes

Project trips, as represented in the above project trip assignment, were added to background traffic volumes to obtain background plus project traffic volumes. Background traffic volumes plus project trips are typically referred to simply as project traffic volumes; this is contrasted with the term project trips, which is used to signify the traffic that is produced specifically by the project. The project traffic volumes are shown graphically on **Figure 10**. A comparison of Background plus Project traffic in 2017 with the forecast in the 2007 TIA at the study intersections is tabulated on **Appendix G**. The current forecasts are about 11.8% less than the 2007 TIA forecasts for the entire network compared to the 2007 TIA Background Plus Project scenario, even though the project's impacts are 41% less. This is because Background traffic volumes will be 8.5% higher than the 2007 TIA forecast.

4.3 Project Intersection Level of Service Analysis

The results of the intersection level of service analysis under project conditions are summarized in **Table 16**. This table indicates that the Background plus Project scenario traffic volumes will generally be lower than the same scenario with the larger Miravale III project in the 2007 TIA. Nevertheless, the results show that eight of the study intersections would operate at an unacceptable LOS E or worse under project conditions:

1 Moranda Road and US 101 Northbound Ramps

2 Moranda Road and Front Street

3 San Vicente Road and Front Street

4 West Street and Front Street

9 Front Street and US 101 Southbound Ramps

11 San Vicente Road and Market Street

14 East Street and Market Street

16 San Vicente Road and Gabilan Drive

Each of these intersections would be impacted by the project, according to City of Soledad standards. The remaining 11 intersections would continue to operate at acceptable levels of service.

The peak-hour signal warrants were checked for the existing unsignalized intersections to determine whether signalization would be justified on the basis peak-hour volumes. A summary of the signal warrant checks is shown in **Table 17**. The analysis showed that the Caltrans peak-hour volume warrant would be satisfied at ten intersections under project conditions. As indicated in the comparison columns in Table 17, these were all identified to warrant signals in the 2007 TIA.

2 Moranda Road and Front Street

4 West Street and Front Street

5 Main Street and Front Street

6 East Street and Front Street

12 West Street and Market Street

14 East Street and Market Street

15 East Street and North Street/Metz Road

16 San Vicente Road and Gabilan Drive

18 Main Street and Gabilan Drive

19 Andalucia Drive and Gabilan Drive

4.4 Project Roadway Segment Analysis

Traffic volumes for project conditions on each of the studied roadway segments were developed by adding to background condition volumes the project trips. The project trips were assigned to the roadway system in the same manner as with intersections. The roadway segment analysis indicates that the addition of project traffic will cause the following roadway segment to operate at LOS E under project conditions. This impact will be slightly less than the LOS F identified in the 2007 TIA, but the impact is not reduced to a level of insignificance.

Front Street, between East Street and Nestles Road

Table 18 presents the roadway segment analysis. The degradation of roadway segment levels of service indicates the need for roadway widening. Since there are no evaluation criteria for roadway segments, the roadway segment analysis is presented for informative purposes only. All other studied roadway segments will operate at LOS C or better conditions.

The City desires the San Vicente Road extension along the westerly boundary of the project site. This extension will operate at an acceptable LOS A, as summarized on Table 18.

The San Vicente Road extension along the west side of the project that includes the "S" curve is outside the City limits and is located outside the Miramonte property. Implementing improvements along this extension is likely to be a long process involving other property owners and the County of Monterey. The project will be developed in phases over many years with access initially provided by extensions of West Street and Orchard Lane into the site. In order for impacts on West Street and Orchard Lane to not exceed the ultimate impacts from the buildout of Miramonte, it is estimated that 78% of Miramonte can be developed before San Vicente begins carrying project traffic and "off-loading" West Street and Orchard Lane. This is because the San Vicente Road extension is estimated to carry 22% of project traffic at project buildout.

There is an existing 40 foot right of way for the San Vicente Road extension that follows the existing City limits in the southwest corner of the project. This includes two right angle turns. To approximate the capacity of this alignment each right angle can be considered an intersection. Appendix H includes a level of service calculation indicating that each right angle turn would operate at LOS A, with about 9.3 seconds of average delay. Because there are two curves, the total delay would be more in the order of 18 seconds. Although the overall level of service would be acceptable, it will be circuitous and slow. This will be a disincentive to use the San Vicente Road extension, which is an important access route for the project, especially to reduce project traffic on West Street and Orchard Lane. However, it can operate satisfactorily with appropriate signing and traffic control.

The "S" curve illustrated on the proposed Specific Plan in Figure 2 would reduce travel time along the San Vicente Road extension and is recommended as its preferred alignment. It would have 300-foot radius curves and can be designed to accommodate a speed of about 30 miles per hour. This curve would operate satisfactorily with proper curve warning and advisory speed signing.

4.5 Project Freeway Segment Analysis

Traffic volumes for project conditions on each of the studied freeway segments were developed by adding to background condition volumes the project trips. The project trips were assigned to the freeway system in the same manner as with intersections. The freeway segment analysis indicates that all freeway segments analyzed are projected to operate at LOS C or better under project conditions. This is an improvement from the anticipated LOS D in the 2007 TIA. The freeway segment analysis is summarized in **Table 19**.

4.6 Project Freeway Ramp Analysis

Traffic volumes for project conditions on each of the studied freeway ramps were developed by adding to background condition volumes the project trips. The project trips were assigned to the freeway ramps in the same manner as with intersections. Freeway ramp analysis is presented in **Table 20**. The freeway ramp analysis indicates that one of the studied freeway ramps is projected to operate at LOS E under project conditions. This is an improvement from the anticipated LOS F in the 2007 TIA.

Moranda Road Interchange – Southbound US 101 off-ramp to Moranda Road (PM Peak Hour)

Because the complementary volume in the AM peak hour will be similar on the complementary ramp, the following ramp will also operate at LOS E.

Moranda Road Interchange – Northbound US 101 on-ramp from Moranda Road (AM Peak Hour)

As stated under existing conditions, the existing ramp configurations are inadequate to serve existing traffic volumes. The ramps at both the Moranda Road and Front Street interchanges with US 101 were constructed years ago and marginally accommodate existing traffic volumes. The project traffic will worsen conditions on each of the ramps.

4.7 Intersection Impacts and Mitigation Measures

Described below are the intersection impacts and recommended mitigation measures. **Table 21** shows the resulting levels of service for project conditions with the recommended mitigation measures. **Figure 11** indicates resulting lane configurations at each of the mitigated intersections. Although the current Miramonte project is smaller than the previous Miravale III, there is no reduction in the number of impacted intersections or their respective mitigations. The only exception is intersection 17, the Gabilan Drive /West Street intersection, where a signal has already been installed.

Several of the identified impacts involve significant physical improvements to not only intersection configurations, but also roadway widening. In some cases, the improvements identified below will be undesirable due to the need for right-of-way acquisition and/or create inconsistency with the City's General Plan. The evaluation of necessary mitigation measures revealed that several of the project impacts could be mitigated with the construction of an extension of Gabilan Drive that will provide an alternate route to US 101. The City's General Plan calls for the extension of Gabilan Drive to US 101 as a four-lane divided arterial. The Gabilan Drive extension will provide for a more direct route to the project area and alleviate identified impacts at several intersections. **Figure 12** shows the change in travel patterns of the project that would result with the extension of Gabilan Drive. The figure shows that project traffic would be significantly reduced through several of the intersections identified to be impacted. Therefore, it is recommended that rather than the project implementing undesirable roadway widening, that it instead contribute its fair-share towards the construction costs of the extension of Gabilan Drive to US 101 and widening of San Vicente Road from the project south to the Gabilan Drive extension.

(1) Moranda Road and US 101 NB Ramps

Impact: The intersection level of service would be an acceptable LOS D or better under Background with Improvements conditions and the intersection would degrade to LOS F under project conditions. This constitutes a significant impact by City of Soledad standards.

Mitigation Measure. The necessary improvement to mitigate the project impact at this intersection will consist of the signalization of the intersection and the addition of a second northbound left-turn lane, Moranda Road to northbound US 101. The implementation of these improvements will require that the northbound US 101 on-ramp be widened to receive the two lanes. Intersection level of service would improve to LOS B with the improvements.

With the construction of the Gabilan Drive extension to US 101, the improvements described above would not be necessary. Instead, improvements associated with the Gabilan Drive extension would be made at the intersection. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101. The volume of vehicles bound for northbound US 101 indicate the need for the reconfiguration/reconstruction of the US 101 interchange at Moranda Road/Front Street to provide more efficient access to the project site and north Soledad in general.

(2) Moranda Road and Front Street

Impact: The intersection level of service would be an acceptable LOS C or better during both peak hours under Background with Improvements conditions and the intersection

would degrade to LOS F under project conditions. This constitutes a significant impact by City of Soledad standards.

Mitigation Measure. The additional improvement necessary, beyond those identified under background conditions, to mitigate the project impact at this intersection will consist of the addition of a second northbound through lane and eastbound free-right-turn lane. The implementation of this improvement will require that northbound Front Street be widened to two lanes. The roadway segment analysis also indicates the need for widening of Front Street between Moranda Road and San Vicente Road. Intersection level of service will improve to LOS A with the improvements.

With the construction of the Gabilan Drive extension to US 101, the improvements described above would not be necessary. Instead, improvements associated with the Gabilan Drive extension would be made at the intersection. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(3) San Vicente Road and Front Street

Impact: The intersection level of service would be an acceptable LOS B during both peak hours under Background with Improvements conditions and the intersection would degrade to LOS F under project conditions. This constitutes a significant impact by City of Soledad standards.

Mitigation Measure. The additional improvement necessary, beyond those identified under background conditions, to mitigate the project impact at this intersection will consist of the addition of two eastbound left-turn lanes and southbound free-right-turn lane. The implementation of this improvement will require that northbound Front Street be widened to two lanes and northbound San Vicente Road be widened to three lanes. Intersection level of service will improve to LOS B with the improvements. The improvements described above will require a significant amount of right-of-way acquisition and will not blend well with surrounding land uses.

With the construction of the Gabilan Drive extension to US 101, the improvements described above would not be necessary. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(4) West Street and Front Street

Impact: The intersection level of service would be an acceptable LOS B or better during both peak hours under Background with Improvements conditions and the intersection would degrade to LOS E during the PM peak hour under project conditions. This

constitutes a significant impact by City of Soledad standards. The intersection would also meet signal warrants with the addition of project traffic.

Mitigation Measure. The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection with protected left-turn phasing on Front Street. Intersection level of service will improve to LOS C during the PM peak hour with the improvements.

(5) Main Street and Front Street

Impact: The intersection would meet signal warrants with the addition of project traffic.

Mitigation Measure. The necessary improvements consist of the signalization of the intersection with protected left-turn phasing along Front Street.

With the construction of the Gabilan Drive extension to US 101, the signalization of this intersection would not be necessary. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(9) Front Street and US 101 SB Ramps

Impact: The intersection would degrade to LOS F during the PM peak hour under project conditions. This constitutes a significant impact by City of Soledad standards. However, the impact is more associated with the LOS E on the SB Off-Ramp.

Mitigation Measure. The volume of vehicles exiting southbound US 101 at Front Street indicate the need for widening of Front Street, between US 101 and Moranda Road, to two lanes southbound and/or reconfiguration/reconstruction of the US 101 interchange at Moranda Road/Front Street to provide more efficient access to the project site and north Soledad in general. A traffic signal is not recommended at this location due to the very low amount of conflicting traffic.

(11) San Vicente Road and Market Street

Impact: The intersection level of service would be an acceptable LOS C or better during both peak hours under Background with Improvements conditions and the intersection would degrade to LOS F under project conditions. This constitutes a significant impact by City of Soledad standards.

Mitigation Measure. The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection and widening of San Vicente Road to accommodate two lanes in each direction. Intersection level of service will improve to LOS A with the improvements.

With the construction of the Gabilan Drive extension to US 101, the signalization of the intersection and widening of San Vicente Road would not be necessary. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(12) West Street and Market Street

Impact: The intersection would meet signal warrants with the addition of project traffic.

Mitigation Measure. The necessary improvements consist of the signalization of the intersection.

With the construction of the Gabilan Drive extension to US 101, the signalization of this intersection would not be necessary. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(14) East Street and Market Street

Impact: The intersection level of service would be an acceptable LOS C or better under Background with Improvements conditions and the intersection would degrade to LOS F during the PM peak hour under project conditions. This constitutes a significant impact by City of Soledad standards. The intersection would also meet signal warrants with the addition of project traffic.

Mitigation Measure. The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection. Intersection level of service will improve to LOS A with the improvements.

(16) San Vicente Road and Gabilan Drive

Impact: The intersection level of service would be an acceptable LOS B under Background with Improvements conditions and the intersection would degrade to LOS F under project conditions. This constitutes a significant impact by City of Soledad standards. The intersection would also meet signal warrants with the addition of project traffic.

Mitigation Measure. The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection and addition of a second westbound left-turn lane, exclusive northbound right-turn lane, and southbound left-turn lane. The improvement will require the widening of southbound San Vicente Road to accommodate the dual left-turn lanes from Gabilan. Intersection level of service will improve to LOS A with the improvements.

With the construction of the Gabilan Drive extension to US 101, the improvements described above would not be necessary. Instead, improvements associated with the Gabilan Drive extension would be made at the intersection to serve the new movements. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(18) Main Street and Gabilan Drive

Impact: The intersection would meet signal warrants with the addition of project traffic.

Mitigation Measure. The necessary improvements consist of the signalization of the intersection with protected left-turn phasing along Gabilan Drive.

With the construction of the Gabilan Drive extension to US 101, the signalization of this intersection would not be necessary. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(19) Andalucia Drive and Gabilan Drive

Impact: The intersection would meet signal warrants with the addition of project traffic.

Mitigation Measure. The necessary improvements consist of the signalization of the intersection with protected left-turn phasing along Gabilan Drive.

4.8 Traffic Mitigation Triggers and Impact Fees

Discussed below are project development level trigger points for impacts and mitigation measures for the two major roadway improvements identified in the previous section, as well as the local and regional impact fees.

Traffic Mitigation Triggers

The large size of the proposed project will require that construction of the project be phased over the next ten years. As such, it is necessary to phase mitigation costs/fees along with the development of the project in order to ensure the financial feasibility of the initial development activities. The two major roadway improvements, Gabilan Extension and reconstruction of the US 101/Moranda Road interchange, proposed as mitigation measures for the proposed project will require substantial funding that cannot be provided at the initial stages of this development nor completely by the proposed development alone. Therefore, triggers were determined for the two major roadway improvement projects.

Gabilan Extension Development Level Trigger

Analysis was conducted at intersections and roadway segments along San Vicente Road to determine at what development level the extension of Gabilan Drive needed to be implemented to support project traffic. The traffic analysis indicated that the most critical point of constraint is the intersection of San Vicente Road and Front Street. The capacity of the eastbound left-turn movement, Front Street to San Vicente, during the PM peak hour is the critical movement at the intersection. Under background conditions, the intersection was shown to meet traffic signal warrants. The traffic signal has already been installed. Analysis indicates that with the installation of a signal at the intersection, acceptable levels of service, LOS D, will be maintained at the intersection with up to 84% of the project development traffic added to the roadway system. It should be noted, that though intersection levels of service may be acceptable, the number of left-turning vehicles under background conditions (545 during the PM peak hour) indicates the need for a second left-turn lane and subsequent widening of San Vicente Road to receive the two left-turn lanes. With 84% of the project development traffic added to the roadway system, an additional 350 trips would be added to the left-turn movement during the PM peak hour. By comparison, the 2007 TIA estimated that about 50% of Miravale III could be developed before the Gabilan Drive extension needed to be constructed.

Based on roadway segment analysis conducted along San Vicente Road, LOS D operations along the roadway can be maintained with up to 100% of the project traffic added to the roadway system. However, as previously discussed, the intersection of San Vicente Road and Front Street would be unable to serve this level of development and would create spill over onto adjacent streets, such as West Street, that provide an alternate access to San Vicente Road.

US 101 and Moranda Road Interchange Improvement Development Level Trigger

As described previously, the existing freeway ramps at Moranda Road and US 101 are not designed to accommodate existing traffic volumes. The addition of project traffic, as well as background traffic, would compound the need for improvement of the ramps. The US 101 southbound off-ramp to Moranda Road will be the constraint on any further development. Analysis of ramp capacities indicate that LOS D operations can be maintained on the ramps with up to 42% of the project traffic added to the roadway system. Intersection level of service analysis indicates that with signalization of the ramp termini intersections, up to 84% of the project development traffic can be accommodated; However, even with the signalization of the intersections, the ramps would be inadequate to serve this level of development. By comparison, the 2007 TIA estimated that about 25% of Miravale II could be developed and maintain LOS D on the ramps. The 2007 TIA

estimated that about 50% of Miravale III could be developed before signalization was needed at the ramp termini intersections.

Traffic Impact Fees

Funding for the above described mitigation measures, as well as others described in the previous section, will be obtained via traffic impact fees imposed upon the project by both the City of Soledad and The Transportation Agency for Monterey County (TAMC). Mitigation of the project impacts would be in the form of payment of traffic impact fees estimated for the project.

Local Intersection Impacts

Since the project is one of many potential development projects that would contribute to the unacceptable operating conditions at the identified intersections, the project should make a fair-share contribution toward the cost of the necessary improvements. The intersection improvements necessary under project conditions will be funded by the City's traffic impact fee program. Mitigation of the project impacts would be in the form of payment of City of Soledad's traffic impact fees estimated for the project.

Regional Transportation Impacts

The identified US 101/Moranda Road interchange improvements cannot be completely funded by a single development. In lieu of one single project absorbing the total cost of freeway interchange reconstruction, a regional development impact fee program has been established for state highways and regional roads within Monterey County. The Transportation Agency for Monterey County (TAMC) implements the fee program. The payment of fees is considered mitigation for project impacts to freeway facilities. This contribution to the regional fund shall be in addition to the City of Soledad traffic fee.

Monterey County also passed Measure X in the November, 2016 election. Soledad will have funds from this 3/8 cent sales tax to assist in financing transportation improvements such as the US 101 interchanges.

4.9 Project Area Roadway System

Primary access to the site will be provided via extensions of San Vicente Road, West Street, and Orchard Lane. Each of the roadways will be extended into the project area with connections to a completely new roadway system of collectors and local roads that will serve each of the residential and commercial areas of the project.

Transit and Pedestrian Analysis

It can be assumed that some of the project trips could be made by transit. Assuming up to 3% transit mode share, which is probably the highest that could be expected, yields an estimate of 57 PM transit trips during each of the peak hours. This demand along with existing and other future demand for transit service will justify the need for establishing a plan and expansion of the transit system serving the City of Soledad.

Pedestrian facilities in the project area will consist primarily of sidewalks along the streets. Sidewalks will be provided along virtually all streets and at intersections within the project area. There are no existing bicycle facilities that can be extended into the project area. The residential uses of the project along with existing and future neighborhoods will justify the need for a continuous bicycle facility system throughout the City of Soledad. All pedestrian and bicycle lanes of the project should provide for future connection to existing sidewalks and streets.

5. CUMULATIVE GROWTH CONDITIONS

This chapter presents a summary of the traffic conditions that would occur under cumulative conditions with and without the proposed project. It includes descriptions of nearby pending developments and the procedure used to estimate traffic volumes associated with them. This chapter also presents the results of the intersection level of service calculations. The analysis of cumulative growth conditions was conducted at the request of the City of Soledad and is in conformance with the California Environmental Quality Act CEQA.

5.1 Future Roadway Network Under Cumulative Conditions

It is assumed in this analysis that the roadway network and intersection configurations under cumulative no project conditions would be the same as described under Background conditions with improvements with the exception of the following two intersections:

Moranda Road and Front Street - The improvement consists of the addition of an east leg to the intersection to serve the Soledad Plaza project site. The Soledad Plaza Shopping Center project is inactive. However, it is included as a Cumulative project because it is generally consistent with the General Plan for the site. A project similar to Soledad Plaza has a high probability of occurring.

San Vicente Road and Gabilan Drive - The necessary improvement consists of the addition of a west leg to the intersection to serve the Soledad Plaza project site.

The project mitigation measures described in the previous chapter are included under the cumulative with project conditions analysis. The cumulative with project analysis includes evaluation of intersection levels of service with and without the extension of Gabilan Drive to US 101 as described in the previous chapter.

5.2 Cumulative Traffic Volumes

Cumulative traffic volumes include trips associated with three pending developments located within the City of Soledad. City staff provided the list of cumulative developments. The projects are described below.

• The Village at Soledad – 140,000 square foot shopping center and a 68 room hotel, located along the eastside of Nestles Road south of Los Coches Drive.

• Soledad Plaza – 536,224 square foot shopping center, located along the west side of San Vicente Road between Moranda Road and Gabilan Road.

• 263 Front Street – 12,200 square foot retail center and 102 apartments/condominiums, located along the north side of Front Street between West Street and Benito Street.

Traffic volumes for cumulative conditions were estimated by adding traffic associated with pending developments to background traffic volumes for the cumulative without project scenario and the proposed project for the cumulative with project scenario. The added traffic associated with the pending projects was developed based on trip generation estimates and assignments in the 2007 TIA. The magnitude of traffic added to the roadway system by each of the pending developments is estimated by multiplying the applicable trip generation rates to the size of the development. The trip generation rates published in the Institute of Transportation Engineers (ITE) manual entitled Trip Generation, seventh edition, 2003, were used for this analysis. On the basis of these rates, it is estimated that the pending projects would generate a combined total of 30,731 daily trips, with 796 trips occurring during the AM peak hour and 2,662 occurring during the PM peak hour. The type of land use, size, and trip estimates of each development is presented in **Table 22**. Cumulative Growth traffic volumes with the project are shown on **Figure 13.** The cumulative growth without the Project is assumed to be the same as the 2007 TIA, which basically includes an allowance of five more years of growth.

A comparison of Cumulative plus Project traffic in 2017 with the forecast in the 2007 TIA at the study intersections is tabulated in **Appendix I**. The current forecasts are about 13.2% less than the 2007 TIA forecasts for the entire network compared to the 2007 TIA Cumulative Plus Project scenario.

5.3 Cumulative Conditions Intersection Levels of Service

The results of the intersection level of service analysis under cumulative conditions are summarized in **Table 23**. The results show that all of the study intersections would operate at an acceptable LOS D or better under cumulative conditions without and with the project.

The peak-hour signal warrant analysis for cumulative conditions showed that the Caltrans peak-hour volume warrant would not be satisfied at any further study intersections than those identified under project conditions. The results of the signal warrant analysis are summarized in **Table 24**.

5.4 Cumulative Roadway Segment Analysis

Traffic volumes for cumulative conditions on each of the studied roadway segments were developed by adding to background condition volumes the trips associated with each of the pending projects and proposed project. The pending project trips were assigned to the roadway system in the same manner as with the proposed project. The roadway segment analysis indicates that all studied roadway segments are projected to operate at

LOS D or better under cumulative no project conditions. The roadway segment analysis indicates that the addition of project traffic will cause two studied roadway segments to deteriorate to LOS E or worse under cumulative with project conditions. The degradation of roadway segment levels of service indicates the need for roadway widening. This is a reduction from the four additional segments that would need widening for Cumulative plus the previous Miravale III. **Tables 25** and **26** present the roadway segment analysis including a comparison between the 2007 TIA and the current analysis.

5.5 Cumulative Freeway Segment Analysis

Traffic volumes for cumulative conditions on each of the studied freeway segments were developed by adding to background condition volumes the trips associated with each of the pending projects and proposed project. The pending project trips were assigned to the freeway system in the same manner as with the proposed project. The freeway segment analysis indicates that all freeway segments analyzed are projected to operate at LOS C or better under cumulative conditions without and with the project. Freeway segment analysis is presented in **Tables 27** and **28**.

5.6 Cumulative Freeway Ramp Analysis

Traffic volumes for cumulative conditions on each of the studied freeway ramps were developed by adding to background condition volumes the trips associated with each of the pending projects and proposed project. The pending project trips were assigned to the freeway ramps in the same manner as with the proposed project. The freeway ramp analysis indicates that no further study ramps than those identified under project conditions would deteriorate in levels of service. Freeway ramp analyses are presented in **Tables 29** and **30**.

6. YEAR 2035 CONDITIONS

This chapter presents the long-term traffic impacts on the transportation system associated with the proposed development as well as land use growth and transportation improvements within the entire City of Soledad. The purpose of this analysis is to evaluate the long-term traffic impacts on the transportation system associated with the proposed development.

6.1 Year 2035 Traffic Conditions

Year 2035 traffic volumes on the Soledad street system are assumed to be equal with the 2030 forecasts in the 2007 TIA. This is valid because development is occurring at a much slower rate than anticipated in 2007. For example, Background projects, which included about 1131 dwelling units, are only about 50% complete. This is an absorption rate of about 50 dwelling units per year. Miravale III, which was proposed in 2007 to include over 4,200 dwelling units, was assumed to be complete in 10 years according to the "Traffic Mitigation Triggers and Impact Fees" section of "Chapter 4. Project Impacts and Mitigation Measures" of the 2007 TIA. Obviously, the project planning and preliminary design have not been completed. Assuming an absorption rate of 150 per year, the buildout of Background and Miravale III would take about 20 years.

US 101 volumes were developed by adding five years of straight line growth of 1% per year (5% total) in through traffic volumes on US 101 to the 2030 forecast by Omni Means Engineers & Planning Consultants. This growth rate is the same as the approximately 1% per year that occurred between 2005 and 2015. The traffic forecasts for Year 2030 were produced using the Association of Monterey Bay Area Governments (AMBAG) Regional Traffic Model available in 2007. The 2030 model includes land use growth and transportation improvements associated with buildout of all General Plans within the AMBAG region and 30 year through-traffic growth on major regional facilities. The AMBAG forecasts were made before the 2008 recession. It assumes growth rates higher than subsequently anticipated by AMBAG based on the substantially slower growth that occurred for the five years after 2008.

6.2 Model Land Use Adjustments

The 2005 Soledad General Plan is not accounted for in the land use assumptions contained in the AMBAG model. Additionally, the proposed Miramonte land uses plus the portion of Miravale III not developed as a part of Miramonte are of greater intensity than those assumed in the General Plan. Therefore, Omni Means and AMBAG adjusted the land uses contained in the model to include the adopted General Plan and Miramonte land uses. The roadway network contained in the AMBAG model for the City of Soledad was expanded to include the expansion of the street network to serve future land uses.

Year 2030 traffic volumes are presented in the memo produced by Omni Means, dated March 27, 2007 and contained in Appendix G of the 2007 TIA.

Though the Year 2035 forecasts reflected at least 18 years of development growth, the forecasts do not show significant increases in traffic volumes on US 101 and its ramps within the City of Soledad. The lack of volume increases on the regional facilities is primarily due to significant changes in land uses within Soledad that are being represented in the model. There is currently a very small amount of proposed land development besides residential within Soledad. As such, existing traffic volumes on the regional facilities reflect the unbalanced land uses within Soledad where trips originate within Soledad due to its substantial residential development and have destinations outside of Soledad in areas that contain industrial/commercial(employment) land uses. The model reflects the future addition of a significant amount of industrial/commercial (employment) within Soledad thus creating a more balanced land use scenario within the City of Soledad. The future balance of land uses will internalize many trips in Soledad. Additionally, several new roadways that will be constructed to serve future development will provide for enhanced connectivity to US 101, specifically the Gloria/Camphora interchange.

6.3 Miramonte Project Trips

Peak hour project trips associated with the proposed Miramonte project were also produced as part of the forecasts completed by Omni Means and are also shown in Appendix G of the 2007 TIA. The Year 2035 Miramonte project trips differ from those presented in Chapter 5 due to changes in land uses and the transportation system as described above. It is expected that the development of more balanced land uses (employment vs. housing) will internalize many of the project trips within Soledad. The near-term project trip assignment and analysis presented in the Chapter 5 depicts the existing unbalanced land use scenario. The Year 2035 projections and project trip assignment assumes a more balanced land use with project trip destinations within Soledad and the utilization of new and enhanced connections to US 101.

6.4 Year 2035 Level of Service Analysis

Level of service analysis was conducted for all freeway segments and interchange ramps within the City of Soledad. The traffic model is intended to provide projections for interregional facilities, and may project future forecasts that are significantly different than existing and expected future traffic volumes on city-level roadways. Therefore, no intersection analysis is presented. The freeway and ramp analysis consists of an evaluation of volume-to-capacity of each of the facilities.

6.5 Freeway Segment Analysis

Year 2035 conditions freeway segment analysis indicates that all freeway segments within the City of Soledad are projected to operate at LOS C or better conditions. The only exception is the southbound section of US 101 from Soledad Prison to Camphora-Gloria Road, which will decline slightly into LOS D. **Table 31** presents Year 2035 conditions on freeway segments. The table shows that the Miramonte project will add between 0 and 454 vehicles during the PM peak.

6.6 Interchange Ramp Analysis

Year 2035 conditions interchange ramp analysis indicates that all freeway ramps are projected to operate at LOS C or better conditions. **Table 32** presents Year 2035 interchange ramp conditions. The table shows that the Miramonte project will add between 0 and 454 vehicles to the identified ramps during the peak hours.

6.7 Year 2035 Freeway Facility Impacts and Mitigation Measures

Long-term traffic analysis of the proposed development levels for the project as well as long-term land use growth and transportation improvements within the entire City of Soledad indicate that the development levels will not have adverse impacts on the major regional facilities serving Soledad. Nonetheless, the proposed project as well as other development projects within the City of Soledad will be required to contribute to the regional development impact fee program as described under near-term project conditions.

7. CONCLUSIONS

The potential impacts of the project were evaluated in accordance with the standards set forth by the City of Soledad. The study included the analysis of AM and PM peak-hour traffic conditions for 19 unsignalized intersections, 11 roadway segments, and 11 freeway segments.

Based on the intersection level of service analysis, the project is projected to have an adverse impact on 8 of the study intersections. In addition, the peak-hour signal warrant analysis showed that the Caltrans peak-hour volume warrant would be satisfied at two additional study intersections under project conditions.

7.1 Project Impacts

The currently proposed Miramonte Specific Plan will result in less impacts than the previously proposed Miravale III Mixed-Use Development. No additional mitigations will be required for any development scenario. On the other hand, the current proposal will not be reduced enough in size to reduce the number of mitigations previously identified in the 2007 TIA. The only exception is intersection 17, the Gabilan Drive /West Street intersection, where a signal has already been installed. The project will have a proportionately smaller pro-rata contribution toward cumulative impact mitigations.

Intersection Impacts

Each of the proposed mitigation measures is presented below:

Several of the identified impacts involve significant physical improvements to not only intersection configurations, but also roadway widening. In some cases, the improvements identified below will be undesirable due to the need for right-of-way acquisition and/or create inconsistency with the City's General Plan. The evaluation of necessary mitigation measures revealed that several of the project impacts could be mitigated with the construction of an extension of Gabilan Drive that will provide an alternate route to US 101. The City's General Plan calls for the extension of Gabilan Drive to US 101 as a four-lane divided arterial. The Gabilan Drive extension will provide for a more direct route to the project area and alleviate identified impacts at several intersections. Therefore, it is recommended that rather than the project implementing undesirable roadway widening, that it instead contribute its fair-share towards the construction costs of the extension of Gabilan Drive to US 101 and widening of San Vicente Road from the project south to the Gabilan Drive extension.

(1) Moranda Road and US 101 NB Ramps - The necessary improvement to mitigate the project impact at this intersection will consist of the signalization of the intersection and

the addition of a second northbound left-turn lane, Moranda Road to northbound US 101. The implementation of these improvements will require that the northbound US 101 on-ramp be widened to receive the two lanes.

With the construction of the Gabilan Drive extension to US 101, the improvements described above would not be necessary. Instead, improvements associated with the Gabilan Drive extension would be made at the intersection to serve the new movements created by the extension. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101. The volume of vehicles bound for northbound US 101 indicate the need for the reconfiguration/reconstruction of the US 101 interchange at Moranda Road/Front Street to provide more efficient access to the project site and north Soledad in general.

(2) Moranda Road and Front Street - The improvement necessary to mitigate the project impact at this intersection will consist of the addition of a second northbound through lane and eastbound free-right-turn lane. The implementation of this improvement will require that northbound Front Street be widened to two lanes. The roadway segment analysis also indicates the need for widening of Front Street between Moranda Road and San Vicente Road.

With the construction of the Gabilan Drive extension to US 101, the improvements described above would not be necessary. Instead, improvements associated with the Gabilan Drive extension would be made at the intersection. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(3) San Vicente Road and Front Street - The improvement necessary to mitigate the project impact at this intersection will consist of the addition of two eastbound left-turn lanes and southbound free-right- turn lane. The implementation of this improvement will require that northbound Front Street be widened to two lanes and northbound San Vicente Road be widened to three lanes. The improvements described above will require a significant amount of right-of-way acquisition and will not blend well with surrounding land uses.

With the construction of the Gabilan Drive extension to US 101, the improvements described above would not be necessary. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(4) West Street and Front Street - The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection with protected left-turn phasing on Front Street.

(5) Main Street and Front Street - The necessary improvements consist of the signalization of the intersection with protected left-turn phasing along Front Street.

With the construction of the Gabilan Drive extension to US 101, the signalization of this intersection would not be necessary. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(9) Front Street and US 101 SB Ramps - The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection and addition of a second lane on the off- ramp. The improvement will require the widening of southbound Front Street to two lanes. The volume of vehicles exiting southbound US 101 at Front Street indicate the need for widening of Front Street, between US 101 and Moranda Road, to two lanes southbound and/or reconfiguration/reconstruction of the US 101 interchange at Moranda Road/Front Street to provide more efficient access to the project site and north Soledad in general.

(11) San Vicente Road and Market Street - The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection and widening of San Vicente Road to accommodate two lanes in each direction.

With the construction of the Gabilan Drive extension to US 101, the signalization of the intersection and widening of San Vicente Road would not be necessary. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(12) West Street and Market Street - The necessary improvements consist of the signalization of the intersection. With the construction of the Gabilan Drive extension to US 101, the signalization of this intersection would not be necessary. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(14) East Street and Market Street - The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection.

(16) San Vicente Road and Gabilan Drive - The necessary improvements to mitigate project impacts at this intersection consist of the signalization of the intersection and addition of a second westbound left- turn lane, exclusive northbound right-turn lane, and southbound left-turn lane. The improvement will require the widening of southbound San Vicente Road to accommodate the dual left-turn lanes from Gabilan.

With the construction of the Gabilan Drive extension to US 101, the improvements described above would not be necessary. Instead, improvements associated with the Gabilan Drive extension would be made at the intersection to serve the new movements.

Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(18) Main Street and Gabilan Drive - The necessary improvements consist of the signalization of the intersection with protected left-turn phasing along Gabilan Drive.

With the construction of the Gabilan Drive extension to US 101, the signalization of this intersection would not be necessary. Therefore, it is recommended that the project contribute instead towards the construction of the extension of Gabilan Drive to US 101.

(19) Andalucia Drive and Gabilan Drive - The necessary improvements consist of the signalization of the intersection with protected left-turn phasing along Gabilan Drive.

Freeway Segment Impacts

The results of the freeway segment analysis showed that all freeway segments are projected to operate at LOS C or better conditions with the addition of project traffic.

Freeway Ramp Impacts

The freeway ramp analysis indicates that two of the studied freeway ramps are projected to operate at LOS F under project conditions.

Moranda Road Interchange – Southbound US 101 off-ramp to Moranda Road (PM Peak Hour)

Moranda Road Interchange – Northbound US 101 on-ramp from Moranda Road (AM Peak Hour)

The existing ramp configurations are inadequate to serve existing traffic volumes. The ramps at both the Moranda Road and Front Street interchanges with US 101 were constructed years ago and not designed to accommodate existing traffic volumes. The existing ramp alignments are inadequate to feed the large ramp volumes onto the mainline that also has seen increased volumes. The project traffic will worsen conditions on each of the ramps.

Traffic Mitigation Triggers

The large size of the proposed project will require that construction of the project be phased over the next ten years. As such, it is necessary to phase mitigation costs/fees along with the development of the project in order to ensure the financial feasibility of the initial development activities. The two major roadway improvements, Gabilan Extension and reconstruction of the US 101Moranda Road interchange, proposed as mitigation measures for the proposed project will require substantial funding that cannot be provided

at the initial stages of this development nor funded solely by Miramonte. Therefore, triggers were determined for the two major roadway improvement projects.

Gabilan Extension Development Level Trigger

Analysis was conducted at intersections and roadway segments along San Vicente Road to determine at what development level the extension of Gabilan Drive needed to be implemented to support project traffic. The traffic analysis indicated that the most critical point of constraint is the intersection of San Vicente Road and Front Street. The capacity of the eastbound left-turn movement, Front Street to San Vicente, during the PM peak hour is the critical movement at the intersection. Under background conditions, the intersection was shown to meet traffic signal warrants. Analysis indicates that with the installation of a signal at the intersection, acceptable levels of service, LOS D, will be maintained at the intersection with up to 50% of the project development traffic added to the roadway system. It should be noted, that though intersection levels of service may be acceptable, the number of left-turning vehicles under background conditions (545 during the PM peak hour) indicates the need for a second left-turn lane and subsequent widening of San Vicente Road to receive the two left-turn lanes. With 84% of the project development traffic added to the roadway system, an additional 350 trips would be added to the left-turn movement during the PM peak hour.

Based on roadway segment analysis conducted along San Vicente Road, LOS C operations along the roadway can be maintained with up to 100% of the project traffic added to the roadway system. However, as previously discussed, the intersection of San Vicente Road and Front Street would be unable to serve this level of development and would create spill over onto adjacent streets, such as West Street, that provide an alternate access to San Vicente Road.

US 101 and Moranda Road Interchange Improvement Development Level Trigger

The existing freeway ramps at Moranda Road and US 101 are not designed to accommodate existing traffic volumes. The addition of project traffic, as well as background traffic, would compound the need for improvement of the ramps. The US 101 southbound off-ramp to Moranda Road will be the constraint on any further development. Analysis of ramp capacities indicate that LOS D operations can be maintained on the ramps with up to 42% of the project traffic added to the roadway system. Intersection level of service analysis indicates that with signalization of the ramp termini intersections, up to 84% of the project development traffic can be accommodated; However, even with the signalization of the intersections, the ramps would be inadequate to serve this level of development.

7.2 Traffic Impact Fees

Funding for the above described mitigation measures, as well as others described in the previous section, will be obtained via traffic impact fees imposed upon the project by both the City of Soledad and The Transportation Agency for Monterey County (TAMC). Mitigation of the project impacts would be in the form of payment of traffic impact fees estimated for the project.

Local Intersection Impacts

Since the project is one of many potential development projects that would contribute to the unacceptable operating conditions at the identified intersections, the project will make a fair-share contribution toward the cost of the necessary improvements. The intersection improvements necessary under project conditions will be funded by the City's forthcoming (May/June 2007) traffic impact fee program. Mitigation of the project impacts would be in the form of payment of City of Soledad's traffic impact fees estimated for the project.

Regional Transportation Impacts

The identified US 101/Moranda Road interchange improvements cannot be completely funded by a single development. In lieu of one single project absorbing the total cost of freeway interchange reconstruction, a regional development impact fee program has been established for state highways and regional roads within Monterey County. The Transportation Agency for Monterey County (TAMC) implements the fee program. The payment of fees is considered mitigation for project impacts to freeway facilities. This contribution to the regional fund shall be in addition to the City of Soledad traffic fee.

7.3 Project Area Roadway System

Primary access to the site will be provided via extensions of San Vicente Road, West Street, and Orchard Lane. Each of the roadways will be extended into the project area with connections to a completely new roadway system of collectors and local roads that will serve each of the residential and commercial areas of the project. The proposed "S" curve on San Vicente Road near the southwest corner of the project will be able to be designed to operate acceptably.

Transit and Pedestrian Analysis

It can be assumed that some of the project trips could be made by transit. Assuming up to 3% transit mode share, which is probably the highest that could be expected, yields an estimate of 57 PM transit trips during each of the peak hours. This demand along with existing and other future demand for transit service will justify the need for expanding the existing transit system serving the City of Soledad.

Pedestrian facilities in the project area will consist primarily of sidewalks along the streets. Sidewalks will be provided along virtually all streets and at intersections within the project area. There are no existing bicycle facilities that can be extended into the project area. The residential uses of the project along with existing and future neighborhoods will justify the need for a continuous bicycle facility system throughout the City of Soledad. All pedestrian and bicycle lanes of the project should provide for future connection to existing sidewalks and streets.

7.4 Year 2035 Long-Term Analysis

Long-term traffic analysis of the proposed development levels for the project as well as long-term land use growth and transportation improvements within the entire Coty of Soledad indicate that the development levels will not have adverse impacts on the major regional facilities serving Soledad. Nonetheless, the proposed project as well as other development projects within the City of Soledad will be required to contribute to the regional development impact fee program as described under near-term project conditions.

Table 1
Unsignalized Intersection Level of Service Definition Based on Delay

Level of Service	Average Control Delay per Vehicle (sec.)
A	0 - 10
B	> 10 - 15
C	> 15 - 25
D	> 25 - 35
E	> 35 - 50
F	> 50

Source: Transportation Research Board, Highway Capacity Manual (Washington, D.C., 2000) pp. 17-2.

Table 2
Signalized Intersection Level of Service Definitions Based on Delay

Level of Service	Description	Average Control Delay Per Vehicle (Sec.)
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	Less than 10.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.1 to 20.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.1 to 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.1 to 80.0
F	Operation with delays unacceptable to most drivers occurring due to oversaturation, poor progression, or very long cycle lengths.	Greater than 80.0

Source: Transportation Research Board, Highway Capacity Manual (Washington, D.C., 2000), p. 16-2

Table 3
Freeway Segment Levels of Service Based on Volume-to-Capacity Ratio

Level of Service	Description	V/C Ratio
A	Primarily free-flow operations. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.	Less than 0.36
B	Reasonably free-flow conditions. The ability to maneuver within the traffic traffic stream is only slightly restricted.	0.36 - 0.54
C	Provides for stable operation, however flows approach the range in which small increases will cause a substantial deterioration in service. Freedom to maneuver withtin the traffic is noticeably restricted.	0.55 - 0.77
D	Borders on unstable flow. Small increases in flow cause substantial deterioration in service. Freedom to maneuver within the traffic stream is severely limited. Minor incidents can be expected to create substantial queuing, as the traffic stream has little space to absorb disruptions.	0.78 - 0.93
E	Operations are extremely unstable. Any incident can be expected to produce a serious breakdown with extensive queuing. Maneuverability within the traffic stream is extremely limited.	0.94 - 1.00
F	Forced or breakdown conditions. Such conditions generally exist within queues forming behind breakdown points.	Greater than 1.00

Source: 1985 Highway Capacity Manual for freeway sections with a 70 mph design speed.

Table 4

Existing Intersection Levels of Service

	N-S Street	E-W Street	Intersection Control	2007 Report Existing Conditions		Total Entering Volume % Increase	Existing Conditions	
				Avg. Delay	LOS		Avg. Delay	LOS
1	Moranda Road	US 101 Ramps	TWSC	11	B	39.3%	15	C
2	Moranda Road	Front Street	TWSC	28	D	20.6%	***34***	***D***
3	San Vicente Road	Front Street	Signal	14	B	15.9%	17	B
4	West Street	Front Street	AWSC	11	B	20.3%	13	B
5	Main Street	Front Street	AWSC	10	B	14.5%	12	B
6	East Street	Front Street	AWSC	14	B	4.9%	***15***	***B***
7	Front Street	Nestles Road	Signal	23	C	32.7%	13	B
8	Front St-US 101 NB Off-Ramp	US 101 NB On-Ramp	Signal	12	B	5.0%	15	B
9	Front St-US 101 SB Off-Ramp	US 101 SB On-Ramp	TWSC	15	B	19.7%	18	C
10	Front St-US 101 SB On-Ramp	Morisoli Road	TWSC	11	B	24.3%	14	B
11	San Vicente Road	Market Street	TWSC	11	B	52.2%	17	C
12	West Street	Market Street	AWSC	9	A	26.4%	11	B
13	Main Street	Market Street	AWSC	8	A	46.4%	12	B
14	East Street	Market Street	AWSC	9	A	22.0%	11	B
15	Andalucia Drive	Metz Road	AWSC	9	A	4.9%	9	A
16	San Vicente Road	Gabilan Drive	TWSC	10	B	43.4%	14	B
17	West Street	Gabilan Drive	Signal	9	A	37.2%	11	B
18	Main Street	Gabilan Drive	AWSC	8	A	44.4%	12	B
19	Andalucia Drive	Gabilan Drive	TWSC	10	B	73.3%	18	C

Notes:

1. TWSC = Two-way stop-controlled intersection.
2. AWSC = Four-way stop-controlled intersection.
3. Intersections 3 and 17 are now signalized. Existing conditions delay at Intersections 3 and 17 calculated using Traffix analysis software.
4. Intersections 7 and 8 are now signalized. Existing conditions delay at Intersections 7 and 8 referenced from the *Soledad Event Center TIA* , Mott MacDonald, June 2017.
5. Background conditions at Intersection 17 calculated using Traffix analysis software.
6. LOS below LOS standard shown highlighted in red.
7. Significant impacts are shown in **BOLD** and boxed.
8. *Italics* and **BOLD** indicates signal warrant met.
9. All results shown are for PM Peak Hour conditions.

Table 5

Existing Intersection Signal Warrant Analysis

	Intersection	2007 Report Existing Conditions	Existing Conditions
1	Moranda Road & US 101 NB Ramps	No	No
2	Moranda Road & Front Street	**Yes**	**Yes**
3	San Vicente Road & Front Street	**Yes**	Already Signalized
4	West Street & Front Street	No	No
5	Main Street & Front Street	No	No
6	East Street & Front Street	**Yes**	**Yes**
7	Front Street & Nestles Road	No	Already Signalized
8	Front Street & US 101 NB Ramps	No	Already Signalized
9	Front Street & US 101 SB Ramps	No	No
10	Front Street & Morisoli Road	No	No
11	San Vicente Road & Market Street	No	No
12	West Street & Market Street	No	No
13	Main Street & Market Street	No	No
14	East Street & Market Street	No	No
15	East Street & North Stree/Metz Road	No	No
16	San Vicente Road & Gabilan Drive	No	No
17	West Street & Gabilan Drive	No	Already Signalized
18	Main Street & Gabilan Drive	No	No
19	Andalucia Drive & Gabilan Drive	No	No

Notes:

1. Signal warrant analysis based on Caltrans Peak Hour Signal Warrant #11.
2. All results shown are for PM Peak Hour conditions.

Table 6

Existing Roadway Segment Analysis

Street Segment	Direction	# of Lanes	Capacity (vph)	2007 Report Existing Conditions			Existing Conditions		
				Volume	V/C	LOS	Volume	V/C	LOS
Front Street									
1 Moranda Rd and San Vicente Rd	EB	2	2,400	971	0.405	A	1,076	0.448	A
	WB	2	2,400	360	0.150	A	401	0.167	A
2 San Vicente and West St	EB	2	2,400	635	0.265	A	782	0.326	A
	WB	2	2,400	278	0.116	A	293	0.122	A
3 West St and Main St	EB	1	1,200	476	0.397	A	510	0.425	A
	WB	1	1,200	283	0.236	A	310	0.258	A
4 Main St and East St	EB	1	1,200	408	0.340	A	365	0.304	A
	WB	1	1,200	352	0.293	A	324	0.270	A
5 East St and Nestles Rd	EB	1	1,200	495	0.413	A	499	0.416	A
	WB	1	1,200	568	0.473	A	665	0.554	A
Gabilan Drive									
6 San Vicente Rd and West St	EB	2	2,400	146	0.061	A	187	0.078	A
	WB	2	2,400	93	0.039	A	174	0.073	A
7 West St and Andalucia Dr	EB	2	2,400	231	0.096	A	329	0.137	A
	WB	2	2,400	196	0.082	A	224	0.093	A
San Vicente Road									
8 Market St and Gabilan Dr	NB	1	1,200	341	0.284	A	413	0.344	A
	SB	1	1,200	165	0.138	A	269	0.224	A
9 North of Gabilan Dr	NB	1	1,200	134	0.112	A	182	0.152	A
	SB	1	1,200	77	0.064	A	115	0.096	A
West Street									
10 Market St and Gabilan Dr	NB	2	2,400	253	0.105	A	412	0.172	A
	SB	2	2,400	125	0.052	A	201	0.084	A
11 North of Gabilan Dr	NB	2	2,400	200	0.083	A	286	0.119	A
	SB	2	2,400	134	0.056	A	217	0.090	A

Notes:

1. Capacity of roadways based on assumed capacity of 1,200 vphpl and existing lanes on roadways.
2. **BOLD** indicates significant increase in roadway segment volume and LOS.
3. LOS below LOS standard shown highlighted in red.
4. All results shown are for PM Peak Hour conditions.

Table 7

Existing Freeway Segment Analysis

Freeway Segment	Direction	# of Lanes	Capacity (vph)	24-Hr Tot Volume	2007 Report Existing Conditions			Existing Conditions		
					Volume	V/C	LOS	Volume	V/C	LOS
US 101										
1 North Gonzales and Gonzales-5th Street	Both	4	9,600	39,800	4,400	0.458	B	4,250	0.443	B
	NB	2	4,800	19,900	1,760	0.367	B	1,557	0.324	A
	SB	2	4,800	19,900	2,640	0.550	C	2,693	0.561	C
2 Gonzales-5th Street and Gloria Road	Both	4	9,600	37,700	4,250	0.443	B	4,150	0.432	B
	NB	2	4,800	18,850	1,700	0.354	A	1,521	0.317	A
	SB	2	4,800	18,850	2,550	0.531	B	2,629	0.548	B
3 Gloria Road and Soledad Prison	Both	4	9,600	40,100	3,350	0.349	A	3,250	0.339	A
	NB	2	4,800	20,050	1,340	0.279	A	1,191	0.248	A
	SB	2	4,800	20,050	2,010	0.419	B	2,059	0.429	B
4 Soledad Prison and Camphora	Both	4	9,600	38,500	3,150	0.328	A	3,150	0.328	A
	NB	2	4,800	19,250	1,260	0.263	A	1,154	0.240	A
	SB	2	4,800	19,250	1,890	0.394	B	1,996	0.416	B
5 Camphora and North Soledad	Both	4	9,600	39,000	4,300	0.448	B	4,250	0.443	B
	NB	2	4,800	19,500	1,720	0.358	A	1,557	0.324	A
	SB	2	4,800	19,500	2,580	0.538	B	2,693	0.561	C
6 North Soledad and South Soledad	Both	4	9,600	37,200	3,800	0.396	B	4,050	0.422	B
	NB	2	4,800	18,600	1,520	0.317	A	1,484	0.309	A
	SB	2	4,800	18,600	2,280	0.475	B	2,566	0.535	B
7 South Soledad and Arroyo Seco Road	Both	4	9,600	37,500	3,700	0.385	B	4,050	0.422	B
	NB	2	4,800	18,750	1,665	0.347	A	1,484	0.309	A
	SB	2	4,800	18,750	2,035	0.424	B	2,566	0.535	B
8 Arroyo Seco Road and North Greenfield	Both	4	9,600	34,700	3,550	0.370	B	3,600	0.375	B
	NB	2	4,800	17,350	1,598	0.333	A	1,319	0.275	A
	SB	2	4,800	17,350	1,953	0.407	B	2,281	0.475	B
9 North Greenfield and Walnut Avenue	Both	4	9,600	32,400	3,050	0.318	A	3,200	0.333	A
	NB	2	4,800	16,200	1,373	0.286	A	1,172	0.244	A
	SB	2	4,800	16,200	1,678	0.350	A	2,028	0.423	B
10 Walnut Avenue and Oak Avenue	Both	4	9,600	29,300	2,850	0.297	A	2,900	0.302	A
	NB	2	4,800	14,650	1,283	0.267	A	1,063	0.221	A
	SB	2	4,800	14,650	1,568	0.327	A	1,837	0.383	B
11 Oak Avenue and South Greenfield	Both	4	9,600	24,100	2,350	0.245	A	2,350	0.245	A
	NB	2	4,800	12,050	1,058	0.220	A	861	0.179	A
	SB	2	4,800	12,050	1,293	0.269	A	1,489	0.310	A

Notes:

1. Capacity of freeway lanes based on assumed capacity of 2,400 vphpl, as prescribed by the Highway Capacity Manual.
2. Existing data provided by Caltrans Traffic Census Program 2015, Route 101 District 5.
3. All results shown are for PM Peak Hour conditions.

Table 8

Existing Freeway Ramp Analysis

Interchange	Direction	# of Lanes	Type	Capacity (vph)	2007 Report Existing Conditions			Existing Conditions		
					Volume	V/C	LOS	Volume	V/C	LOS
US 101										
1 Camphora Road[2]	SB to Camphora Road	1	Diagonal	1,830	30	0.020	A	82	0.045	A
	NB from Camphora Road	1	Diagonal	1,830	32	0.021	A	92	0.050	A
	SB from Camphora Road	1	Diagonal	1,830	95	0.063	A	180	0.098	A
	NB to Camphora Road	1	Diagonal	1,830	64	0.043	A	144	0.079	A
2 Moranda Road[3]	SB to Moranda Road	1	Diagonal	1,830	824	0.549	A	969	0.530	A
	NB from Moranda Road	1	Loop	1,500	242	0.161	A	330	0.220	A
	SB from Moranda Road	1	Loop	1,500	42	0.028	A	69	0.046	A
	NB to Moranda Road	1	Loop	1,500	86	0.057	A	123	0.082	A
3 Front Street[3]	SB to Front Street	1	Loop	1,500	170	0.113	A	240	0.160	A
	NB from Front Street	1	Loop	1,500	135	0.090	A	172	0.115	A
	SB from Front Street	1	Diagonal	1,830	283	0.155	A	385	0.210	A
	NB to Front Street	1	Diagonal	1,830	393	0.215	A	414	0.226	A
4 Arroyo Seco Road[2]	SB to Arroyo Seco Road	1	Diagonal	1,830	88	0.059	A	181	0.099	A
	NB from Arroyo Seco Road	1	Diagonal	1,830	70	0.047	A	179	0.098	A

Notes:

1. Capacity for diagonal ramps (1,830 vphpl) and loop ramps (1,500 vphpl) based on assumed capacity as prescribed by the Highway Capacity Manual
2. Existing data provided by Caltrans Traffic Census Program 2015, Route 101 District 5.
3. Existing ramp volume derived from peak hour turning movement counts.

Table 9

Approved Project Trip Generation Estimates

PROJECT	Size	Daily Trips	PM Peak Hour		
			Total	In	Out
1. Miravale II and Orchard Villas	250 Units	2,380	250	158	92
2. AutoZone	6,840 SF	423	41	20	21
3. ARCO (Gas Station)	12 VFPs	1,953	162	81	81
4. Los Coches Mini Storage	36,595 SF	91	10	5	5
		4,847	463	264	199

Notes:

1. Traffic volumes are based on trip generation rates cited from Trip Generation Manual, 9th Edition, Institute of Transportation Engineers (ITE), 2012, unless otherwise noted.
2. VFPs = Vehicle Fueling Positions (i.e., the maximum number of vehicles that can be simultaneously fueled at one time).

Table 10

Background Intersection Levels of Service

	N-S Street	E-W Street	Intersection Control	2007 Report Existing Conditions		Count Date	Total Entering Volume % Increase	Existing Conditions		2007 Report Background Conditions		Total Entering Volume % Increase	Background Conditions	
				Avg. Delay	LOS			Avg. Delay	LOS	Avg. Delay	LOS		Avg. Delay	LOS
1	Moranda Road	US 101 Ramps	TWSC	11	B	5/31/17	39.3%	15	C	14	B	7.2%	15	B
2	Moranda Road	Front Street	TWSC	28	D	5/31/17	20.6%	***34***	***D***	102	F	5.1%	***107***	***F***
3	San Vicente Road	Front Street	Signal	14	B	5/31/17	15.9%	17	B	40	E	1.9%	18	B
4	West Street	Front Street	AWSC	11	B	5/31/17	20.3%	13	B	13	B	22.5%	16	C
5	Main Street	Front Street	AWSC	10	B	5/31/17	14.5%	12	B	12	B	7.0%	13	B
6	East Street	Front Street	AWSC	14	B	5/31/17	4.9%	***15***	***B***	73	F	6.8%	***78***	***F***
7	Front Street	Nestles Road	Signal	23	C	6/12/13	32.7%	13	B	300	F	9.6%	18	B
8	Front St-US 101 NB Off-Ramp	US 101 NB On-Ramp	Signal	12	B	6/12/13	5.0%	15	B	14	B	15.9%	16	B
9	Front St-US 101 SB Off-Ramp	US 101 SB On-Ramp	TWSC	15	B	5/31/17	19.7%	18	C	19	C	2.3%	19	C
10	Front St-US 101 SB On-Ramp	Morisoli Road	TWSC	11	B	6/12/13	24.3%	14	B	13	B	2.7%	13	B
11	San Vicente Road	Market Street	TWSC	11	B	5/31/17	52.2%	17	C	16	C	4.4%	17	C
12	West Street	Market Street	AWSC	9	A	5/31/17	26.4%	11	B	9	A	21.3%	11	B
13	Main Street	Market Street	AWSC	8	A	5/31/17	46.4%	12	B	8	A	40.8%	11	B
14	East Street	Market Street	AWSC	9	A	5/31/17	22.0%	11	B	16	C	2.2%	16	C
15	Andalucia Drive	Metz Road	AWSC	9	A	6/12/13	4.9%	9	A	***21***	***C***	2.8%	***22***	***C***
16	San Vicente Road	Gabilan Drive	TWSC	10	B	5/31/17	43.4%	14	B	13	B	8.2%	14	B
17	West Street	Gabilan Drive	Signal	9	A	5/31/17	37.2%	11	B	11	B	13.7%	11	B
18	Main Street	Gabilan Drive	AWSC	8	A	5/31/17	44.4%	12	B	9	A	11.0%	10	A
19	Andalucia Drive	Gabilan Drive	TWSC	10	B	5/31/17	73.3%	18	C	16	C	5.5%	17	C

Notes:

1. TWSC = Two-way stop-controlled intersection.
2. AWSC = Four-way stop-controlled intersection.
3. Intersections 3 and 17 are now signalized. Existing conditions delay at Intersections 3 and 17 calculated using Traffix analysis software.
4. Intersections 7 and 8 are now signalized. Existing conditions delay at Intersections 7 and 8 referenced from the *Soledad Event Center TIA* , Mott MacDonald, June 2017.
5. Background conditions at Intersection 17 calculated using Traffix analysis software.
6. LOS below LOS standard shown highlighted in red.
7. Significant impacts are shown in **BOLD** and boxed.
8. *Italics* and **BOLD** indicates signal warrant met.
9. All results shown are for PM Peak Hour conditions.

Table 11

Background Intersection Signal Warrant Analysis

	Intersection	2007 Report Existing Conditions	Existing Conditions	2007 Report Background Conditions	Background Conditions
1	Moranda Road & US 101 NB Ramps	No	No	No	No
2	Moranda Road & Front Street	**Yes**	**Yes**	**Yes**	**Yes**
3	San Vicente Road & Front Street	**Yes**	Already Signalized	**Yes**	Already Signalized
4	West Street & Front Street	No	No	No	No
5	Main Street & Front Street	No	No	No	No
6	East Street & Front Street	**Yes**	**Yes**	**Yes**	**Yes**
7	Front Street & Nestles Road	No	Already Signalized	**Yes**	Already Signalized
8	Front Street & US 101 NB Ramps	No	Already Signalized	**Yes**	Already Signalized
9	Front Street & US 101 SB Ramps	No	No	No	No
10	Front Street & Morisoli Road	No	No	No	No
11	San Vicente Road & Market Street	No	No	No	No
12	West Street & Market Street	No	No	No	No
13	Main Street & Market Street	No	No	No	No
14	East Street & Market Street	No	No	No	No
15	East Street & North Stree/Metz Road	No	No	**Yes**	**Yes**
16	San Vicente Road & Gabilan Drive	No	No	No	No
17	West Street & Gabilan Drive	No	Already Signalized	No	Already Signalized
18	Main Street & Gabilan Drive	No	No	No	No
19	Andalucia Drive & Gabilan Drive	No	No	No	No

Notes:

1. Signal warrant analysis based on Caltrans Peak Hour Signal Warrant #11.
2. All results shown are for PM Peak Hour conditions.

Table 12

Background Roadway Segment Analysis

Street Segment	Direction	# of Lanes	Capacity (vph)	2007 Report Existing Conditions			Existing Conditions			Approved Project Trips				2007 Report Background Conditions			Background Conditions		
				Volume	V/C	LOS	Volume	V/C	LOS	2007 Report Volume	2007 Report Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
Front Street																			
1 Moranda Rd and San Vicente Rd	EB	2	2,400	971	0.405	A	1,076	0.448	A	283	29.15%	127	11.84%	1,254	0.523	A	1,203	0.501	A
	WB	2	2,400	360	0.150	A	401	0.167	A	240	66.67%	108	26.93%	600	0.250	A	509	0.212	A
2 San Vicente and West St	EB	2	2,400	635	0.265	A	782	0.326	A	95	14.96%	43	5.47%	730	0.304	A	825	0.344	A
	WB	2	2,400	278	0.116	A	293	0.122	A	75	26.98%	34	11.52%	353	0.147	A	327	0.136	A
3 West St and Main St	EB	1	1,200	476	0.397	A	510	0.425	A	95	19.96%	43	8.38%	571	0.476	A	553	0.461	A
	WB	1	1,200	283	0.236	A	310	0.258	A	75	26.50%	34	10.89%	358	0.298	A	344	0.286	A
4 Main St and East St	EB	1	1,200	408	0.340	A	365	0.304	A	95	23.28%	43	11.71%	503	0.419	A	408	0.340	A
	WB	1	1,200	352	0.293	A	324	0.270	A	75	21.31%	34	10.42%	427	0.356	A	358	0.298	A
5 East St and Nestles Rd	EB	1	1,200	495	0.413	A	499	0.416	A	197	39.80%	89	17.77%	692	0.577	A	588	0.490	A
	WB	1	1,200	568	0.473	A	665	0.554	A	257	45.25%	116	17.39%	825	0.688	B	781	0.651	B
Gabilan Drive																			
6 San Vicente Rd and West St	EB	2	2,400	146	0.061	A	187	0.078	A	163	111.64%	73	39.22%	309	0.129	A	260	0.108	A
	WB	2	2,400	93	0.039	A	174	0.073	A	138	148.39%	62	35.69%	231	0.096	A	236	0.098	A
7 West St and Andalucia Dr	EB	2	2,400	231	0.096	A	329	0.137	A	174	75.32%	78	23.80%	405	0.169	A	407	0.170	A
	WB	2	2,400	196	0.082	A	224	0.093	A	148	75.51%	67	29.73%	344	0.143	A	291	0.121	A
San Vicente Road																			
8 Market St and Gabilan Dr	NB	1	1,200	341	0.284	A	413	0.344	A	159	46.63%	72	17.32%	500	0.417	A	485	0.404	A
	SB	1	1,200	165	0.138	A	269	0.224	A	133	80.61%	60	22.25%	298	0.248	A	329	0.274	A
9 North of Gabilan Dr	NB	1	1,200	134	0.112	A	182	0.152	A	5	3.73%	2	1.24%	139	0.116	A	184	0.154	A
	SB	1	1,200	77	0.064	A	115	0.096	A	4	5.19%	2	1.57%	81	0.068	A	117	0.097	A
West Street																			
10 Market St and Gabilan Dr	NB	2	2,400	253	0.105	A	412	0.172	A	8	3.16%	4	0.87%	261	0.109	A	416	0.173	A
	SB	2	2,400	125	0.052	A	201	0.084	A	7	5.60%	3	1.57%	132	0.055	A	204	0.085	A
11 North of Gabilan Dr	NB	2	2,400	200	0.083	A	286	0.119	A	1	0.50%	0	0.16%	201	0.084	A	286	0.119	A
	SB	2	2,400	134	0.056	A	217	0.090	A	1	0.75%	0	0.21%	135	0.056	A	217	0.091	A

Notes:

1. Capacity of roadways based on assumed capacity of 1,200 vphpl and existing lanes on roadways.
2. **BOLD** indicates significant increase in roadway segment volume and LOS.
3. LOS below LOS standard shown highlighted in red.
4. All results shown are for PM Peak Hour conditions.

Table 13

Background Freeway Segment Analysis

Freeway Segment	Direction	# of Lanes	Capacity (vph)	24-Hr Tot Volume	2007 Report Existing Conditions			Existing Conditions			Approved Project Trips				2007 Report Background Conditions			Background Conditions		
					Volume	V/C	LOS	Volume	V/C	LOS	2007 Report Volume	2007 Report Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
US 101																				
1 North Gonzales and Gonzales-5th Street	Both	4	9,600	39,800	4,400	0.458	B	4,250	0.443	B	503	11.43%	226	5.32%	4,903	0.511	B	4,476	0.466	B
	NB	2	4,800	19,900	1,760	0.367	B	1,557	0.324	A	225	12.78%	101	6.49%	1,985	0.414	B	1,658	0.345	A
	SB	2	4,800	19,900	2,640	0.550	C	2,693	0.561	C	278	10.53%	125	4.64%	2,918	0.608	C	2,818	0.587	C
2 Gonzales-5th Street and Gloria Road	Both	4	9,600	37,700	4,250	0.443	B	4,150	0.432	B	574	13.51%	259	6.24%	4,824	0.503	B	4,409	0.459	B
	NB	2	4,800	18,850	1,700	0.354	A	1,521	0.317	A	257	15.12%	116	7.63%	1,957	0.408	B	1,637	0.341	A
	SB	2	4,800	18,850	2,550	0.531	B	2,629	0.548	B	318	12.47%	143	5.44%	2,868	0.598	C	2,772	0.578	C
3 Gloria Road and Soledad Prison	Both	4	9,600	40,100	3,350	0.349	A	3,250	0.339	A	646	19.28%	291	8.95%	3,996	0.416	B	3,541	0.369	B
	NB	2	4,800	20,050	1,340	0.279	A	1,191	0.248	A	289	21.57%	130	10.92%	1,629	0.339	A	1,321	0.275	A
	SB	2	4,800	20,050	2,010	0.419	B	2,059	0.429	B	357	17.76%	161	7.82%	2,367	0.493	B	2,220	0.463	B
4 Soledad Prison and Camphora	Both	4	9,600	38,500	3,150	0.328	A	3,150	0.328	A	682	21.65%	307	9.75%	3,832	0.399	B	3,457	0.360	B
	NB	2	4,800	19,250	1,260	0.263	A	1,154	0.240	A	305	24.21%	137	11.87%	1,565	0.326	A	1,291	0.269	A
	SB	2	4,800	19,250	1,890	0.394	B	1,996	0.416	B	377	19.95%	170	8.52%	2,267	0.472	B	2,166	0.451	B
5 Camphora and North Soledad	Both	4	9,600	39,000	4,300	0.448	B	4,250	0.443	B	718	16.70%	323	7.60%	5,018	0.523	B	4,573	0.476	B
	NB	2	4,800	19,500	1,720	0.358	A	1,557	0.324	A	321	18.66%	144	9.25%	2,041	0.425	B	1,701	0.354	A
	SB	2	4,800	19,500	2,580	0.538	B	2,693	0.561	C	397	15.39%	179	6.65%	2,977	0.620	C	2,872	0.598	C
6 North Soledad and South Soledad	Both	4	9,600	37,200	3,800	0.396	B	4,050	0.422	B	194	5.11%	87	2.15%	3,994	0.416	B	4,137	0.431	B
	NB	2	4,800	18,600	1,520	0.317	A	1,484	0.309	A	81	5.33%	36	2.43%	1,601	0.334	A	1,520	0.317	A
	SB	2	4,800	18,600	2,280	0.475	B	2,566	0.535	B	113	4.96%	51	1.99%	2,393	0.499	B	2,617	0.545	B
7 South Soledad and Arroyo Seco Road	Both	4	9,600	37,500	3,700	0.385	B	4,050	0.422	B	209	5.65%	94	2.32%	3,909	0.407	B	4,144	0.432	B
	NB	2	4,800	18,750	1,665	0.347	A	1,484	0.309	A	115	6.91%	52	3.50%	1,780	0.371	B	1,536	0.320	A
	SB	2	4,800	18,750	2,035	0.424	B	2,566	0.535	B	94	4.62%	42	1.64%	2,129	0.444	B	2,608	0.543	B
8 Arroyo Seco Road and North Greenfield	Both	4	9,600	34,700	3,550	0.370	B	3,600	0.375	B	199	5.61%	89	2.47%	3,749	0.391	B	3,689	0.384	B
	NB	2	4,800	17,350	1,598	0.333	A	1,319	0.275	A	109	6.82%	49	3.71%	1,707	0.356	A	1,368	0.285	A
	SB	2	4,800	17,350	1,953	0.407	B	2,281	0.475	B	89	4.56%	40	1.75%	2,042	0.425	B	2,321	0.484	B
9 North Greenfield and Walnut Avenue	Both	4	9,600	32,400	3,050	0.318	A	3,200	0.333	A	178	5.84%	80	2.50%	3,228	0.336	A	3,280	0.342	A
	NB	2	4,800	16,200	1,373	0.286	A	1,172	0.244	A	98	7.14%	44	3.75%	1,471	0.306	A	1,216	0.253	A
	SB	2	4,800	16,200	1,678	0.350	A	2,028	0.423	B	80	4.77%	36	1.78%	1,758	0.366	B	2,064	0.430	B
10 Walnut Avenue and Oak Avenue	Both	4	9,600	29,300	2,850	0.297	A	2,900	0.302	A	157	5.51%	71	2.45%	3,007	0.313	A	2,971	0.309	A
	NB	2	4,800	14,650	1,283	0.267	A	1,063	0.221	A	86	6.70%	39	3.67%	1,369	0.285	A	1,102	0.230	A
	SB	2	4,800	14,650	1,568	0.327	A	1,837	0.383	B	71	4.53%	32	1.74%	1,639	0.341	A	1,869	0.389	B
11 Oak Avenue and South Greenfield	Both	4	9,600	24,100	2,350	0.245	A	2,350	0.245	A	136	5.79%	61	2.60%	2,486	0.259	A	2,411	0.251	A
	NB	2	4,800	12,050	1,058	0.220	A	861	0.179	A	75	7.09%	34	3.95%	1,133	0.236	A	895	0.186	A
	SB	2	4,800	12,050	1,293	0.269	A	1,489	0.310	A	61	4.72%	27	1.81%	1,354	0.282	A	1,516	0.316	A

Notes:

1. Capacity of freeway lanes based on assumed capacity of 2,400 vphpl, as prescribed by the Highway Capacity Manual.
2. Existing data provided by Caltrans Traffic Census Program 2015, Route 101 District 5.
3. All results shown are for PM Peak Hour conditions.
4. Approved projects from 2007 report are approximately 55% built out. Thus, approved project trips represent 45% of approved project trips from 2007 report.

Table 14

Background Freeway Ramp Analysis

Interchange	Direction	# of Lanes	Type	Capacity (vph)	2007 Report Existing Conditions			Existing Conditions			Approved Project Trips				2007 Report Background Conditions			Background Conditions		
					Volume	V/C	LOS	Volume	V/C	LOS	2007 Report Volume	2007 Report Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
US 101																				
1 Camphora Road[2]	SB to Camphora Road	1	Diagonal	1,830	30	0.020	A	82	0.045	A	0	0.00%	0	0.00%	30	0.020	A	82	0.045	A
	NB from Camphora Road	1	Diagonal	1,830	32	0.021	A	92	0.050	A	0	0.00%	0	0.00%	32	0.021	A	92	0.050	A
	SB from Camphora Road	1	Diagonal	1,830	95	0.063	A	180	0.098	A	20	21.05%	9	5.00%	115	0.077	A	189	0.103	A
	NB to Camphora Road	1	Diagonal	1,830	64	0.043	A	144	0.079	A	16	25.00%	7	5.00%	80	0.053	A	151	0.083	A
2 Moranda Road[3]	SB to Moranda Road	1	Diagonal	1,830	824	0.549	A	969	0.530	A	283	34.34%	127	13.14%	1,107	0.738	C	1,096	0.599	A
	NB from Moranda Road	1	Loop	1,500	242	0.161	A	330	0.220	A	240	99.17%	108	32.73%	482	0.321	A	438	0.292	A
	SB from Moranda Road	1	Loop	1,500	42	0.028	A	69	0.046	A	0	0.00%	0	0.00%	42	0.028	A	69	0.046	A
	NB to Moranda Road	1	Loop	1,500	86	0.057	A	123	0.082	A	0	0.00%	0	0.00%	86	0.057	A	123	0.082	A
3 Front Street[3]	SB to Front Street	1	Loop	1,500	170	0.113	A	240	0.160	A	113	66.47%	51	21.19%	283	0.189	A	291	0.194	A
	NB from Front Street	1	Loop	1,500	135	0.090	A	172	0.115	A	81	60.00%	36	21.19%	216	0.144	A	208	0.139	A
	SB from Front Street	1	Diagonal	1,830	283	0.155	A	385	0.210	A	93	32.86%	42	10.87%	376	0.205	A	427	0.233	A
	NB to Front Street	1	Diagonal	1,830	393	0.215	A	414	0.226	A	115	29.26%	52	12.50%	508	0.278	A	466	0.255	A
4 Arroyo Seco Road[2]	SB to Arroyo Seco Road	1	Diagonal	1,830	88	0.059	A	181	0.099	A	5	5.68%	2	1.24%	93	0.062	A	183	0.100	A
	NB from Arroyo Seco Road	1	Diagonal	1,830	70	0.047	A	179	0.098	A	6	8.57%	3	1.51%	76	0.051	A	182	0.099	A

Notes:

1. Capacity for diagonal ramps (1,830 vphpl) and loop ramps (1,500 vphpl) based on assumed capacity as prescribed by the Highway Capacity Manual
2. Existing data provided by Caltrans Traffic Census Program 2015, Route 101 District 5.
3. Existing ramp volume derived from peak hour turning movement counts.
4. Approved projects from 2007 report are approximately 55% built out. Thus, approved project trips represent 45% of approved project trips from 2007 report.

Table 15

Trip Generation Estimates

TRIP GENERATION RATES[1]	ITE Land Use Code	Daily Trip Rate	PM Peak Hour			
			Peak Hour Rate	% of ADT	% In	% Out
Single-Family Detached Housing	210	9.52	1.00	11%	63%	37%
Apartment	220	6.65	0.62	9%	65%	35%
Senior Adult Housing Detached	251	3.68	0.27	7%	61%	39%
Shopping Center[2]	820	68.15	2.71	4%	44%	56%

GENERATED TRIPS	Project Size	Daily Trips	Peak Hour Trips	% of ADT	In	Out
PROPOSED PROJECT (Revised Project)						
Single-Family Detached Housing (Market Rate)	1,353 Units	12,881	1,353	11%	852	501
Single-Family Detached Housing (Affordable Housing)	169 Units	1,609	169	11%	106	63
Apartment	338 Units	2,248	210	9%	137	73
Senior Adult Housing Detached	132 Units	486	36	7%	22	14
Farmer's Community	400 Units	651	117	18%	59	59
Residential Development	**2,392 Units**	**17,875**	**1,885**	**11%**	**1,176**	**710**
Internal Trip Reduction[3]		**-6,072**	**-241**		**-106**	**-135**
Shopping Center	99,000 SF	6,747	268	4%	118	150
Commercial Development		**6,747**	**268**	**4%**	**118**	**150**
Total Net Trips		**18,549**	**1,912**		**1,187**	**725**

Notes:

1. Trip generation rates published by Institute of Transportation Engineers, "Trip Generation," 9th Edition, 2012.
2. Shopping center trip rates based ITE on fitted curve equation.
3. A reduction of 90% of commercial trips was applied to the residential trips to account for internal trips between residential and commercial land uses.

Table 16

Project Intersection Levels of Service

	N-S Street	E-W Street	Intersection Control	2007 Report Background Conditions		Background Conditions		2007 Report Project Conditions		Total Entering Volume % Increase	Project Conditions	
				Avg. Delay	LOS	Avg. Delay	LOS	Avg. Delay	LOS		Avg. Delay	LOS
1	Moranda Road	US 101 Ramps	TWSC	14	B	15	B	79	F	-17.1%	**65**	**F**
2	Moranda Road	Front Street	TWSC	21	C	22	C	200	F	-17.0%	**166**	**F**
3	San Vicente Road	Front Street	Signal	18	B	18	B	154	F	-18.0%	**126**	**F**
4	West Street	Front Street	AWSC	13	B	16	C	37	E	-2.9%	***36***	***E***
5	Main Street	Front Street	AWSC	12	B	13	B	***29***	***D***	-9.7%	***26***	***D***
6	East Street	Front Street	AWSC	23	C	25	C	27	C	-10.6%	25	C
7	Front Street	Nestles Road	Signal	16	B	18	B	27	C	-9.1%	25	C
8	Front St-US 101 NB Off-Ramp	US 101 NB On-Ramp	Signal	17	B	20	B	18	B	1.2%	20	C
9	Front St-US 101 SB Off-Ramp	US 101 SB On-Ramp	TWSC	19	C	19	C	66	F	-18.2%	**54**	**F**
10	Front St-US 101 SB On-Ramp	Morisoli Road	TWSC	13	B	13	B	17	C	-13.5%	15	B
11	San Vicente Road	Market Street	TWSC	16	C	17	C	129	F	-22.1%	**100**	**F**
12	West Street	Market Street	AWSC	9	A	11	B	***16***	***C***	20.2%	***19***	***C***
13	Main Street	Market Street	AWSC	8	A	11	B	10	A	4.7%	11	B
14	East Street	Market Street	AWSC	16	C	16	C	101	F	-12.2%	***89***	***F***
15	Andalucia Drive	Metz Road	AWSC	20	C	21	C	42	D	-11.2%	37	D
16	San Vicente Road	Gabilan Drive	TWSC	13	B	14	B	441	F	-22.5%	***342***	***F***
17	West Street	Gabilan Drive	Signal	11	B	11	B	64	F	-18.6%	13	B
18	Main Street	Gabilan Drive	AWSC	9	A	10	A	***12***	***B***	-5.5%	***11***	***B***
19	Andalucia Drive	Gabilan Drive	TWSC	16	C	17	C	***19***	***C***	-10.0%	***17***	***C***

Notes:

1. TWSC = Two-way stop-controlled intersection.
2. AWSC = Four-way stop-controlled intersection.
3. Intersections 3 and 17 are now signalized. Existing conditions delay at Intersections 3 and 17 calculated using Traffix analysis software.
4. Intersections 7 and 8 are now signalized. Existing conditions delay at Intersections 7 and 8 referenced from the *Soledad Event Center TIA* , Mott MacDonald, June 2017.
5. Background conditions at Intersection 17 calculated using Traffix analysis software.
6. LOS below LOS standard shown highlighted in red.
7. Significant impacts are shown in **BOLD** and boxed.
8. *Italics* and **BOLD** indicates signal warrant met.
9. All results shown are for PM Peak Hour conditions.

Table 17

Project Intersection Signal Warrant Analysis

	Intersection	2007 Report Existing Conditions	Existing Conditions	2007 Report Background Conditions	Background Conditions	2007 Report Project Conditions	Project Conditions
1	Moranda Road & US 101 NB Ramps	No	No	No	No	No	No
2	Moranda Road & Front Street	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
3	San Vicente Road & Front Street	**Yes**	Already Signalized	**Yes**	Already Signalized	**Yes**	Already Signalized
4	West Street & Front Street	No	No	No	No	**Yes**	**Yes**
5	Main Street & Front Street	No	No	No	No	**Yes**	**Yes**
6	East Street & Front Street	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
7	Front Street & Nestles Road	No	Already Signalized	**Yes**	Already Signalized	**Yes**	Already Signalized
8	Front Street & US 101 NB Ramps	No	Already Signalized	**Yes**	Already Signalized	**Yes**	Already Signalized
9	Front Street & US 101 SB Ramps	No	No	No	No	No	No
10	Front Street & Morisoli Road	No	No	No	No	No	No
11	San Vicente Road & Market Street	No	No	No	No	No	No
12	West Street & Market Street	No	No	No	No	**Yes**	**Yes**
13	Main Street & Market Street	No	No	No	No	No	No
14	East Street & Market Street	No	No	No	No	**Yes**	**Yes**
15	East Street & North Stree/Metz Road	No	No	**Yes**	**Yes**	**Yes**	**Yes**
16	San Vicente Road & Gabilan Drive	No	No	No	No	**Yes**	**Yes**
17	West Street & Gabilan Drive	No	Already Signalized	No	Already Signalized	**Yes**	Already Signalized
18	Main Street & Gabilan Drive	No	No	No	No	**Yes**	**Yes**
19	Andalucia Drive & Gabilan Drive	No	No	No	No	**Yes**	**Yes**

Notes:

1. Signal warrant analysis based on Caltrans Peak Hour Signal Warrant #11.
2. All results shown are for PM Peak Hour conditions.

Table 18

Project Roadway Segment Analysis

Street Segment	Direction	# of Lanes	Capacity (vph)	2007 Report Background Conditions			Background Conditions			Project Trips				2007 Report Project Conditions			Project Conditions		
				Volume	V/C	LOS	Volume	V/C	LOS	2007 Report Volume	2007 Report Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
Front Street																			
1 Moranda Rd and San Vicente Rd	EB	2	2,400	1,254	0.523	A	1,203	0.501	A	**1074**	**85.65%**	634	52.69%	**2,328**	**0.970**	**E**	1,837	0.766	C
	WB	2	2,400	600	0.250	A	509	0.212	A	538	89.67%	317	62.28%	1,138	0.474	A	826	0.344	A
2 San Vicente and West St	EB	2	2,400	730	0.304	A	825	0.344	A	387	53.01%	228	27.64%	1,117	0.465	A	1,053	0.439	A
	WB	2	2,400	353	0.147	A	327	0.136	A	211	59.77%	124	37.95%	564	0.235	A	451	0.188	A
3 West St and Main St	EB	1	1,200	571	0.476	A	553	0.461	A	130	22.77%	77	13.93%	701	0.584	A	630	0.525	A
	WB	1	1,200	358	0.298	A	344	0.286	A	166	46.37%	98	28.51%	524	0.437	A	442	0.368	A
4 Main St and East St	EB	1	1,200	503	0.419	A	408	0.340	A	128	25.45%	76	18.64%	631	0.526	A	484	0.403	A
	WB	1	1,200	427	0.356	A	358	0.298	A	255	59.72%	150	41.93%	682	0.568	A	508	0.423	A
5 East St and Nestles Rd	EB	1	1,200	692	0.577	A	588	0.490	A	314	45.38%	185	31.48%	1,006	0.838	D	773	0.644	B
	WB	1	1,200	825	0.688	B	781	0.651	B	**627**	**76.00%**	**370**	**47.40%**	**1,452**	**1.210**	**F**	**1,151**	**0.959**	**E**
Gabilan Drive																			
6 San Vicente Rd and West St	EB	2	2,400	309	0.129	A	260	0.108	A	351	113.59%	207	79.51%	660	0.275	A	467	0.195	A
	WB	2	2,400	231	0.096	A	236	0.098	A	186	80.52%	110	46.59%	417	0.174	A	346	0.144	A
7 West St and Andalucia Dr	EB	2	2,400	405	0.169	A	407	0.170	A	95	23.46%	56	13.75%	500	0.208	A	463	0.193	A
	WB	2	2,400	344	0.143	A	291	0.121	A	148	43.02%	87	29.94%	492	0.205	A	378	0.157	A
San Vicente Road																			
8 Market St and Gabilan Dr	NB	1	1,200	500	0.417	A	485	0.404	A	**738**	**147.60%**	435	89.77%	**1,238**	**1.032**	**F**	920	0.766	C
	SB	1	1,200	298	0.248	A	329	0.274	A	370	124.16%	218	66.29%	668	0.557	A	547	0.456	A
9 North of Gabilan Dr	NB	1	1,200	139	0.116	A	184	0.154	A	463	333.09%	273	148.17%	602	0.502	A	457	0.381	A
	SB	1	1,200	81	0.068	A	117	0.097	A	262	323.46%	155	132.71%	343	0.286	A	272	0.227	A
West Street																			
10 Market St and Gabilan Dr	NB	2	2,400	261	0.109	A	416	0.173	A	479	183.52%	283	68.09%	740	0.308	A	699	0.291	A
	SB	2	2,400	132	0.055	A	204	0.085	A	240	181.82%	142	69.56%	372	0.155	A	346	0.144	A
11 North of Gabilan Dr	NB	2	2,400	201	0.084	A	286	0.119	A	924	459.70%	545	190.26%	1,125	0.469	A	831	0.346	A
	SB	2	2,400	135	0.056	A	217	0.091	A	471	348.89%	278	127.85%	606	0.253	A	495	0.206	A

Notes:

1. Capacity of roadways based on assumed capacity of 1,200 vphpl and existing lanes on roadways.
2. **BOLD** indicates significant increase in roadway segment volume and LOS.
3. LOS below LOS standard shown highlighted in red.
4. All results shown are for PM Peak Hour conditions.

Table 19

Project Freeway Segment Analysis

Freeway Segment	Direction	# of Lanes	Capacity (vph)	24-Hr Tot Volume	2007 Report Background Conditions			Background Conditions			Project Trips				2007 Report Project Conditions			Project Conditions		
					Volume	V/C	LOS	Volume	V/C	LOS	2007 Report Volume	2007 Report Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
US 101																				
1 North Gonzales and Gonzales-5th Street	Both	4	9,600	39,800	4,903	0.511	B	4,476	0.466	B	1,755	35.79%	865	19.32%	6,658	0.694	C	5,341	0.556	C
	NB	2	4,800	19,900	1,985	0.414	B	1,658	0.345	A	1,316	66.30%	289	17.40%	3,301	0.688	C	1,947	0.406	B
	SB	2	4,800	19,900	2,918	0.608	C	2,818	0.587	C	439	15.04%	576	20.45%	3,357	0.699	C	3,394	0.707	C
2 Gonzales-5th Street and Gloria Road	Both	4	9,600	37,700	4,824	0.503	B	4,409	0.459	B	2,006	41.58%	901	20.43%	6,830	0.711	C	5,310	0.553	C
	NB	2	4,800	18,850	1,957	0.408	B	1,637	0.341	A	1,504	76.85%	301	18.36%	3,461	0.721	C	1,938	0.404	B
	SB	2	4,800	18,850	2,868	0.598	C	2,772	0.578	C	502	17.50%	600	21.65%	3,370	0.702	C	3,372	0.703	C
3 Gloria Road and Soledad Prison	Both	4	9,600	40,100	3,996	0.416	B	3,541	0.369	B	2,256	56.46%	1,001	28.27%	6,252	0.651	C	4,542	0.473	B
	NB	2	4,800	20,050	1,629	0.339	A	1,321	0.275	A	1,692	103.87%	334	25.28%	3,321	0.692	C	1,655	0.345	A
	SB	2	4,800	20,050	2,367	0.493	B	2,220	0.463	B	564	23.83%	667	30.04%	2,931	0.611	C	2,887	0.601	C
4 Soledad Prison and Camphora	Both	4	9,600	38,500	3,832	0.399	B	3,457	0.360	B	2,382	62.16%	1,054	30.48%	6,214	0.647	C	4,511	0.470	B
	NB	2	4,800	19,250	1,565	0.326	A	1,291	0.269	A	1,786	114.12%	352	27.23%	3,351	0.698	C	1,643	0.342	A
	SB	2	4,800	19,250	2,267	0.472	B	2,166	0.451	B	596	26.29%	702	32.41%	2,863	0.596	C	2,868	0.598	C
5 Camphora and North Soledad	Both	4	9,600	39,000	5,018	0.523	B	4,573	0.476	B	1,880	37.47%	1,109	24.25%	6,898	0.719	C	5,682	0.592	C
	NB	2	4,800	19,500	2,041	0.425	B	1,701	0.354	A	627	30.72%	370	21.75%	2,668	0.556	C	2,071	0.431	B
	SB	2	4,800	19,500	2,977	0.620	C	2,872	0.598	C	1,253	42.09%	739	25.73%	4,230	0.881	D	3,611	0.752	C
6 North Soledad and South Soledad	Both	4	9,600	37,200	3,994	0.416	B	4,137	0.431	B	483	12.09%	285	6.89%	4,477	0.466	B	4,422	0.461	B
	NB	2	4,800	18,600	1,601	0.334	A	1,520	0.317	A	197	12.30%	116	7.63%	1,798	0.375	B	1,636	0.341	A
	SB	2	4,800	18,600	2,393	0.499	B	2,617	0.545	B	286	11.95%	169	6.46%	2,679	0.558	C	2,786	0.580	C
7 South Soledad and Arroyo Seco Road	Both	4	9,600	37,500	3,909	0.407	B	4,144	0.432	B	537	13.74%	317	7.65%	4,446	0.463	B	4,461	0.465	B
	NB	2	4,800	18,750	1,780	0.371	B	1,536	0.320	A	358	20.11%	211	13.74%	2,138	0.445	B	1,747	0.364	B
	SB	2	4,800	18,750	2,129	0.444	B	2,608	0.543	B	179	8.41%	106	4.06%	2,308	0.481	B	2,714	0.565	C
8 Arroyo Seco Road and North Greenfield	Both	4	9,600	34,700	3,749	0.391	B	3,689	0.384	B	510	13.60%	301	8.16%	4,259	0.444	B	3,990	0.416	B
	NB	2	4,800	17,350	1,707	0.356	A	1,368	0.285	A	340	19.92%	201	14.69%	2,047	0.426	B	1,569	0.327	A
	SB	2	4,800	17,350	2,042	0.425	B	2,321	0.484	B	170	8.33%	100	4.31%	2,212	0.461	B	2,421	0.504	B
9 North Greenfield and Walnut Avenue	Both	4	9,600	32,400	3,228	0.336	A	3,280	0.342	A	456	14.13%	269	8.20%	3,684	0.384	B	3,549	0.370	B
	NB	2	4,800	16,200	1,471	0.306	A	1,216	0.253	A	304	20.67%	179	14.72%	1,775	0.370	B	1,395	0.291	A
	SB	2	4,800	16,200	1,758	0.366	B	2,064	0.430	B	152	8.65%	90	4.36%	1,910	0.398	B	2,154	0.449	B
10 Walnut Avenue and Oak Avenue	Both	4	9,600	29,300	3,007	0.313	A	2,971	0.309	A	403	13.40%	238	8.01%	3,410	0.355	A	3,209	0.334	A
	NB	2	4,800	14,650	1,369	0.285	A	1,102	0.230	A	269	19.65%	159	14.43%	1,638	0.341	A	1,261	0.263	A
	SB	2	4,800	14,650	1,639	0.341	A	1,869	0.389	B	134	8.18%	79	4.23%	1,773	0.369	B	1,948	0.406	B
11 Oak Avenue and South Greenfield	Both	4	9,600	24,100	2,486	0.259	A	2,411	0.251	A	349	14.04%	205	8.50%	2,835	0.295	A	2,616	0.273	A
	NB	2	4,800	12,050	1,133	0.236	A	895	0.186	A	233	20.56%	137	15.31%	1,366	0.285	A	1,032	0.215	A
	SB	2	4,800	12,050	1,354	0.282	A	1,516	0.316	A	116	8.57%	68	4.49%	1,470	0.306	A	1,584	0.330	A

Notes:

1. Capacity of freeway lanes based on assumed capacity of 2,400 vphpl, as prescribed by the Highway Capacity Manual.
2. Existing data provided by Caltrans Traffic Census Program 2015, Route 101 District 5.
3. All results shown are for PM Peak Hour conditions.
4. Approved projects from 2007 report are approximately 55% built out. Thus, approved project trips represent 45% of approved project trips from 2007 report.

Table 20

Project Freeway Ramp Analysis

Interchange	Direction	# of Lanes	Type	Capacity (vph)	2007 Report Background Conditions			Background Conditions			Project Trips				2007 Report Project Conditions			Project Conditions		
					Volume	V/C	LOS	Volume	V/C	LOS	2007 Report Volume	2007 Report Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
US 101																				
1 Camphora Road[2]	SB to Camphora Road	1	Diagonal	1,830	30	0.020	A	82	0.045	A	0	0.00%	0	0.00%	30	0.020	A	82	0.045	A
	NB from Camphora Road	1	Diagonal	1,830	32	0.021	A	92	0.050	A	0	0.00%	0	0.00%	32	0.021	A	92	0.050	A
	SB from Camphora Road	1	Diagonal	1,830	115	0.077	A	189	0.103	A	63	54.78%	37	19.58%	178	0.119	A	226	0.123	A
	NB to Camphora Road	1	Diagonal	1,830	80	0.053	A	151	0.083	A	31	38.75%	18	11.90%	111	0.074	A	169	0.092	A
2 Moranda Road[3]	SB to Moranda Road	1	Diagonal	1,830	1,107	0.738	C	1,096	0.599	A	**1,002**	**90.51%**	**591**	**53.91%**	**2,109**	**1.406**	**F**	**1,687**	**0.922**	**E**
	NB from Moranda Road	1	Loop	1,500	482	0.321	A	438	0.292	A	502	104.15%	296	67.58%	984	0.656	C	734	0.489	A
	SB from Moranda Road	1	Loop	1,500	42	0.028	A	69	0.046	A	36	85.71%	21	30.43%	78	0.052	A	90	0.060	A
	NB to Moranda Road	1	Loop	1,500	86	0.057	A	123	0.082	A	72	83.72%	42	34.15%	158	0.105	A	165	0.110	A
3 Front Street[3]	SB to Front Street	1	Loop	1,500	283	0.189	A	291	0.194	A	251	88.69%	148	50.89%	534	0.356	A	439	0.293	A
	NB from Front Street	1	Loop	1,500	216	0.144	A	208	0.139	A	125	57.87%	74	35.50%	341	0.227	A	282	0.188	A
	SB from Front Street	1	Diagonal	1,830	376	0.205	A	427	0.233	A	143	38.03%	84	19.68%	519	0.284	A	511	0.279	A
	NB to Front Street	1	Diagonal	1,830	508	0.278	A	466	0.255	A	286	56.30%	169	36.29%	794	0.434	B	635	0.347	A
4 Arroyo Seco Road[2]	SB to Arroyo Seco Road	1	Diagonal	1,830	93	0.062	A	183	0.100	A	9	9.68%	5	2.73%	102	0.068	A	188	0.103	A
	NB from Arroyo Seco Road	1	Diagonal	1,830	76	0.051	A	182	0.099	A	18	23.68%	11	6.05%	94	0.063	A	193	0.105	A

Notes:

1. Capacity for diagonal ramps (1,830 vphpl) and loop ramps (1,500 vphpl) based on assumed capacity as prescribed by the Highway Capacity Manual
2. Existing data provided by Caltrans Traffic Census Program 2015, Route 101 District 5.
3. Existing ramp volume derived from peak hour turning movement counts.
4. Approved projects from 2007 report are approximately 55% built out. Thus, approved project trips represent 45% of approved project trips from 2007 report.

Table 21

Project Intersection Levels of Service with Mitigation

	N-S Street	E-W Street	Intersection Control	2007 Report Background Conditions		Background Conditions		2007 Report Project Conditions		Total Entering Volume % Increase	Project Conditions		2007 Report Project Mitigated		Project Mitigated		2007 Report Project With Gabilan Ext.		Project With Gabilan Ext.	
				Avg. Delay	LOS	Avg. Delay	LOS	Avg. Delay	LOS		Avg. Delay	LOS	Avg. Delay	LOS	Avg. Delay	LOS	Avg. Delay	LOS	Avg. Delay	LOS
1	Moranda Road	US 101 Ramps	TWSC	14	B	15	B	79	F	-17.1%	**65**	**F**	12	B	10	A	12	B	10	A
2	Moranda Road	Front Street	TWSC	21	C	22	C	200	F	-17.0%	**166**	**F**	6	A	5	A	14	B	12	B
3	San Vicente Road	Front Street	Signal	18	B	18	B	154	F	-18.0%	**126**	**F**	15	B	12	B	20	B	16	B
4	West Street	Front Street	AWSC	13	B	16	C	37	E	-2.9%	***36***	***E***	21	C	20	C	12	B	12	B
5	Main Street	Front Street	AWSC	12	B	13	B	***29***	***D***	-9.7%	***26***	***D***	23	C	21	C	22	C	20	C
6	East Street	Front Street	AWSC	23	C	25	C	27	C	-10.6%	25	C					27	C	24	C
7	Front Street	Nestles Road	Signal	16	B	18	B	27	C	-9.1%	25	C					23	C	21	C
8	Front St-US 101 NB Off-Ramp	US 101 NB On-Ramp	Signal	17	B	20	B	18	B	1.2%	20	C					24	C	24	C
9	Front St-US 101 SB Off-Ramp	US 101 SB On-Ramp	TWSC	19	C	19	C	66	F	-18.2%	**54**	**F**	8	A	7	A	8	A	7	A
10	Front St-US 101 SB On-Ramp	Morisoli Road	TWSC	13	B	13	B	17	C	-13.5%	15	B					16	C	14	B
11	San Vicente Road	Market Street	TWSC	16	C	17	C	129	F	-22.1%	**100**	**F**	8	A	6	A	19	C	15	B
12	West Street	Market Street	AWSC	9	A	11	B	***16***	***C***	20.2%	***19***	***C***	7	A	8	A	11	B	13	B
13	Main Street	Market Street	AWSC	8	A	11	B	10	A	4.7%	11	B					9	A	9	A
14	East Street	Market Street	AWSC	16	C	16	C	101	F	-12.2%	***89***	***F***					6	A	5	A
15	Andalucia Drive	Metz Road	AWSC	20	C	21	C	42	D	-11.2%	37	D					32	C	28	C
16	San Vicente Road	Gabilan Drive	TWSC	13	B	14	B	441	F	-22.5%	***342***	***F***	12	B	9	A	17	C	13	B
17	West Street	Gabilan Drive	Signal	11	B	11	B	64	F	-18.6%	13	B	37	D	30	C	37	D	30	C
18	Main Street	Gabilan Drive	AWSC	9	A	10	A	***12***	***B***	-5.5%	***11***	***B***	16	C	15	C	11	B	10	B
19	Andalucia Drive	Gabilan Drive	TWSC	16	C	17	C	***19***	***C***	-10.0%	***17***	***C***					22	C	20	C

Notes:

1. TWSC = Two-way stop-controlled intersection.
2. AWSC = Four-way stop-controlled intersection.
3. Intersections 3 and 17 are now signalized. Existing conditions delay at Intersections 3 and 17 calculated using Traffix analysis software.
4. Intersections 7 and 8 are now signalized. Existing conditions delay at Intersections 7 and 8 referenced from the *Soledad Event Center TIA* , Mott MacDonald, June 2017.
5. Background conditions at Intersection 17 calculated using Traffix analysis software.
6. LOS below LOS standard shown highlighted in red.
7. Significant impacts are shown in **BOLD** and boxed.
8. *Italics* and **BOLD** indicates signal warrant met.
9. All results shown are for PM Peak Hour conditions.

Table 22

Cumulative Project Trip Generation Estimates

		Daily		AM Peak Hour				PM Peak Hour			
Land Use	Size	Rate /a/	Trips	Rate /a/	In	Out	Total	Rate /a/	In	Out	Total
The Village at Soledad											
Shopping Center /d/	140,000 s.f.	42.94	6,012	1.03	88	56	144	3.75	252	273	525
Hotel /e/	68 Rooms	8.17	556	0.56	23	15	38	0.59	21	19	40
Totals			6,567		111	71	182		273	292	565
Soledad Plaza											
Shopping Center /d/	536,224 s.f.	42.94	23,025	1.03	337	215	552	3.75	965	1046	2011
263 Front Street											
Specialty Retail Center /c/	12,200 s.f.	44.32	541	1.35	8	9	16	2.71	15	19	33
Residential /b/	102 units	5.86	598	0.44	8	37	45	0.52	36	18	53
Totals			1,138		16	46	61		50	36	86
Total All Approved Projects			**30,731**		**464**	**332**	**796**		**1,289**	**1,374**	**2,662**

Notes:
/a/ Rates expressed in trips per dwelling units.
/b/ Trip Generation rates for residential condominium/townhouse (ITE Land Use #230) used for this project.
/c/ Trip Generation rates for specialty retail center (ITE Land Use #814) used for this project.
/d/ Trip Generation rates for shopping center (ITE Land Use #820) used for this project.
/e/ Trip Generation rates for hotel (ITE Land Use #310) used for this project.

Source for rates: *ITE Trip Generation, Seventh Edition.*

Table 23

Cumulative Conditions Intersection Levels of Service

	N-S Street	E-W Street	Intersection Control	Intersection Control	2007 Report Cumulative No Project Conditions		Total Entering Volume % Increase	Cumulative No Project Conditions		2007 Report Cumulative With Project No Gabilan Extension		2007 Report Cumulative With Project With Gablian Extension		Total Entering Volume % Increase	Cumulative With Project No Gablian Extension		Cumulative With Project With Gabilan Extension	
					Avg. Delay	LOS		Avg. Delay	LOS	Avg. Delay	LOS	Avg. Delay	LOS		Avg. Delay	LOS	Avg. Delay	LOS
1	Moranda Road	US 101 Ramps	TWSC	Signal	16	B	0.0%	16	B	18	B	12	B	-17.5%	15	B	10	A
2	Moranda Road	Front Street	TWSC	Signal	20	B	0.0%	20	B	13	B	16	B	-15.3%	11	B	14	B
3	San Vicente Road	Front Street	Signal	Signal	20	B	0.0%	20	B	16	B	22	C	-17.1%	13	B	18	B
4	West Street	Front Street	AWSC	Signal	21	C	0.0%	21	C	32	C	14	B	-2.8%	31	C	14	B
5	Main Street	Front Street	AWSC	Signal	21	C	0.0%	21	C	22	C	20	B	-9.7%	20	B	18	B
6	East Street	Front Street	AWSC	Signal	25	C	0.0%	25	C	35	D	34	C	-12.8%	31	C	30	C
7	Front Street	Nestles Road	Signal	Signal	22	C	0.0%	22	C	48	D	44	D	-12.5%	42	D	39	D
8	Front St-US 101 NB Off-Ramp	US 101 NB On-Ramp	Signal	Signal	18	B	0.0%	18	B	18	B	24	C	-9.4%	16	B	22	C
9	Front St-US 101 SB Off-Ramp	US 101 SB On-Ramp	TWSC	Signal	21	C	0.0%	21	C	15	B	16	B	-17.6%	12	B	13	B
10	Front St-US 101 SB On-Ramp	Morisoli Road	TWSC	TWSC	13	B	0.0%	13	B	18	C	17	C	-14.0%	16	C	15	B
11	San Vicente Road	Market Street	TWSC	Signal	30	C	0.0%	***30***	***C***	10	A	10	B	-18.5%	8	A	8	A
12	West Street	Market Street	AWSC	Signal	10	A	0.0%	10	A	9	A	11	B	-10.2%	8	A	10	A
13	Main Street	Market Street	AWSC	AWSC	9	A	0.0%	9	A	11	B	9	A	-8.6%	10	A	8	A
14	East Street	Market Street	AWSC	Signal	27	C	0.0%	***27***	***C***	8	A	7	A	-12.0%	***7***	***A***	6	A
15	Andalucia Drive	Metz Road	AWSC	Signal	20	C	0.0%	20	C	49	D	36	D	-11.8%	43	D	32	C
16	San Vicente Road	Gabilan Drive	TWSC	Signal	21	C	0.0%	21	C	29	C	32	C	-14.8%	25	C	27	C
17	West Street	Gabilan Drive	Signal	Signal	14	B	0.0%	14	B	43	D	40	D	-16.2%	36	D	34	C
18	Main Street	Gabilan Drive	AWSC	Signal	11	B	0.0%	11	B	17	B	16	B	-8.2%	16	B	15	B
19	Andalucia Drive	Gabilan Drive	TWSC	TWSC	18	C	0.0%	18	C	23	C	23	C	-8.9%	21	C	21	C

Notes:

1. TWSC = Two-way stop-controlled intersection.
2. AWSC = Four-way stop-controlled intersection.
3. Intersections 3 and 17 are now signalized. Existing conditions delay at Intersections 3 and 17 calculated using Traffix analysis software.
4. Intersections 7 and 8 are now signalized. Existing conditions delay at Intersections 7 and 8 referenced from the *Soledad Event Center TIA* , Mott MacDonald, June 2017.
5. Background conditions at Intersection 17 calculated using Traffix analysis software.
6. LOS below LOS standard shown highlighted in red.
7. Significant impacts are shown in **BOLD** and boxed.
8. *Italics* and **BOLD** indicates signal warrant met.
9. All results shown are for PM Peak Hour conditions.

Table 24

Cumulative Intersection Signal Warrant Analysis

Intersection	2007 Report Existing Conditions	Existing Conditions	2007 Report Background Conditions	Background Conditions	2007 Report Project Conditions	Project Conditions	2007 Report Cumulative Conditions	Cumulative Conditions
1 Moranda Road & US 101 NB Ramps	No	No	No	No	No	No	**Yes**	**Yes**
2 Moranda Road & Front Street	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
3 San Vicente Road & Front Street	**Yes**	Already Signalized	**Yes**	Already Signalized	**Yes**	Already Signalized	**Yes**	Already Signalized
4 West Street & Front Street	No	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**
5 Main Street & Front Street	No	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**
6 East Street & Front Street	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
7 Front Street & Nestles Road	No	Already Signalized	**Yes**	Already Signalized	**Yes**	Already Signalized	**Yes**	Already Signalized
8 Front Street & US 101 NB Ramps	No	Already Signalized	**Yes**	Already Signalized	**Yes**	Already Signalized	**Yes**	Already Signalized
9 Front Street & US 101 SB Ramps	No	No	No	No	No	No	No	No
10 Front Street & Morisoli Road	No	No	No	No	No	No	No	No
11 San Vicente Road & Market Street	No	No	No	No	No	No	**Yes**	**Yes**
12 West Street & Market Street	No	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**
13 Main Street & Market Street	No	No	No	No	No	No	No	No
14 East Street & Market Street	No	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**
15 East Street & North Stree/Metz Road	No	No	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
16 San Vicente Road & Gabilan Drive	No	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**
17 West Street & Gabilan Drive	No	Already Signalized	No	Already Signalized	**Yes**	Already Signalized	**Yes**	Already Signalized
18 Main Street & Gabilan Drive	No	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**
19 Andalucia Drive & Gabilan Drive	No	No	No	No	**Yes**	**Yes**	**Yes**	**Yes**

Notes:

1. Signal warrant analysis based on Caltrans Peak Hour Signal Warrant #11.

2. All results shown are for PM Peak Hour conditions.

Table 25

Cumulative Roadway Segment Analysis (No Project)

Street Segment	Direction	# of Lanes	Capacity (vph)	2007 Report Background Conditions			Background Conditions			Cumulative Trips				2007 Report Cumulative Conditions			Cumulative Conditions		
				Volume	V/C	LOS	Volume	V/C	LOS	2007 Report Volume	2007 Report Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
Front Street																			
1 Moranda Rd and San Vicente Rd	EB	2	2,400	1,254	0.523	A	1,203	0.501	A	49	3.91%	49	4.07%	1,303	0.543	A	1,252	0.522	A
	WB	2	2,400	600	0.250	A	509	0.212	A	39	6.50%	39	7.66%	639	0.266	A	548	0.228	A
2 San Vicente and West St	EB	2	2,400	730	0.304	A	825	0.344	A	158	21.64%	158	19.16%	888	0.370	A	983	0.409	A
	WB	2	2,400	353	0.147	A	327	0.136	A	157	44.48%	157	48.05%	510	0.213	A	484	0.202	A
3 West St and Main St	EB	1	1,200	571	0.476	A	553	0.461	A	156	27.32%	156	28.22%	727	0.606	A	709	0.591	A
	WB	1	1,200	358	0.298	A	344	0.286	A	153	42.74%	153	44.51%	511	0.426	A	497	0.414	A
4 Main St and East St	EB	1	1,200	503	0.419	A	408	0.340	A	145	28.83%	145	35.56%	648	0.540	A	553	0.461	A
	WB	1	1,200	427	0.356	A	358	0.298	A	160	37.47%	160	44.72%	587	0.489	A	518	0.431	A
5 East St and Nestles Rd	EB	1	1,200	692	0.577	A	588	0.490	A	207	29.91%	207	35.23%	899	0.749	C	795	0.662	B
	WB	1	1,200	825	0.688	B	781	0.651	B	228	27.64%	228	29.21%	1,053	0.878	D	1,009	0.841	D
Gabilan Drive																			
6 San Vicente Rd and West St	EB	2	2,400	309	0.129	A	260	0.108	A	235	76.05%	235	90.26%	544	0.227	A	495	0.206	A
	WB	2	2,400	231	0.096	A	236	0.098	A	217	93.94%	217	91.91%	448	0.187	A	453	0.189	A
7 West St and Andalucia Dr	EB	2	2,400	405	0.169	A	407	0.170	A	157	38.77%	157	38.55%	562	0.234	A	564	0.235	A
	WB	2	2,400	344	0.143	A	291	0.121	A	145	42.15%	145	49.90%	489	0.204	A	436	0.182	A
San Vicente Road																			
8 Market St and Gabilan Dr	NB	1	1,200	500	0.417	A	485	0.404	A	241	48.20%	241	49.74%	741	0.618	B	726	0.605	A
	SB	1	1,200	298	0.248	A	329	0.274	A	237	79.53%	237	72.07%	535	0.446	A	566	0.472	A
9 North of Gabilan Dr	NB	1	1,200	139	0.116	A	184	0.154	A	535	384.89%	535	290.37%	674	0.562	A	719	0.599	A
	SB	1	1,200	81	0.068	A	117	0.097	A	492	607.41%	492	421.23%	573	0.478	A	609	0.507	A
West Street																			
10 Market St and Gabilan Dr	NB	2	2,400	261	0.109	A	416	0.173	A	29	11.11%	29	6.98%	290	0.121	A	445	0.185	A
	SB	2	2,400	132	0.055	A	204	0.085	A	26	19.70%	26	12.74%	158	0.066	A	230	0.096	A
11 North of Gabilan Dr	NB	2	2,400	201	0.084	A	286	0.119	A	54	26.87%	54	18.85%	255	0.106	A	340	0.142	A
	SB	2	2,400	135	0.056	A	217	0.091	A	49	36.30%	49	22.53%	184	0.077	A	266	0.111	A

Notes:

1. Capacity of roadways based on assumed capacity of 1,200 vphpl and existing lanes on roadways.
2. **BOLD** indicates significant increase in roadway segment volume and LOS.
3. LOS below LOS standard shown highlighted in red.
4. All results shown are for PM Peak Hour conditions.

Table 26

Cumulative Roadway Segment Analysis (With Project)

Street Segment	Direction	# of Lanes	Capacity (vph)	2007 Report Cumulative No Project Conditions			Cumulative No Project Conditions			Project Trips				2007 Report Cumulative With Project Conditions			Cumulative With Project Conditions		
				Volume	V/C	LOS	Volume	V/C	LOS	2007 Report Volume	2007 Report Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
Front Street																			
1 Moranda Rd and San Vicente Rd	EB	2	2,400	1,303	0.543	A	1,252	0.522	A	1074	82.43%	634	50.62%	2,377	0.990	E	1,886	0.786	C
	WB	2	2,400	639	0.266	A	548	0.228	A	538	84.19%	317	57.85%	1,177	0.490	A	865	0.360	A
2 San Vicente and West St	EB	2	2,400	888	0.370	A	983	0.409	A	387	43.58%	228	23.20%	1,275	0.531	A	1,211	0.504	A
	WB	2	2,400	510	0.213	A	484	0.202	A	211	41.37%	124	25.63%	721	0.300	A	608	0.253	A
3 West St and Main St	EB	1	1,200	727	0.606	A	709	0.591	A	130	17.88%	77	10.86%	857	0.714	C	786	0.655	B
	WB	1	1,200	511	0.426	A	497	0.414	A	166	32.49%	98	19.73%	677	0.564	A	595	0.496	A
4 Main St and East St	EB	1	1,200	648	0.540	A	553	0.461	A	128	19.75%	76	13.75%	776	0.647	B	629	0.524	A
	WB	1	1,200	587	0.489	A	518	0.431	A	255	43.44%	150	28.97%	842	0.702	B	668	0.556	A
5 East St and Nestles Rd	EB	1	1,200	899	0.749	C	795	0.662	B	**314**	**34.93%**	185	23.28%	**1,213**	**1.011**	F	980	0.816	D
	WB	1	1,200	1,053	0.878	D	1,009	0.841	D	627	59.54%	**370**	**36.68%**	1,680	1.400	F	**1,379**	**1.149**	F
Gabilan Drive																			
6 San Vicente Rd and West St	EB	2	2,400	544	0.227	A	495	0.206	A	351	64.52%	207	41.79%	895	0.373	A	702	0.293	A
	WB	2	2,400	448	0.187	A	453	0.189	A	186	41.52%	110	24.28%	634	0.264	A	563	0.235	A
7 West St and Andalucia Dr	EB	2	2,400	562	0.234	A	564	0.235	A	95	16.90%	56	9.92%	657	0.274	A	620	0.258	A
	WB	2	2,400	489	0.204	A	436	0.182	A	148	30.27%	87	19.97%	637	0.265	A	523	0.218	A
San Vicente Road																			
8 Market St and Gabilan Dr	NB	1	1,200	741	0.618	B	726	0.605	A	738	99.60%	**435**	**59.95%**	1,479	1.233	F	**1,161**	**0.967**	E
	SB	1	1,200	535	0.446	A	566	0.472	A	370	69.16%	218	38.53%	905	0.754	C	784	0.653	B
9 North of Gabilan Dr	NB	1	1,200	674	0.562	A	719	0.599	A	**463**	**68.69%**	273	37.96%	**1,137**	**0.948**	E	992	0.827	D
	SB	1	1,200	573	0.478	A	609	0.507	A	262	45.72%	155	25.46%	835	0.696	B	764	0.637	B
West Street																			
10 Market St and Gabilan Dr	NB	2	2,400	290	0.121	A	445	0.185	A	479	165.17%	283	63.65%	769	0.320	A	728	0.303	A
	SB	2	2,400	158	0.066	A	230	0.096	A	240	151.90%	142	61.70%	398	0.166	A	372	0.155	A
11 North of Gabilan Dr	NB	2	2,400	255	0.106	A	340	0.142	A	924	362.35%	545	160.08%	1,179	0.491	A	885	0.369	A
	SB	2	2,400	184	0.077	A	266	0.111	A	471	255.98%	278	104.33%	655	0.273	A	544	0.227	A

Notes:

1. Capacity of roadways based on assumed capacity of 1,200 vphpl and existing lanes on roadways.
2. **BOLD** indicates significant increase in roadway segment volume and LOS.
3. LOS below LOS standard shown highlighted in red.
4. All results shown are for PM Peak Hour conditions.

Table 27

Cumulative Freeway Segment Analysis (No Project)

Freeway Segment	Direction	# of Lanes	Capacity (vph)	2007 Report Background Conditions			Background Conditions			Cumulative Trips				2007 Report Cumulative No Project Conditions			Cumulative No Project Conditions		
				Volume	V/C	LOS	Volume	V/C	LOS	2007 Report Volume	2007 Report Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
US 101																			
1 North Gonzales and Gonzales-5th Street	Both	4	9,600	4,903	0.511	B	4,476	0.466	B	200	4.08%	200	4.47%	5,103	0.532	B	4,676	0.487	B
	NB	2	4,800	1,985	0.414	B	1,658	0.345	A	135	6.80%	135	8.14%	2,120	0.442	B	1,793	0.374	B
	SB	2	4,800	2,918	0.608	C	2,818	0.587	C	64	2.19%	64	2.27%	2,982	0.621	C	2,882	0.600	C
2 Gonzales-5th Street and Gloria Road	Both	4	9,600	4,824	0.503	B	4,409	0.459	B	228	4.73%	228	5.17%	5,052	0.526	B	4,637	0.483	B
	NB	2	4,800	1,957	0.408	B	1,637	0.341	A	154	7.87%	154	9.41%	2,111	0.440	B	1,791	0.373	B
	SB	2	4,800	2,868	0.598	C	2,772	0.578	C	74	2.58%	74	2.67%	2,942	0.613	C	2,846	0.593	C
3 Gloria Road and Soledad Prison	Both	4	9,600	3,996	0.416	B	3,541	0.369	B	257	6.43%	257	7.26%	4,253	0.443	B	3,798	0.396	B
	NB	2	4,800	1,629	0.339	A	1,321	0.275	A	174	10.68%	174	13.17%	1,803	0.376	B	1,495	0.311	A
	SB	2	4,800	2,367	0.493	B	2,220	0.463	B	83	3.51%	83	3.74%	2,450	0.510	B	2,303	0.480	B
4 Soledad Prison and Camphora	Both	4	9,600	3,832	0.399	B	3,457	0.360	B	270	7.05%	270	7.81%	4,102	0.427	B	3,727	0.388	B
	NB	2	4,800	1,565	0.326	A	1,291	0.269	A	183	11.69%	183	14.18%	1,748	0.364	B	1,474	0.307	A
	SB	2	4,800	2,267	0.472	B	2,166	0.451	B	87	3.84%	87	4.02%	2,354	0.490	B	2,253	0.469	B
5 Camphora and North Soledad	Both	4	9,600	5,018	0.523	B	4,573	0.476	B	193	3.85%	193	4.22%	5,211	0.543	B	4,766	0.496	B
	NB	2	4,800	2,041	0.425	B	1,701	0.354	A	92	4.51%	92	5.41%	2,133	0.444	B	1,793	0.374	B
	SB	2	4,800	2,977	0.620	C	2,872	0.598	C	101	3.39%	101	3.52%	3,078	0.641	C	2,973	0.619	C
6 North Soledad and South Soledad	Both	4	9,600	3,994	0.416	B	4,137	0.431	B	356	8.91%	356	8.61%	4,350	0.453	B	4,493	0.468	B
	NB	2	4,800	1,601	0.334	A	1,520	0.317	A	172	10.74%	172	11.32%	1,773	0.369	B	1,692	0.353	A
	SB	2	4,800	2,393	0.499	B	2,617	0.545	B	184	7.69%	184	7.03%	2,577	0.537	B	2,801	0.584	C
7 South Soledad and Arroyo Seco Road	Both	4	9,600	3,909	0.407	B	4,144	0.432	B	399	10.21%	399	9.63%	4,308	0.449	B	4,543	0.473	B
	NB	2	4,800	1,780	0.371	B	1,536	0.320	A	194	10.90%	194	12.63%	1,974	0.411	B	1,730	0.360	B
	SB	2	4,800	2,129	0.444	B	2,608	0.543	B	205	9.63%	205	7.86%	2,334	0.486	B	2,813	0.586	C
8 Arroyo Seco Road and North Greenfield	Both	4	9,600	3,749	0.391	B	3,689	0.384	B	379	10.11%	379	10.27%	4,128	0.430	B	4,068	0.424	B
	NB	2	4,800	1,707	0.356	A	1,368	0.285	A	184	10.78%	184	13.45%	1,891	0.394	B	1,552	0.323	A
	SB	2	4,800	2,042	0.425	B	2,321	0.484	B	195	9.55%	195	8.40%	2,237	0.466	B	2,516	0.524	B
9 North Greenfield and Walnut Avenue	Both	4	9,600	3,228	0.336	A	3,280	0.342	A	339	10.50%	339	10.34%	3,567	0.372	B	3,619	0.377	B
	NB	2	4,800	1,471	0.306	A	1,216	0.253	A	165	11.22%	165	13.57%	1,636	0.341	A	1,381	0.288	A
	SB	2	4,800	1,758	0.366	B	2,064	0.430	B	174	9.90%	174	8.43%	1,932	0.403	B	2,238	0.466	B
10 Walnut Avenue and Oak Avenue	Both	4	9,600	3,007	0.313	A	2,971	0.309	A	300	9.98%	300	10.10%	3,307	0.344	A	3,271	0.341	A
	NB	2	4,800	1,369	0.285	A	1,102	0.230	A	146	10.66%	146	13.25%	1,515	0.316	A	1,248	0.260	A
	SB	2	4,800	1,639	0.341	A	1,869	0.389	B	154	9.40%	154	8.24%	1,793	0.374	B	2,023	0.421	B
11 Oak Avenue and South Greenfield	Both	4	9,600	2,486	0.259	A	2,411	0.251	A	259	10.42%	259	10.74%	2,745	0.286	A	2,670	0.278	A
	NB	2	4,800	1,133	0.236	A	895	0.186	A	126	11.12%	126	14.08%	1,259	0.262	A	1,021	0.213	A
	SB	2	4,800	1,354	0.282	A	1,516	0.316	A	133	9.82%	133	8.77%	1,487	0.310	A	1,649	0.344	A

Notes:

1. Capacity of freeway lanes based on assumed capacity of 2,400 vphpl, as prescribed by the Highway Capacity Manual.
2. Existing data provided by Caltrans Traffic Census Program 2015, Route 101 District 5.
3. All results shown are for PM Peak Hour conditions.

Table 28

Cumulative Freeway Segment Analysis (With Project)

Freeway Segment	Direction	# of Lanes	Capacity (vph)	2007 Report Cumulative No Project Conditions			Cumulative No Project Conditions			Project Trips				2007 Report Cumulative With Project Conditions			Cumulative With Project Conditions		
				Volume	V/C	LOS	Volume	V/C	LOS	2007 Report Volume	2007 Report Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
US 101																			
1 North Gonzales and Gonzales-5th Street	Both	4	9,600	5,103	0.532	B	4,676	0.487	B	1,755	34.39%	865	18.49%	6,858	0.714	C	5,541	0.577	C
	NB	2	4,800	2,120	0.442	B	1,793	0.374	B	1,316	62.08%	289	16.09%	3,436	0.716	C	2,082	0.434	B
	SB	2	4,800	2,982	0.621	C	2,882	0.600	C	439	14.72%	576	19.99%	3,421	0.713	C	3,458	0.720	C
2 Gonzales-5th Street and Gloria Road	Both	4	9,600	5,052	0.526	B	4,637	0.483	B	2,006	39.71%	901	19.43%	7,058	0.735	C	5,538	0.577	C
	NB	2	4,800	2,111	0.440	B	1,791	0.373	B	1,504	71.25%	301	16.78%	3,615	0.753	C	2,092	0.436	B
	SB	2	4,800	2,942	0.613	C	2,846	0.593	C	502	17.06%	600	21.09%	3,444	0.718	C	3,446	0.718	C
3 Gloria Road and Soledad Prison	Both	4	9,600	4,253	0.443	B	3,798	0.396	B	2,256	53.04%	1,001	26.35%	6,509	0.678	C	4,799	0.500	B
	NB	2	4,800	1,803	0.376	B	1,495	0.311	A	1,692	93.84%	334	22.34%	3,495	0.728	C	1,829	0.381	B
	SB	2	4,800	2,450	0.510	B	2,303	0.480	B	564	23.02%	667	28.96%	3,014	0.628	C	2,970	0.619	C
4 Soledad Prison and Camphora	Both	4	9,600	4,102	0.427	B	3,727	0.388	B	2,382	58.07%	1,054	28.27%	6,484	0.675	C	4,781	0.498	B
	NB	2	4,800	1,748	0.364	B	1,474	0.307	A	1,786	102.17%	352	23.85%	3,534	0.736	C	1,826	0.380	B
	SB	2	4,800	2,354	0.490	B	2,253	0.469	B	596	25.32%	702	31.16%	2,950	0.615	C	2,955	0.616	C
5 Camphora and North Soledad	Both	4	9,600	5,211	0.543	B	4,766	0.496	B	1,880	36.08%	1,109	23.27%	7,091	0.739	C	5,875	0.612	C
	NB	2	4,800	2,133	0.444	B	1,793	0.374	B	627	29.40%	370	20.64%	2,760	0.575	C	2,163	0.451	B
	SB	2	4,800	3,078	0.641	C	2,973	0.619	C	1,253	40.71%	739	24.86%	4,331	0.902	D	3,712	0.773	C
6 North Soledad and South Soledad	Both	4	9,600	4,350	0.453	B	4,493	0.468	B	483	11.10%	285	6.34%	4,833	0.503	B	4,778	0.498	B
	NB	2	4,800	1,773	0.369	B	1,692	0.353	A	197	11.11%	116	6.86%	1,970	0.410	B	1,808	0.377	B
	SB	2	4,800	2,577	0.537	B	2,801	0.584	C	286	11.10%	169	6.03%	2,863	0.596	C	2,970	0.619	C
7 South Soledad and Arroyo Seco Road	Both	4	9,600	4,308	0.449	B	4,543	0.473	B	537	12.47%	317	6.98%	4,845	0.505	B	4,860	0.506	B
	NB	2	4,800	1,974	0.411	B	1,730	0.360	B	358	18.14%	211	12.20%	2,332	0.486	B	1,941	0.404	B
	SB	2	4,800	2,334	0.486	B	2,813	0.586	C	179	7.67%	106	3.77%	2,513	0.524	B	2,919	0.608	C
8 Arroyo Seco Road and North Greenfield	Both	4	9,600	4,128	0.430	B	4,068	0.424	B	510	12.35%	301	7.40%	4,638	0.483	B	4,369	0.455	B
	NB	2	4,800	1,891	0.394	B	1,552	0.323	A	340	17.98%	201	12.95%	2,231	0.465	B	1,753	0.365	B
	SB	2	4,800	2,237	0.466	B	2,516	0.524	B	170	7.60%	100	3.97%	2,407	0.501	B	2,616	0.545	B
9 North Greenfield and Walnut Avenue	Both	4	9,600	3,567	0.372	B	3,619	0.377	B	456	12.78%	269	7.43%	4,023	0.419	B	3,888	0.405	B
	NB	2	4,800	1,636	0.341	A	1,381	0.288	A	304	18.58%	179	12.96%	1,940	0.404	B	1,560	0.325	A
	SB	2	4,800	1,932	0.403	B	2,238	0.466	B	152	7.87%	90	4.02%	2,084	0.434	B	2,328	0.485	B
10 Walnut Avenue and Oak Avenue	Both	4	9,600	3,307	0.344	A	3,271	0.341	A	403	12.19%	238	7.28%	3,710	0.386	B	3,509	0.366	B
	NB	2	4,800	1,515	0.316	A	1,248	0.260	A	269	17.76%	159	12.74%	1,784	0.372	B	1,407	0.293	A
	SB	2	4,800	1,793	0.374	B	2,023	0.421	B	134	7.47%	79	3.91%	1,927	0.401	B	2,102	0.438	B
11 Oak Avenue and South Greenfield	Both	4	9,600	2,745	0.286	A	2,670	0.278	A	349	12.71%	205	7.68%	3,094	0.322	A	2,875	0.299	A
	NB	2	4,800	1,259	0.262	A	1,021	0.213	A	233	18.51%	137	13.42%	1,492	0.311	A	1,158	0.241	A
	SB	2	4,800	1,487	0.310	A	1,649	0.344	A	116	7.80%	68	4.12%	1,603	0.334	A	1,717	0.358	A

Notes:

1. Capacity of freeway lanes based on assumed capacity of 2,400 vphpl, as prescribed by the Highway Capacity Manual.
2. Existing data provided by Caltrans Traffic Census Program 2015, Route 101 District 5.
3. All results shown are for PM Peak Hour conditions.

Table 29

Cumulative Freeway Ramp Analysis (No Project)

Interchange	Direction	# of Lanes	Type	Capacity (vph)	2007 Report Background Conditions			Background Conditions			Cumulative Trips				2007 Report Cumulative No Project Conditions			Cumulative No Project Conditions		
					Volume	V/C	LOS	Volume	V/C	LOS	2007 Report Volume	2007 Report Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
US 101																				
1 Camphora Road[2]	SB to Camphora Road	1	Diagonal	1,830	30	0.020	A	82	0.045	A	0	0.00%	0	0.00%	30	0.020	A	82	0.045	A
	NB from Camphora Road	1	Diagonal	1,830	32	0.021	A	92	0.050	A	0	0.00%	0	0.00%	32	0.021	A	92	0.050	A
	SB from Camphora Road	1	Diagonal	1,830	115	0.077	A	189	0.103	A	5	4.35%	5	2.65%	120	0.080	A	194	0.106	A
	NB to Camphora Road	1	Diagonal	1,830	80	0.053	A	151	0.083	A	5	6.25%	5	3.31%	85	0.057	A	156	0.085	A
2 Moranda Road[3]	SB to Moranda Road	1	Diagonal	1,830	1,107	0.738	C	1,096	0.599	A	73	6.59%	73	6.66%	1,180	0.787	C	1,169	0.639	B
	NB from Moranda Road	1	Loop	1,500	482	0.321	A	438	0.292	A	65	13.49%	65	14.84%	547	0.365	A	503	0.335	A
	SB from Moranda Road	1	Loop	1,500	42	0.028	A	69	0.046	A	157	373.81%	157	227.54%	199	0.133	A	226	0.151	A
	NB to Moranda Road	1	Loop	1,500	86	0.057	A	123	0.082	A	145	168.60%	145	117.89%	231	0.154	A	268	0.179	A
3 Front Street[3]	SB to Front Street	1	Loop	1,500	283	0.189	A	291	0.194	A	27	9.54%	27	9.28%	310	0.207	A	318	0.212	A
	NB from Front Street	1	Loop	1,500	216	0.144	A	208	0.139	A	27	12.50%	27	12.95%	243	0.162	A	235	0.157	A
	SB from Front Street	1	Diagonal	1,830	376	0.205	A	427	0.233	A	49	13.03%	49	11.48%	425	0.232	A	476	0.260	A
	NB to Front Street	1	Diagonal	1,830	508	0.278	A	466	0.255	A	49	9.65%	49	10.52%	557	0.304	A	515	0.281	A
4 Arroyo Seco Road[2]	SB to Arroyo Seco Road	1	Diagonal	1,830	93	0.062	A	183	0.100	A	10	10.75%	10	5.46%	103	0.069	A	193	0.106	A
	NB from Arroyo Seco Road	1	Diagonal	1,830	76	0.051	A	182	0.099	A	7	9.21%	7	3.85%	83	0.055	A	189	0.103	A

Notes:

1. Capacity for diagonal ramps (1,830 vphpl) and loop ramps (1,500 vphpl) based on assumed capacity as prescribed by the Highway Capacity Manual
2. Existing data provided by Caltrans Traffic Census Program 2015, Route 101 District 5.
3. Existing ramp volume derived from peak hour turning movement counts.
4. Approved projects from 2007 report are approximately 55% built out. Thus, approved project trips represent 45% of approved project trips from 2007 report.

Table 30

Cumulative Freeway Ramp Analysis (With Project)

Interchange	Direction	# of Lanes	Type	Capacity (vph)	2007 Report Cumulative No Project Conditions			Cumulative No Project Conditions			Project Trips				2007 Report Cumulative With Project Conditions			Cumulative With Project Conditions		
					Volume	V/C	LOS	Volume	V/C	LOS	2007 Report Volume	2007 Report Increase	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
US 101																				
1 Camphora Road[2]	SB to Camphora Road	1	Diagonal	1,830	30	0.020	A	82	0.045	A	0	0.00%	0	0.00%	30	0.020	A	82	0.045	A
	NB from Camphora Road	1	Diagonal	1,830	32	0.021	A	92	0.050	A	0	0.00%	0	0.00%	32	0.021	A	92	0.050	A
	SB from Camphora Road	1	Diagonal	1,830	120	0.080	A	194	0.106	A	63	52.50%	37	19.07%	183	0.122	A	231	0.126	A
	NB to Camphora Road	1	Diagonal	1,830	85	0.057	A	156	0.085	A	31	36.47%	18	11.52%	116	0.077	A	174	0.095	A
2 Moranda Road[3]	SB to Moranda Road	1	Diagonal	1,830	1,180	0.787	C	1,169	0.639	B	1,002	84.92%	591	50.54%	2,182	1.455	F	1,760	0.962	E
	NB from Moranda Road	1	Loop	1,500	547	0.365	A	503	0.335	A	502	91.77%	296	58.85%	1,049	0.699	B	799	0.533	A
	SB from Moranda Road	1	Loop	1,500	199	0.133	A	226	0.151	A	36	18.09%	21	9.29%	235	0.157	A	247	0.165	A
	NB to Moranda Road	1	Loop	1,500	231	0.154	A	268	0.179	A	72	31.17%	42	15.67%	303	0.202	A	310	0.207	A
3 Front Street[3]	SB to Front Street	1	Loop	1,500	310	0.207	A	318	0.212	A	251	80.97%	148	46.56%	561	0.374	A	466	0.311	A
	NB from Front Street	1	Loop	1,500	243	0.162	A	235	0.157	A	125	51.44%	74	31.43%	368	0.245	A	309	0.206	A
	SB from Front Street	1	Diagonal	1,830	425	0.232	A	476	0.260	A	143	33.65%	84	17.65%	568	0.310	A	560	0.306	A
	NB to Front Street	1	Diagonal	1,830	557	0.304	A	515	0.281	A	286	51.35%	169	32.83%	843	0.461	A	684	0.374	A
4 Arroyo Seco Road[2]	SB to Arroyo Seco Road	1	Diagonal	1,830	103	0.069	A	193	0.106	A	9	8.74%	5	2.59%	112	0.075	A	198	0.108	A
	NB from Arroyo Seco Road	1	Diagonal	1,830	83	0.055	A	189	0.103	A	18	21.69%	11	5.83%	101	0.067	A	200	0.109	A

Notes:

1. Capacity for diagonal ramps (1,830 vphpl) and loop ramps (1,500 vphpl) based on assumed capacity as prescribed by the Highway Capacity Manual
2. Existing data provided by Caltrans Traffic Census Program 2015, Route 101 District 5.
3. Existing ramp volume derived from peak hour turning movement counts.
4. Approved projects from 2007 report are approximately 55% built out. Thus, approved project trips represent 45% of approved project trips from 2007 report.

Table 31

Year 2035 Freeway Segment Analysis

Freeway Segment	Direction	# of Lanes	Capacity (vph)	2007 Report Year 2030 Conditions			2007 Report Project Trips		Year 2035 Conditions			Project Trips	
				Volume	V/C	LOS	Volume	Increase	Volume	V/C	LOS	Volume	Increase
US 101													
4 Soledad Prison and Camphora													
	NB	2	4,800	2,920	0.608	C	150	5%	3,066	0.639	C	89	3%
	SB	2	4,800	4,170	0.869	D	770	18%	4,379	0.912	D	454	10%
5 Camphora and North Soledad													
	NB	2	4,800	2,310	0.481	B	50	2%	2,426	0.505	B	30	1%
	SB	2	4,800	3,130	0.652	C	0	0%	3,287	0.685	C	0	0%
6 North Soledad and South Soledad													
	NB	2	4,800	1,930	0.402	B	200	10%	2,027	0.422	B	118	6%
	SB	2	4,800	2,690	0.560	C	0	0%	2,825	0.589	C	0	0%
7 South Soledad and Arroyo Seco Road													
	NB	2	4,800	1,930	0.402	B	320	17%	2,027	0.422	B	189	9%
	SB	2	4,800	2,750	0.573	C	60	2%	2,888	0.602	C	35	1%
8 Arroyo Seco Road and North Greenfield													
	NB	2	4,800	1,890	0.394	B	290	15%	1,985	0.414	B	171	9%
	SB	2	4,800	2,700	0.563	C	60	2%	2,835	0.591	C	35	1%

Notes:

1. Capacity of freeway lanes based on assumed capacity of 2,400 vphpl, as prescribed by the Highway Capacity Manual.
2. All results shown are for PM Peak Hour conditions.

Table 32

Year 2035 Freeway Ramp Analysis

Interchange	Direction	# of Lanes	Type	Capacity (vph)	2007 Report Year 2030 Conditions			2007 Report Project Trips		Year 2035 Conditions			Project Trips	
					Volume	V/C	LOS	Volume	Increase	Volume	V/C	LOS	Volume	Increase
US 101														
1 Camphora Road[2]	SB to Camphora Road	1	Diagonal	1,830	1,290	0.860	D	770	60%	1,355	0.740	C	454	34%
	NB from Camphora Road	1	Diagonal	1,830	680	0.453	A	100	15%	714	0.390	A	59	8%
	SB from Camphora Road	1	Diagonal	1,830	250	0.167	A	0	0%	263	0.144	A	0	0%
	NB to Camphora Road	1	Diagonal	1,830	70	0.047	A	0	0%	74	0.040	A	0	0%
2 Moranda Road[3]	SB to Moranda Road	1	Diagonal	1,830	550	0.367	A	0	0%	578	0.316	A	0	0%
	NB from Moranda Road	1	Loop	1,500	580	0.387	A	50	9%	609	0.406	A	30	5%
	SB from Moranda Road	1	Loop	1,500	110	0.073	A	0	0%	116	0.077	A	0	0%
	NB to Moranda Road	1	Loop	1,500	200	0.133	A	200	100%	210	0.140	A	118	56%
3 Front Street[3]	SB to Front Street	1	Loop	1,500	320	0.213	A	0	0%	336	0.224	A	0	0%
	NB from Front Street	1	Loop	1,500	250	0.167	A	20	8%	263	0.175	A	12	5%
	SB from Front Street	1	Diagonal	1,830	380	0.253	A	60	16%	399	0.218	A	35	9%
	NB to Front Street	1	Diagonal	1,830	250	0.167	A	140	56%	263	0.144	A	83	32%
4 Arroyo Seco Road[2]	SB to Arroyo Seco Road	1	Diagonal	1,830	150	0.100	A	10	7%	158	0.086	A	6	4%
	NB from Arroyo Seco Road	1	Diagonal	1,830	110	0.073	A	30	27%	116	0.063	A	18	16%

Notes:

1. Capacity for diagonal ramps (1,830 vphpl) and loop ramps (1,500 vphpl) based on assumed capacity as prescribed by the Highway Capacity Manual
2. All results shown are for PM Peak Hour conditions.
3. The 2007 report used a capacity of 1,500 vphpl for both diagonal and loop ramps.

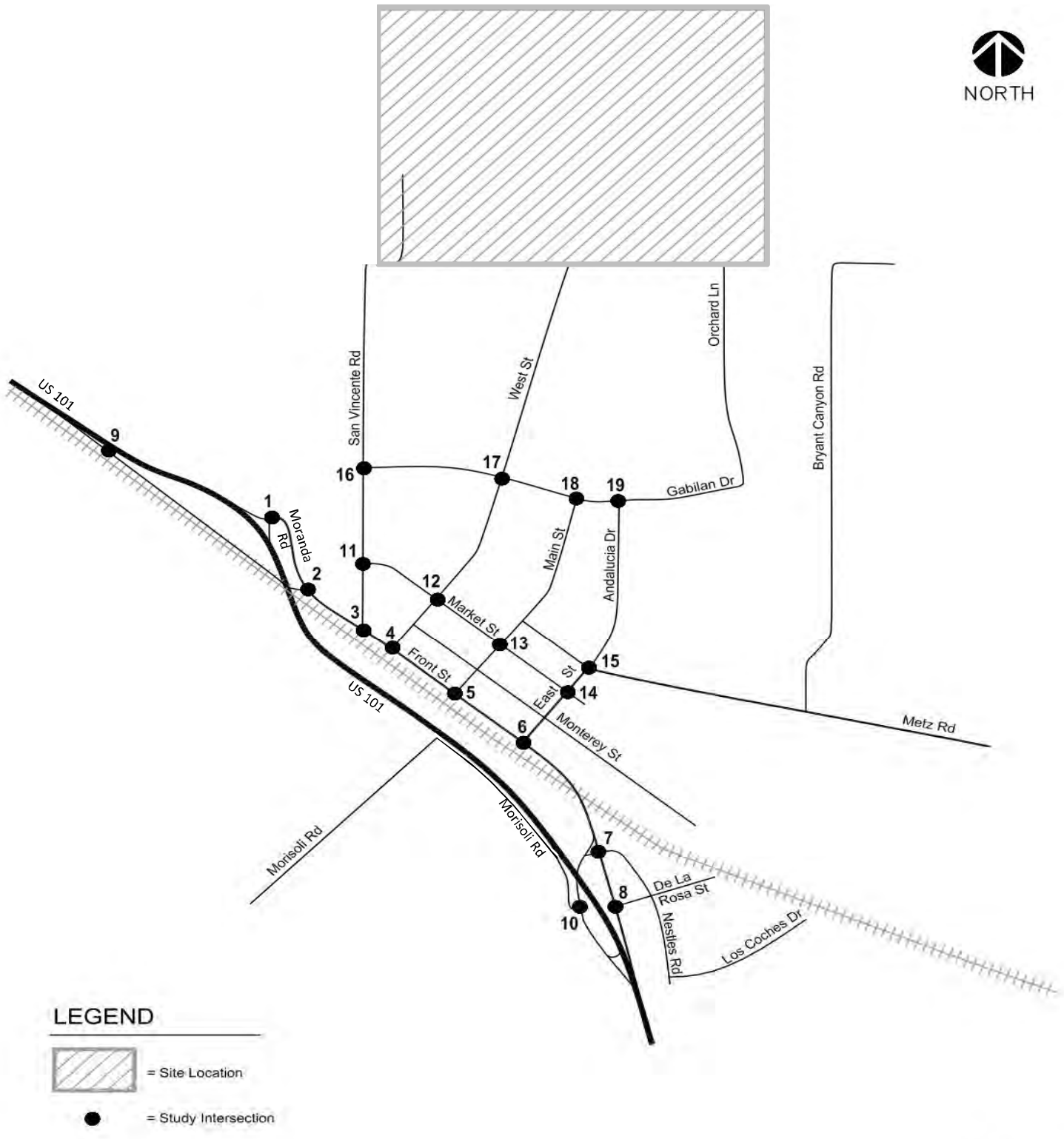
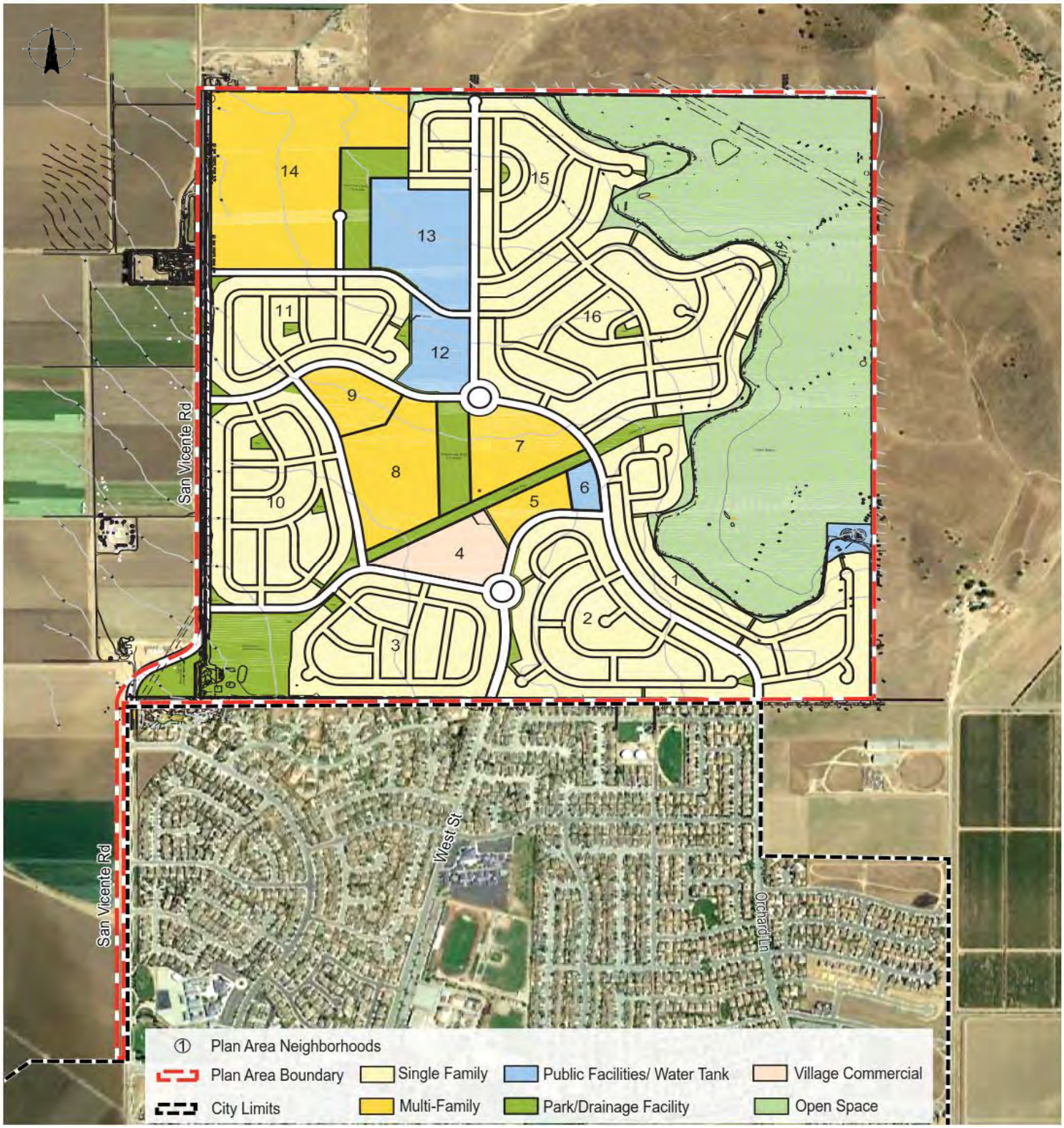


Figure 1

SITE LOCATION AND STUDY INTERSECTIONS AND ROADWAYS



Source:
EMC Planning Group

Figure 2
SITE PLAN

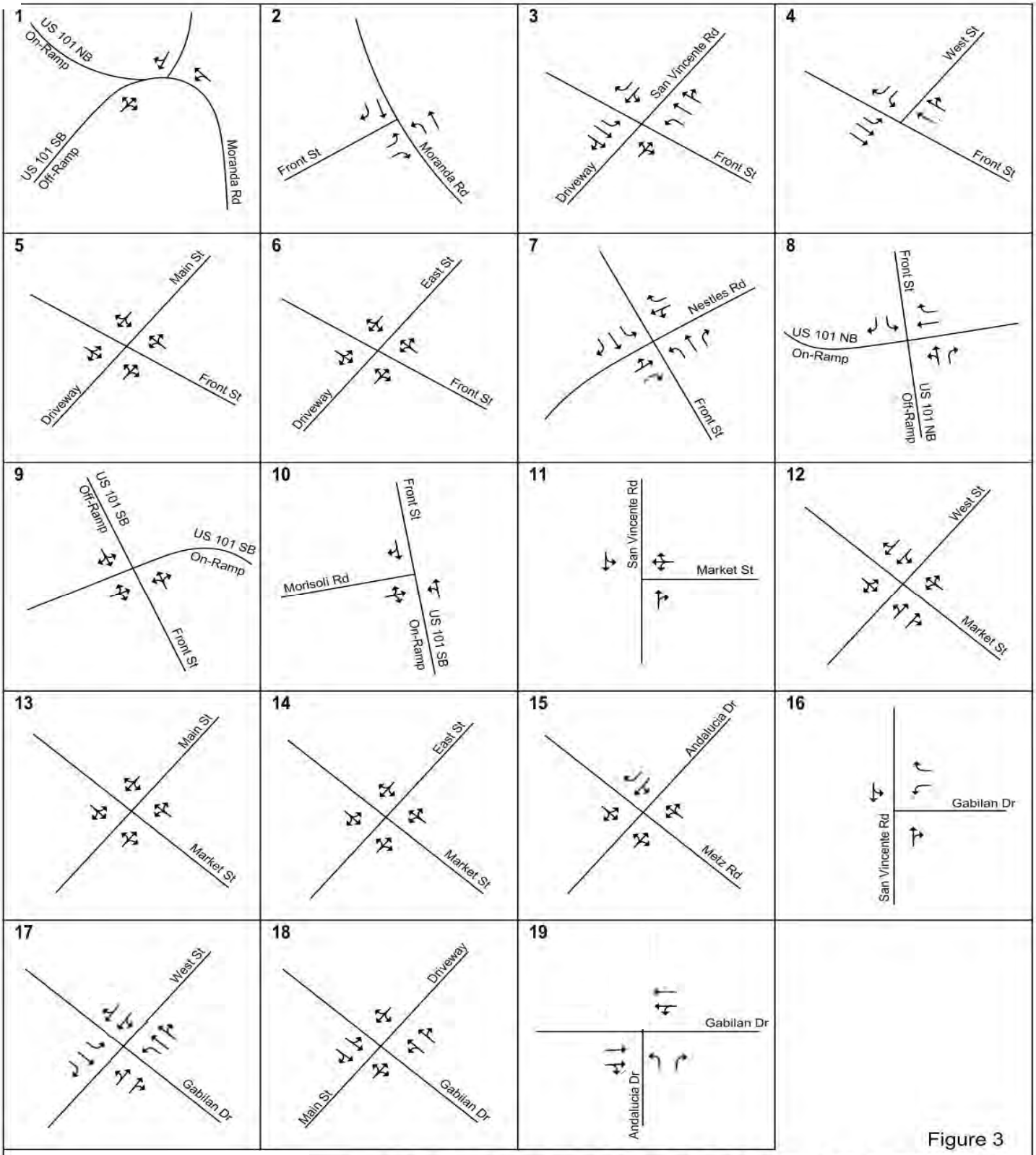


Figure 3

EXISTING LANE CONFIGURATIONS

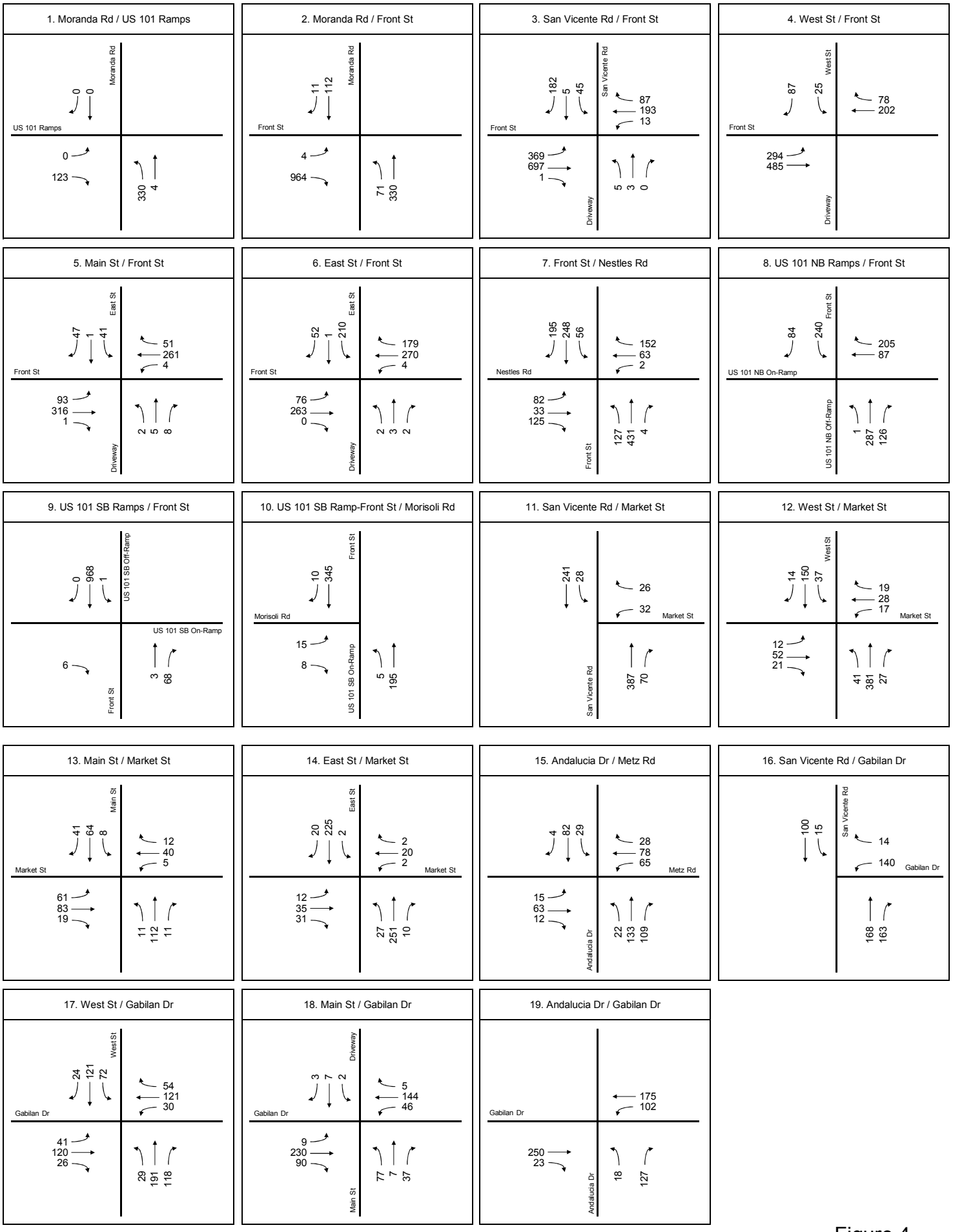


Figure 4

EXISTING PM PEAK HOUR TRAFFIC VOLUMES

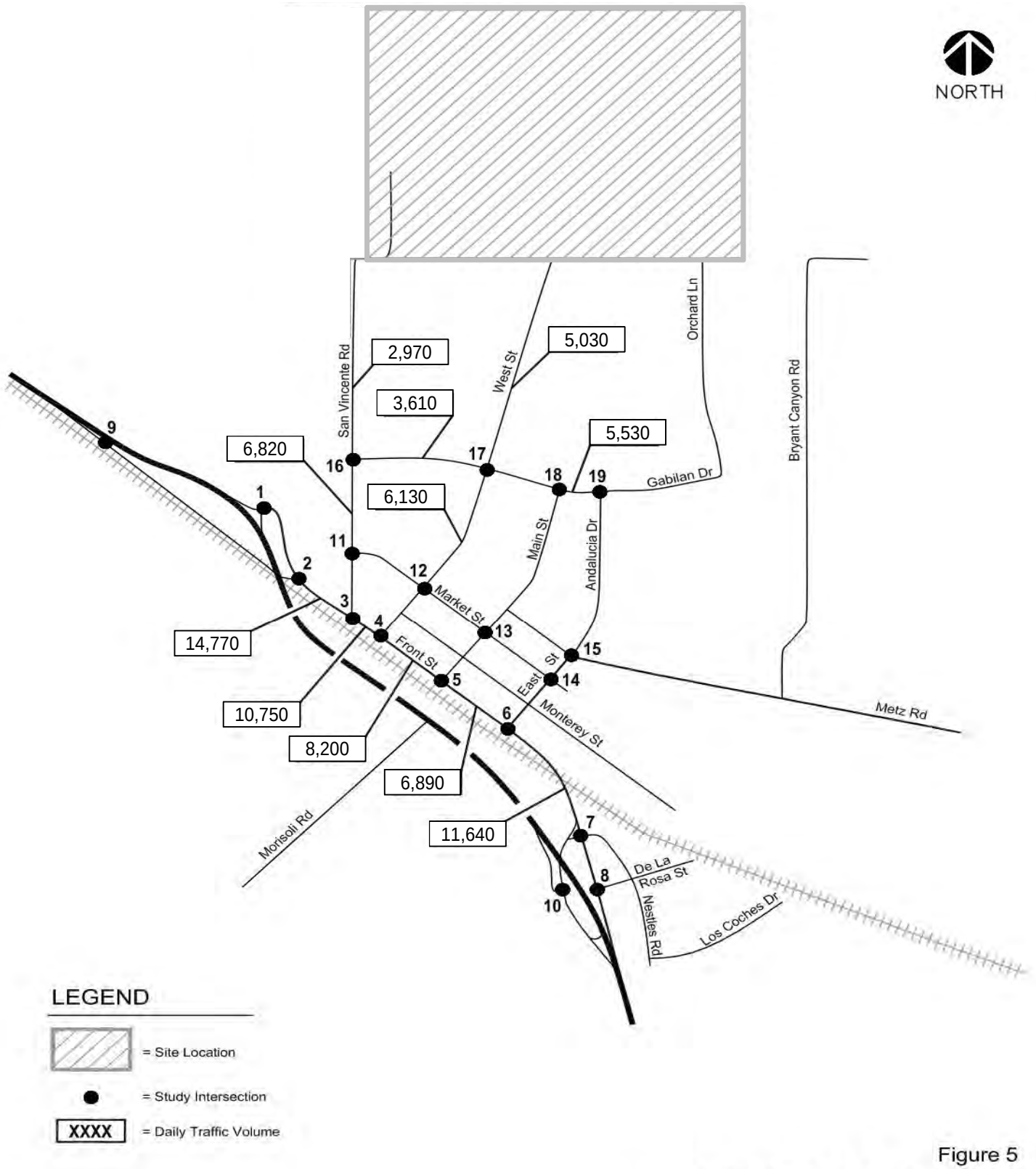


Figure 5

EXISTING DAILY ROADWAY VOLUMES

Notes:
1. Daily roadway volumes estimated from PM peak hour intersection counts (PM peak hour assumed to be 10% of daily traffic volume).

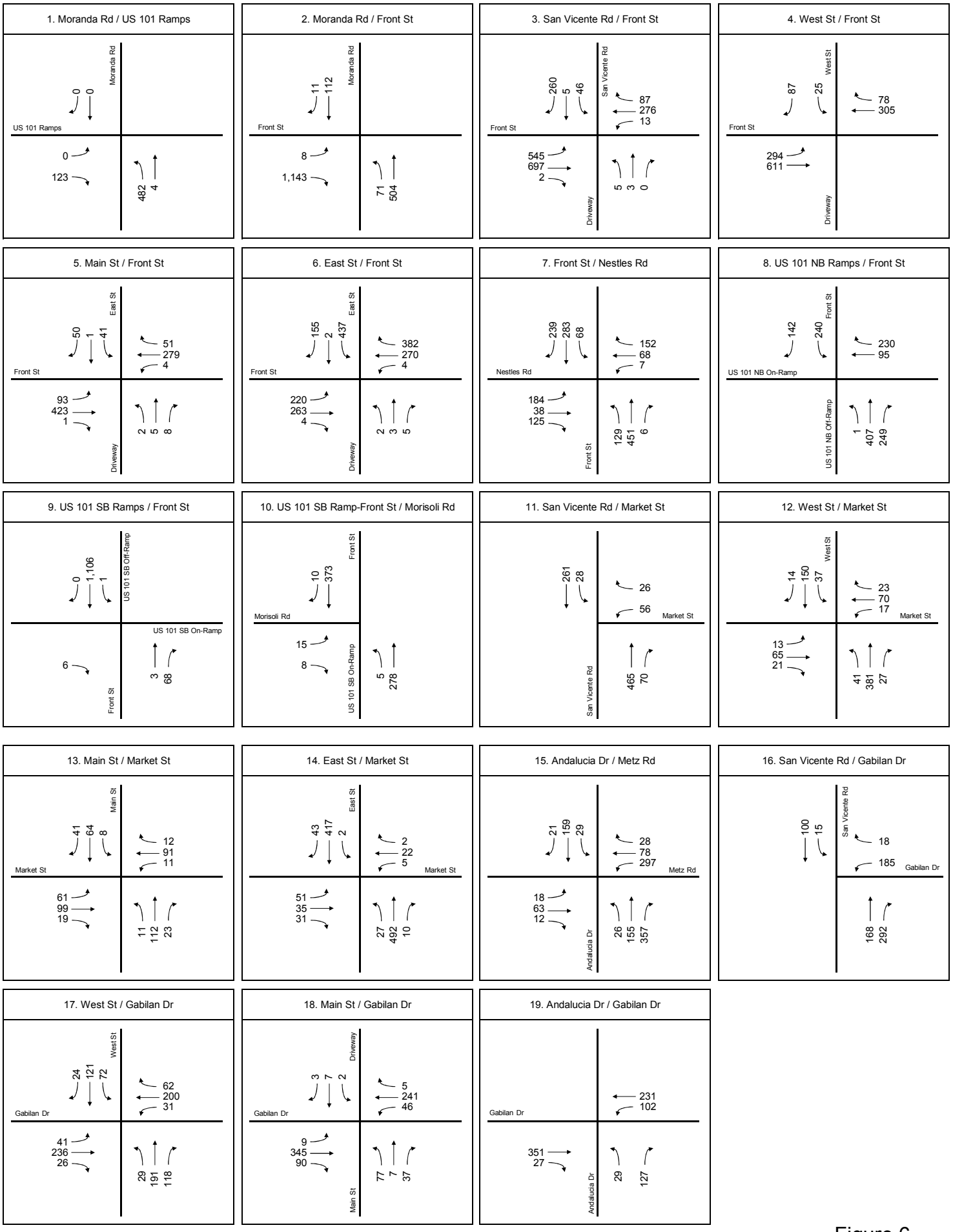


Figure 6

BACKGROUND PM PEAK HOUR TRAFFIC VOLUMES

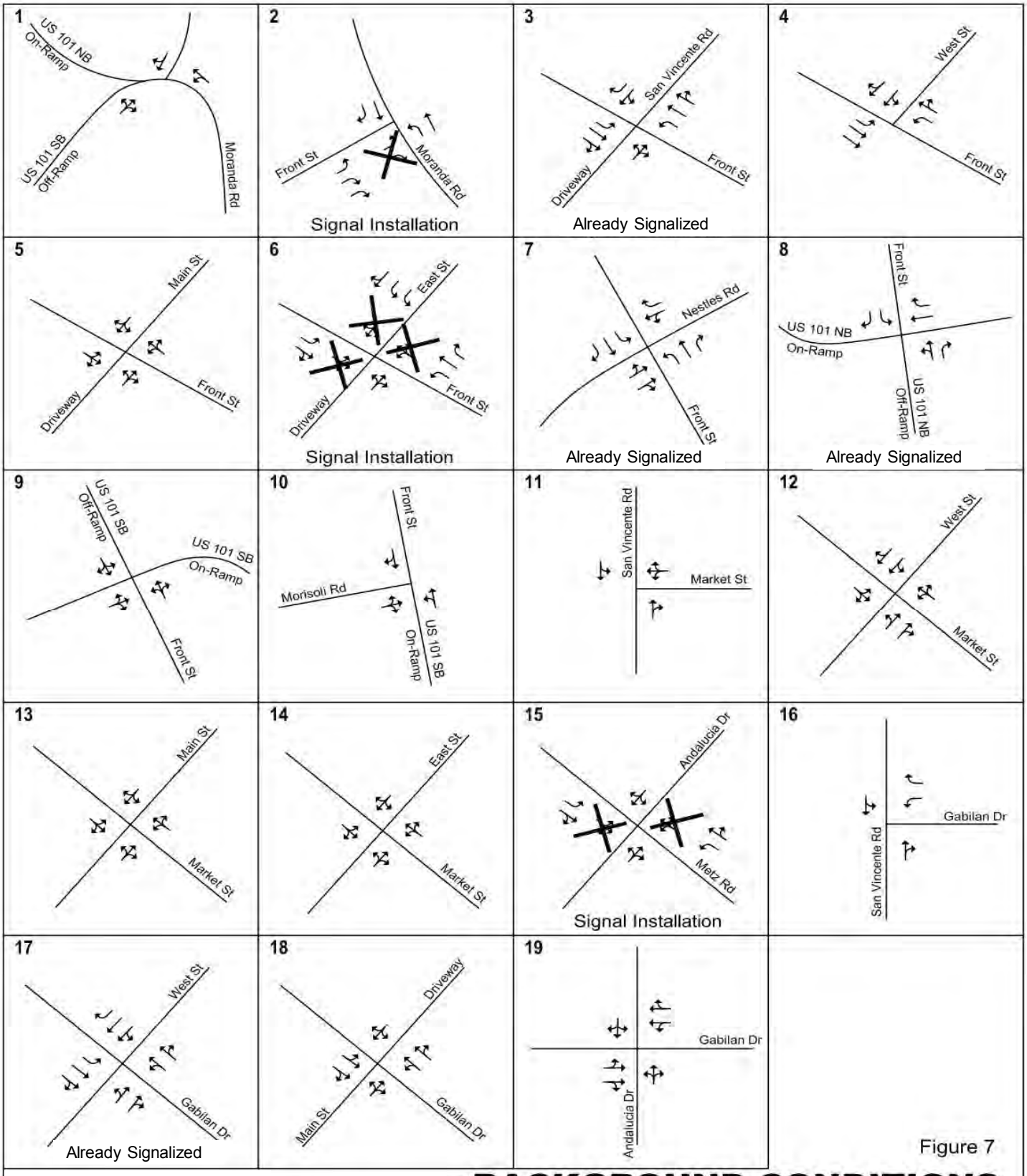


Figure 7

BACKGROUND CONDITIONS NECESSARY IMPROVEMENTS

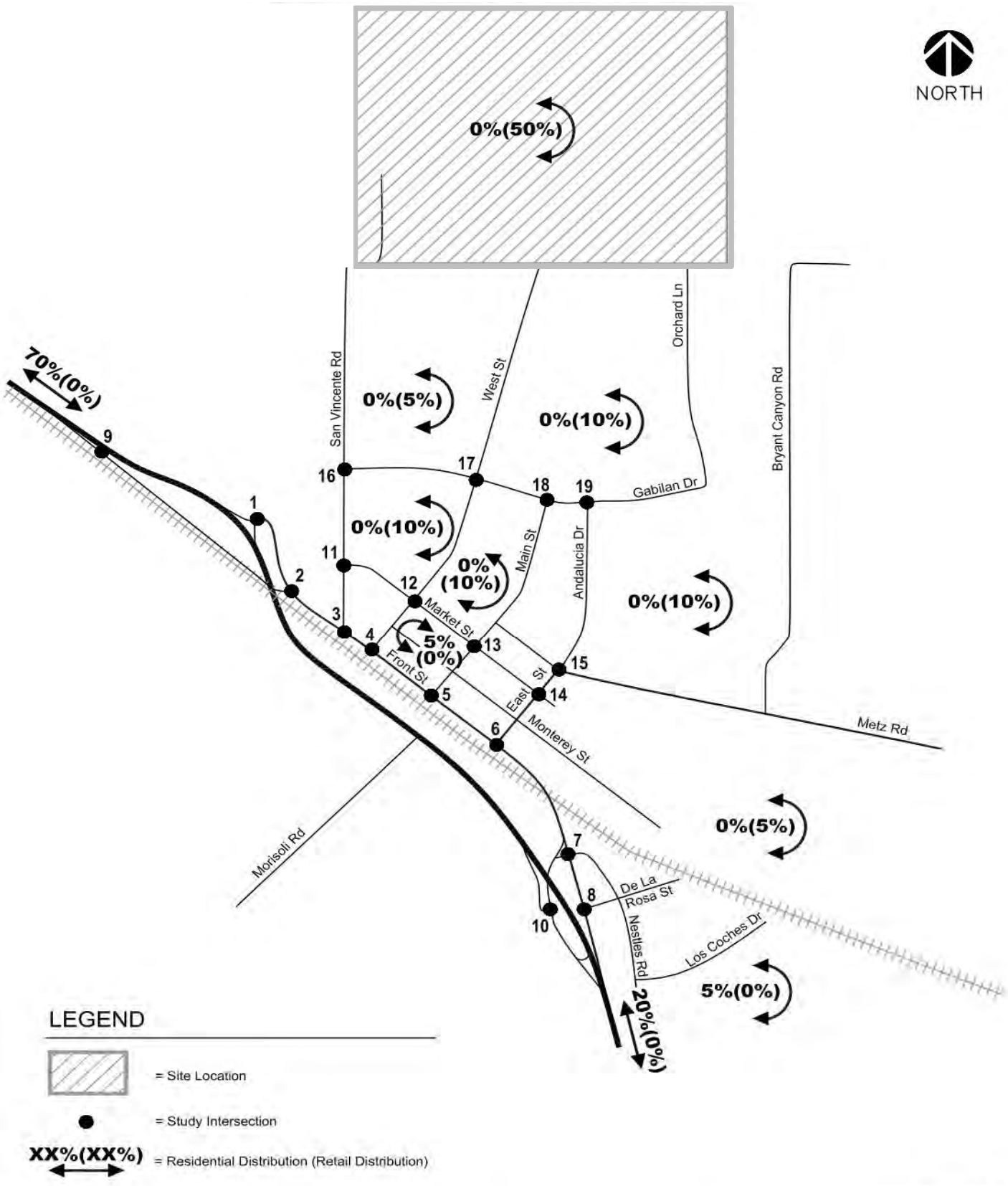


Figure 8

PROJECT TRIP DISTRIBUTION

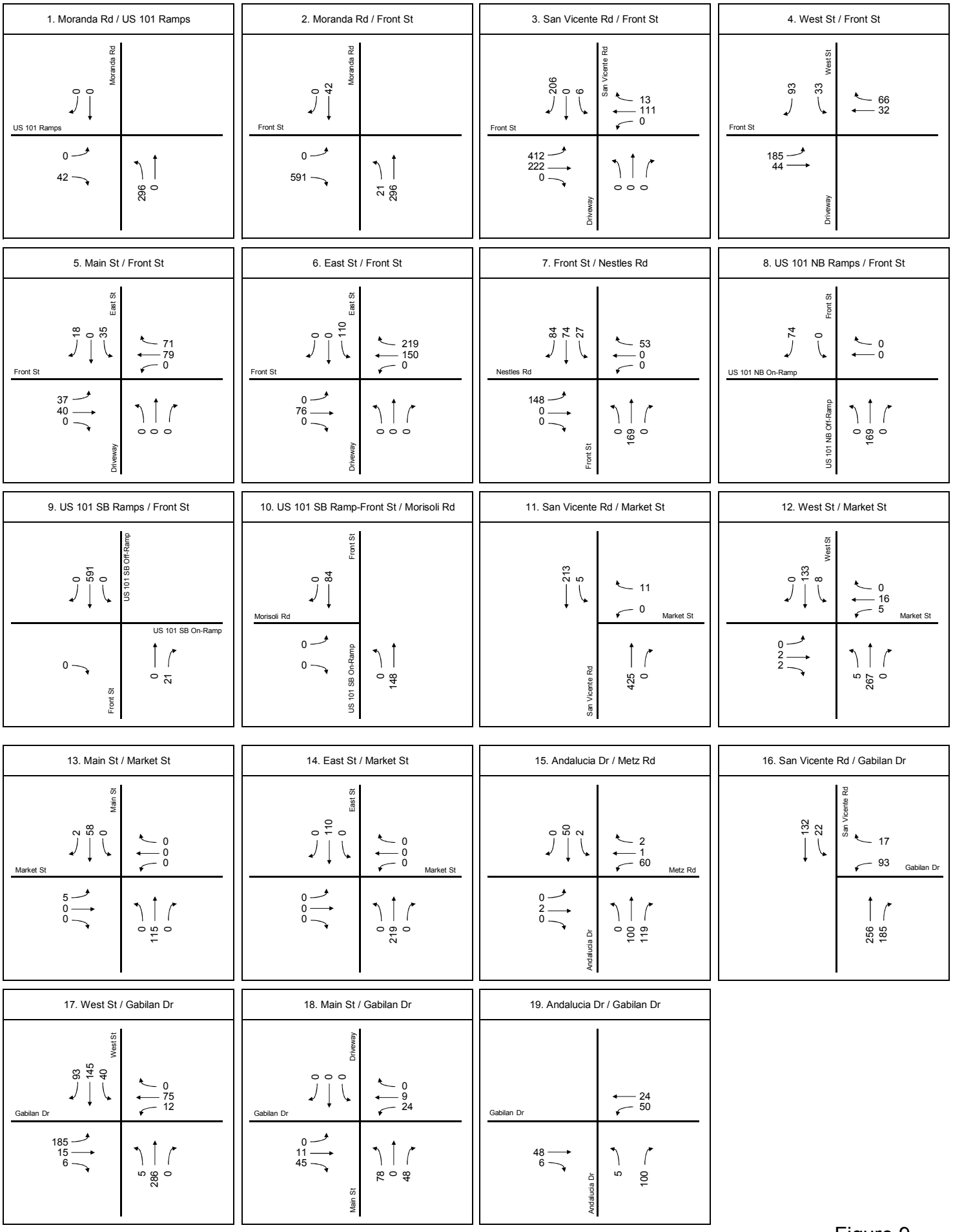


Figure 9

PROJECT PM PEAK HOUR TRIP ASSIGNMENT

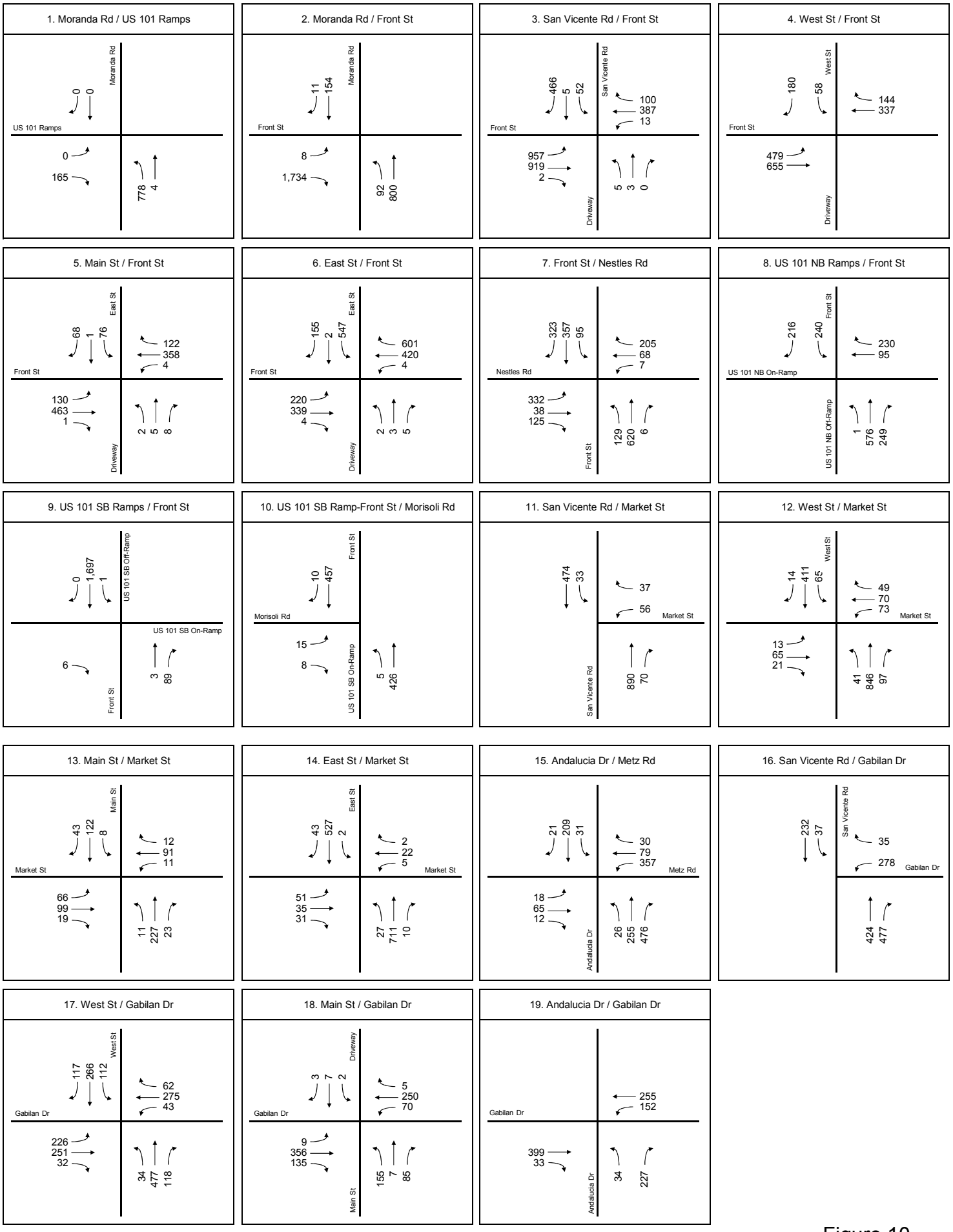


Figure 10

PROJECT PLUS BACKGROUND PM PEAK HOUR TRAFFIC VOLUMES

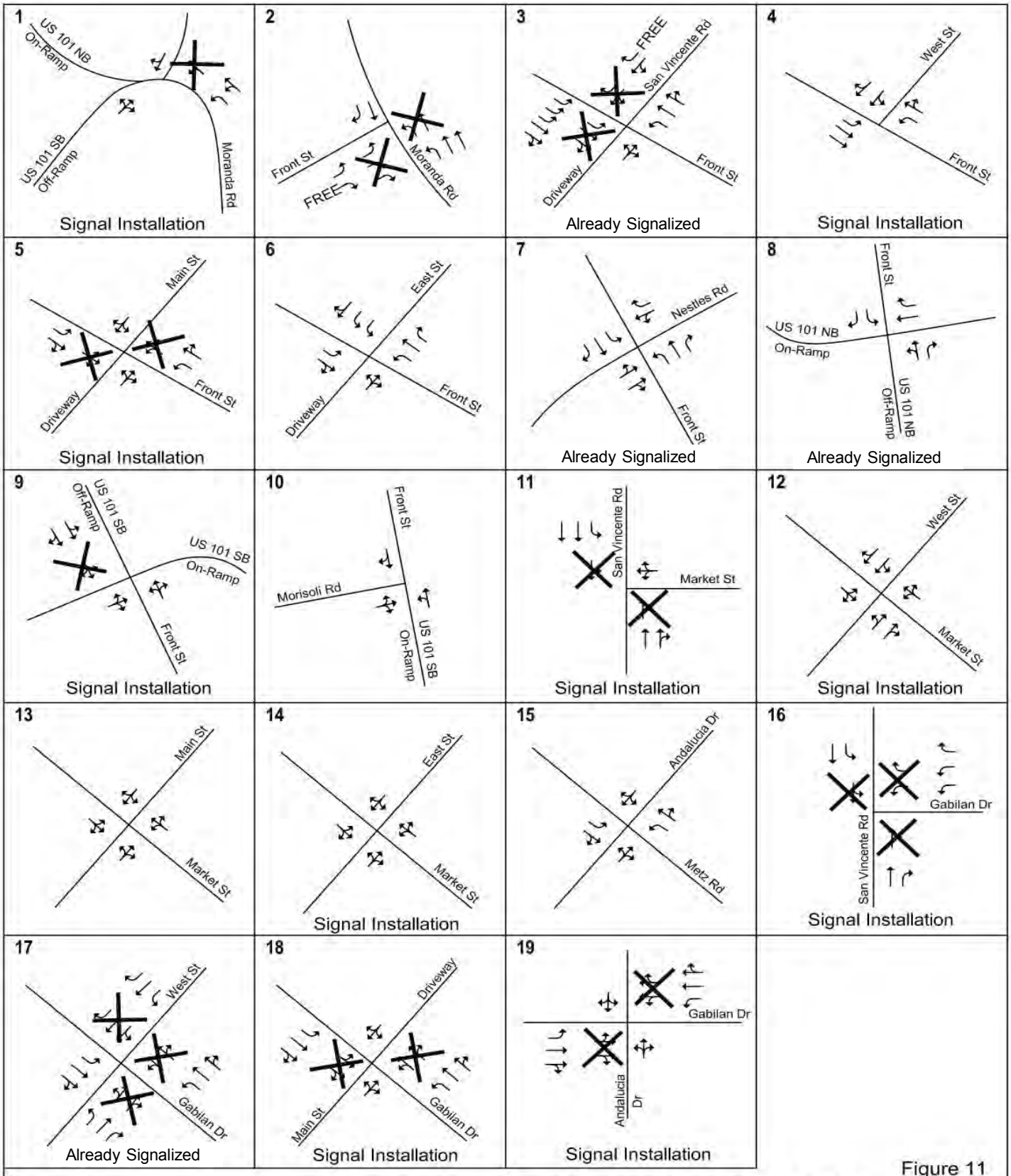
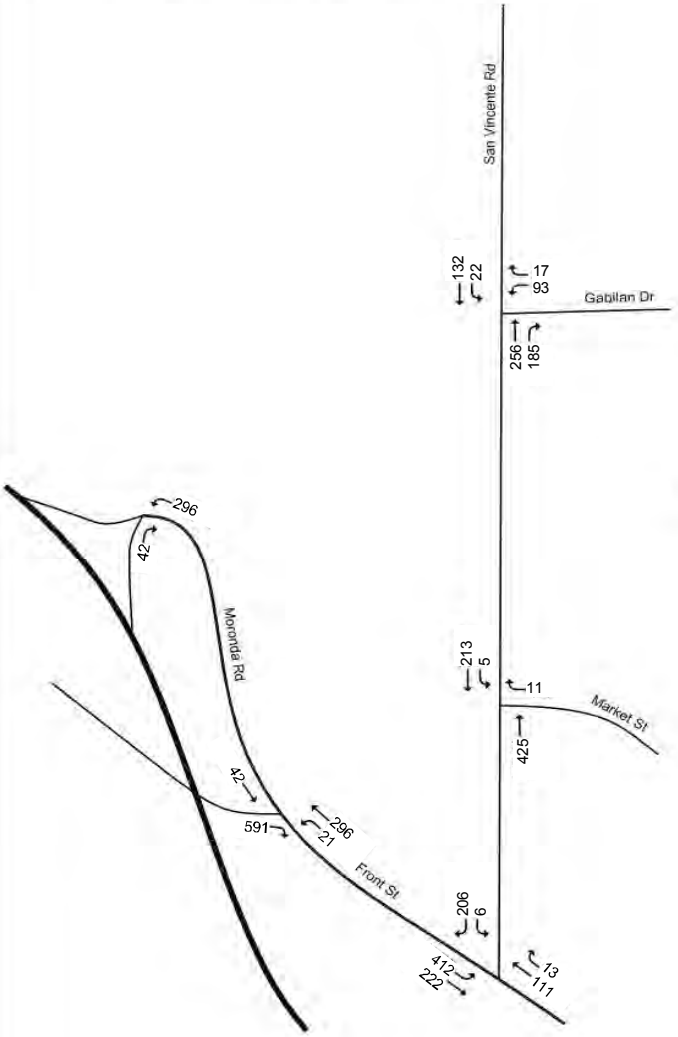


Figure 11

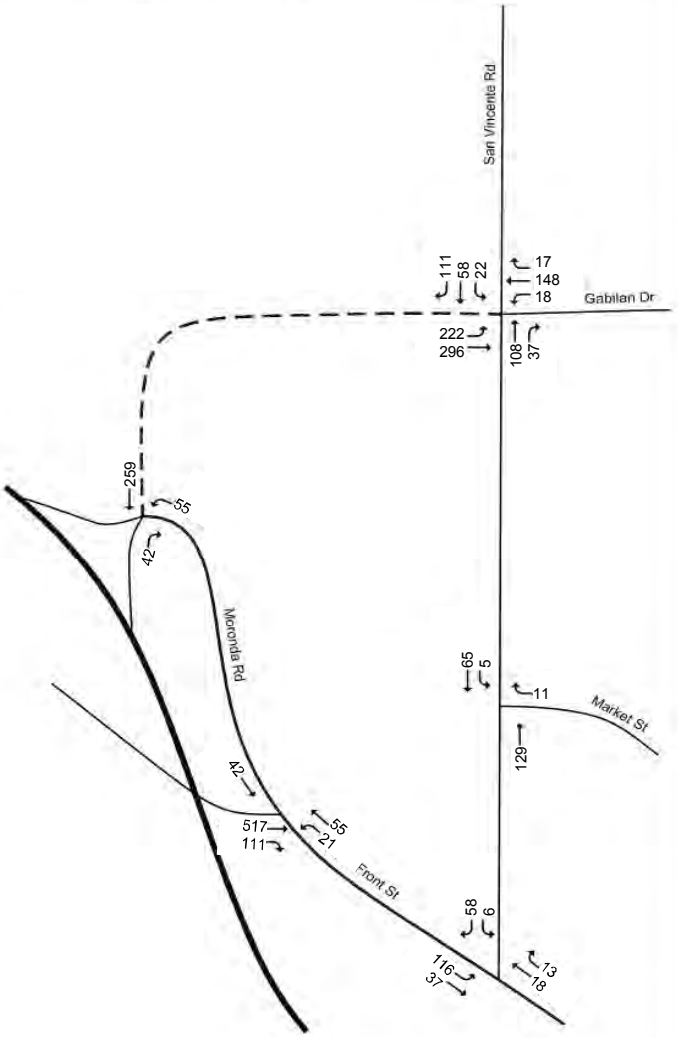
PROJECT MITIGATION MEASURES

NORTH

Without Gabilan Extension



With Gabilan Extension



Notes:
PM Peak Hour Volumes

Figure 12

PROJECT TRIPS WITH AND WITHOUT GABILAN EXTENSION

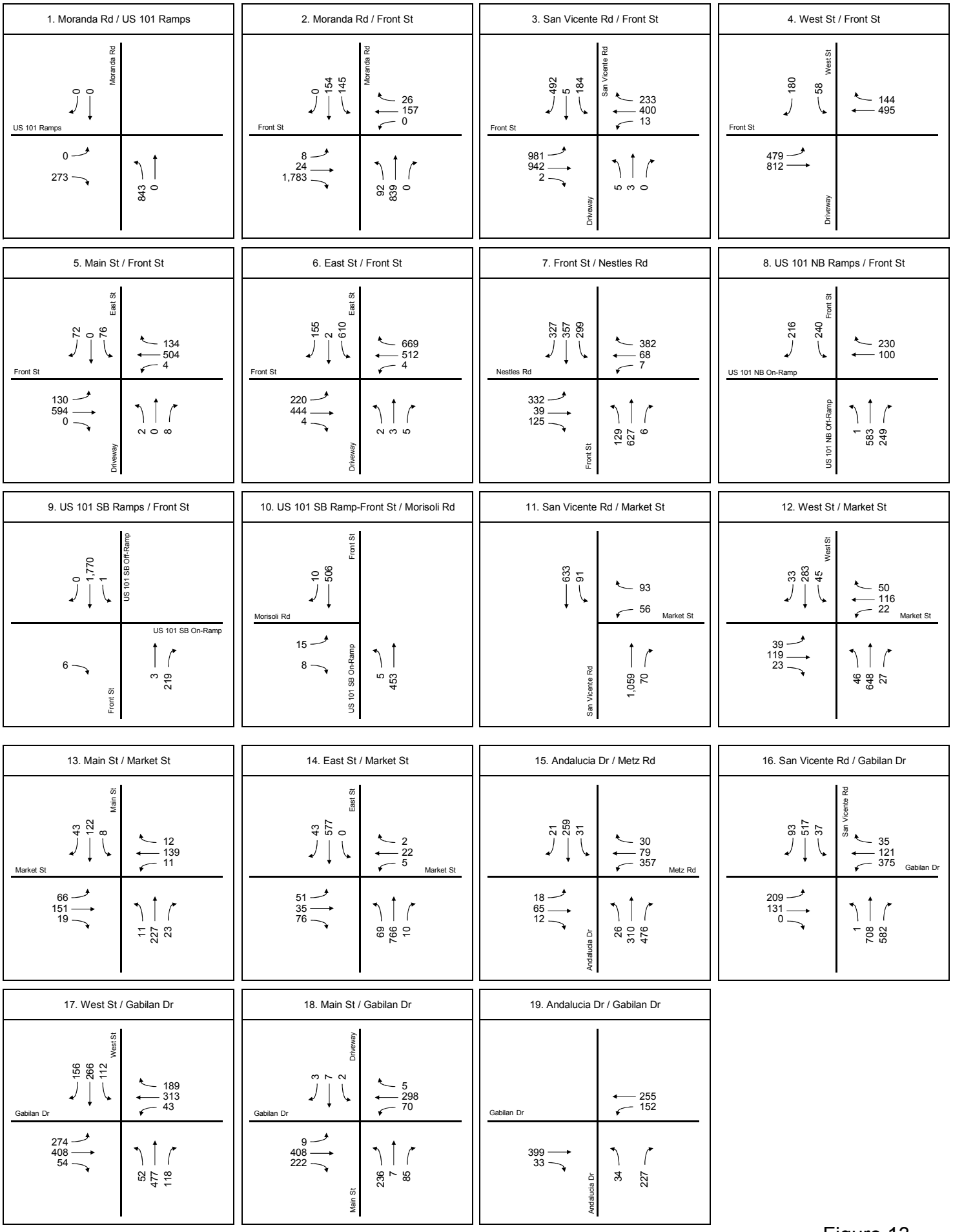
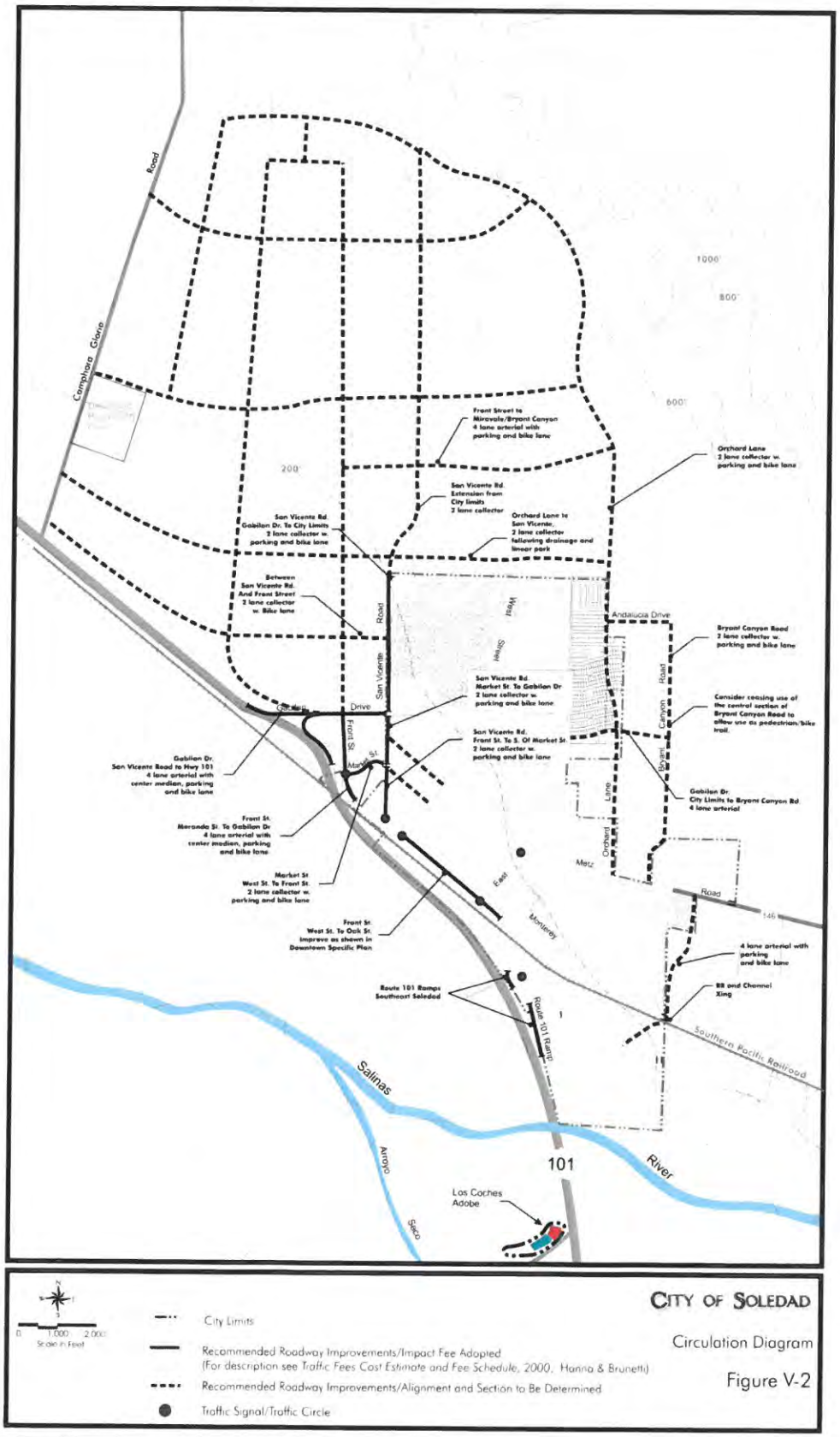


Figure 13

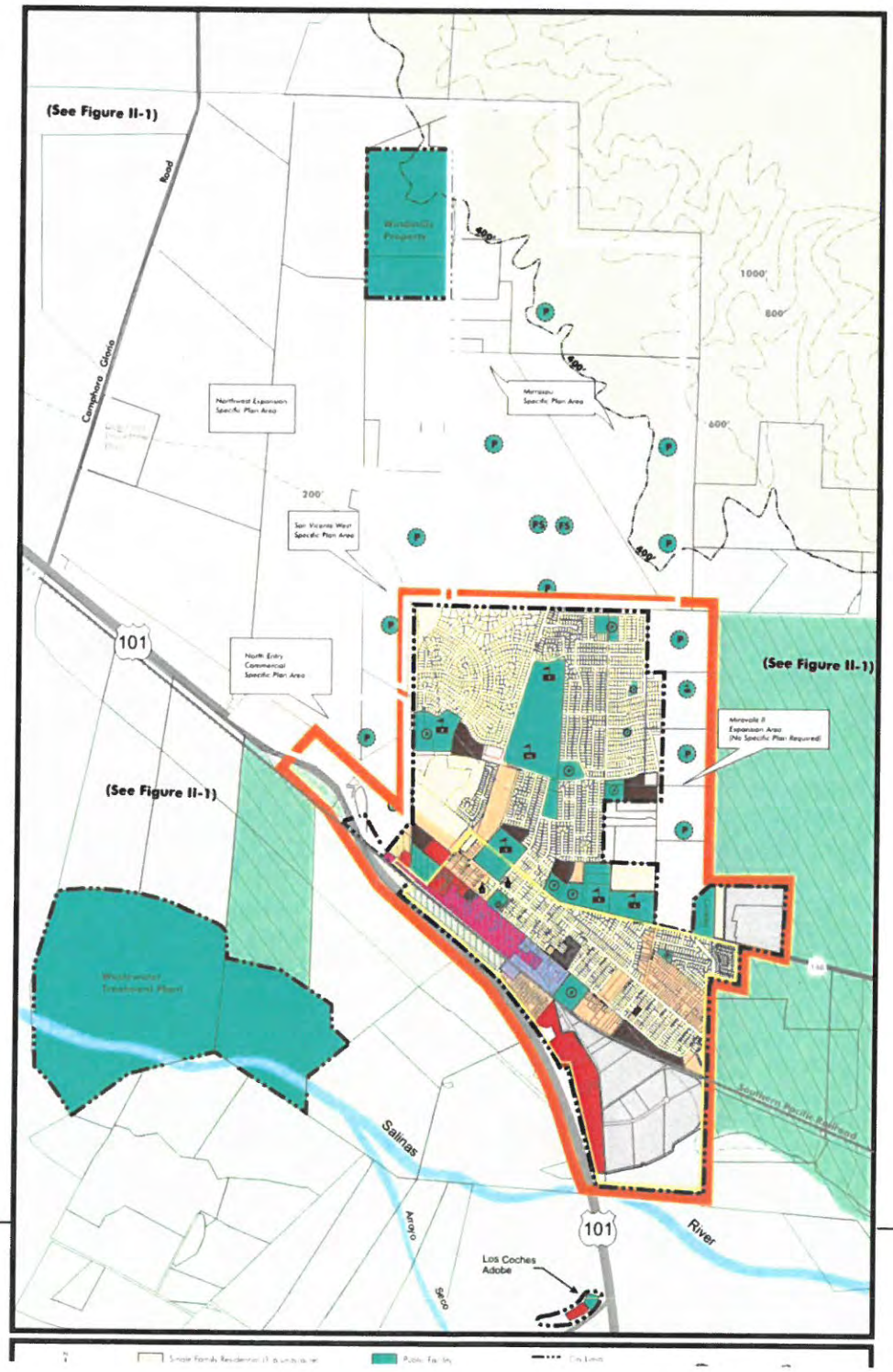
CUMULATIVE PLUS PROJECT PM PEAK HOUR TRAFFIC VOLUMES

Figure V-2: Circulation Diagram



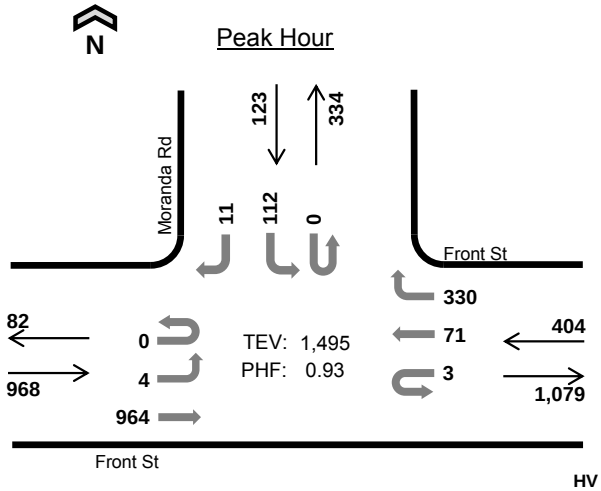
SOLEDAD GENERAL PLAN
II. LAND USE

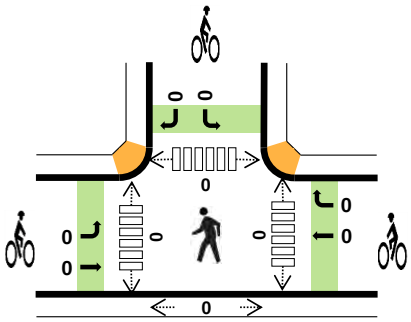
Figure II-9: Land Use Diagram



#2 Moranda Rd & Front St

Date: 05/31/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM





	HV %:	PHF
EB	1.2%	0.91
WB	2.0%	0.97
NB	-	-
SB	3.3%	0.93
TOTAL	1.6%	0.93

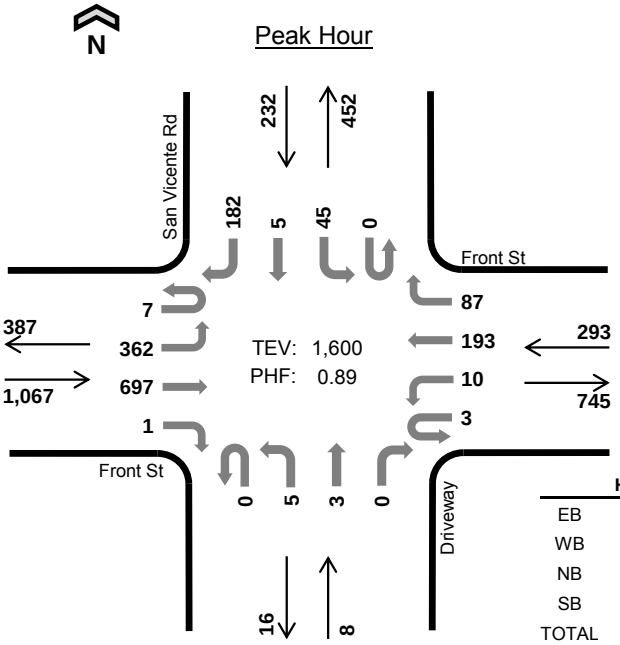
Two-Hour Count Summaries

Interval Start		Front St Eastbound				Front St Westbound				0 Northbound				Moranda Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	4	191	0	1	0	17	88	0	0	0	0	0	17	0	1	319	0
4:15 PM		0	0	192	0	3	0	11	80	0	0	0	0	0	16	0	3	305	0
4:30 PM		0	1	210	0	2	0	31	79	0	0	0	0	0	23	0	3	349	0
4:45 PM		**0**	**1**	**224**	**0**	**0**	**0**	**17**	**84**	**0**	**0**	**0**	**0**	**0**	**28**	**0**	**4**	**358**	1,331
5:00 PM		**0**	**0**	**222**	**0**	**0**	**0**	**14**	**85**	**0**	**0**	**0**	**0**	**0**	**30**	**0**	**3**	**354**	1,366
5:15 PM		**0**	**2**	**252**	**0**	**3**	**0**	**18**	**79**	**0**	**0**	**0**	**0**	**0**	**24**	**0**	**2**	**380**	1,441
5:30 PM		**0**	**1**	**266**	**0**	**0**	**0**	**22**	**82**	**0**	**0**	**0**	**0**	**0**	**30**	**0**	**2**	**403**	**1,495**
5:45 PM		0	1	219	0	1	0	15	59	0	0	0	0	0	21	0	3	319	1,456
Count Total		0	10	1,776	0	10	0	145	636	0	0	0	0	0	189	0	21	2,787	0
Peak Hour	**All**	**0**	**4**	**964**	**0**	**3**	**0**	**71**	**330**	**0**	**0**	**0**	**0**	**0**	**112**	**0**	**11**	**1,495**	**0**
	HV	**0**	**1**	**11**	**0**	**0**	**0**	**2**	**6**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**24**	**0**
	HV%	**-**	**25%**	**1%**	**-**	**0%**	**-**	**3%**	**2%**	**-**	**-**	**-**	**-**	**-**	**4%**	**-**	**0%**	**2%**	**0**

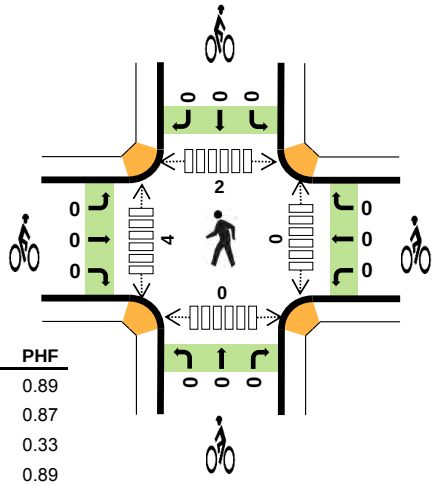
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	1	4	0	1	*6*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	0	3	0	1	*4*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	2	2	0	4	*8*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	**4**	**4**	**0**	**1**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**3**	**2**	**0**	**2**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**2**	**1**	**0**	**1**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:30 PM	**3**	**1**	**0**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:45 PM	2	2	0	2	*6*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	17	19	0	12	*48*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hr	**12**	**8**	**0**	**4**	***24***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

#3 San Vicente Rd Front St



Date: 05/31/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM



	HV %:	PHF
EB	1.4%	0.89
WB	2.4%	0.87
NB	0.0%	0.33
SB	1.7%	0.89
TOTAL	1.6%	0.89

Two-Hour Count Summaries

Interval Start		Front St Eastbound				Front St Westbound				Driveway Northbound				San Vicente Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		1	50	141	0	1	0	53	16	0	1	0	0	0	3	2	43	311	0
4:15 PM		1	54	153	0	0	0	47	13	0	0	2	0	0	8	1	43	322	0
4:30 PM		2	60	169	1	0	0	56	10	0	1	0	0	0	8	5	53	365	0
4:45 PM		**3**	**75**	**171**	**0**	**0**	**0**	**54**	**12**	**0**	**3**	**3**	**0**	**0**	**9**	**3**	**33**	**366**	1,364
5:00 PM		**1**	**85**	**162**	**0**	**1**	**2**	**47**	**21**	**0**	**1**	**0**	**0**	**0**	**12**	**1**	**52**	**385**	1,438
5:15 PM		**3**	**99**	**168**	**0**	**2**	**2**	**41**	**27**	**0**	**0**	**0**	**0**	**0**	**6**	**1**	**51**	**400**	1,516
5:30 PM		**0**	**103**	**196**	**1**	**0**	**6**	**51**	**27**	**0**	**1**	**0**	**0**	**0**	**18**	**0**	**46**	**449**	**1,600**
5:45 PM		2	77	161	0	0	0	30	15	0	0	1	0	0	9	0	42	337	1,571
Count Total		13	603	1,321	2	4	10	379	141	0	7	6	0	0	73	13	363	2,935	0
Peak Hour	**All**	**7**	**362**	**697**	**1**	**3**	**10**	**193**	**87**	**0**	**5**	**3**	**0**	**0**	**45**	**5**	**182**	**1,600**	**0**
	HV	**0**	**9**	**6**	**0**	**0**	**0**	**4**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**26**	**0**
	HV%	**0%**	**2%**	**1%**	**0%**	**0%**	**0%**	**2%**	**3%**	**-**	**0%**	**0%**	**-**	**-**	**0%**	**0%**	**2%**	**2%**	**0**

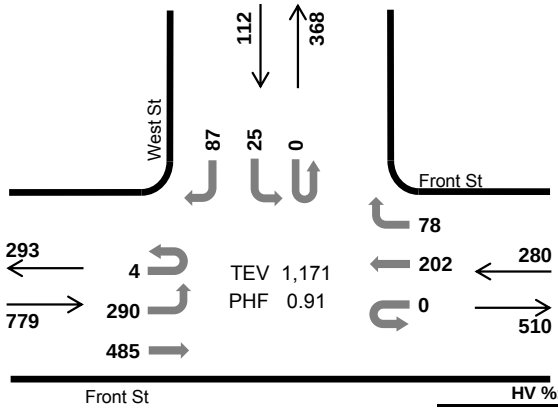
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

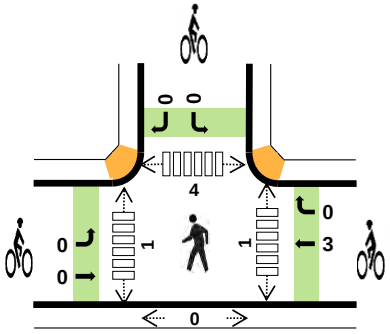
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	3	2	0	3	*8*	0	0	0	0	*0*	0	3	0	0	*3*
4:15 PM	0	1	0	3	*4*	0	0	0	0	*0*	1	3	2	0	*6*
4:30 PM	4	2	0	2	*8*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	**6**	**1**	**0**	**3**	***10***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**4**	**2**	**0**	**1**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**3**	**1**	**0**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:30 PM	**2**	**3**	**0**	**0**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**4**	**2**	**0**	***6***
5:45 PM	2	1	0	1	*4*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	24	13	0	13	*50*	0	0	0	0	*0*	1	10	4	0	*15*
Peak Hour	**15**	**7**	**0**	**4**	***26***	**0**	**0**	**0**	**0**	***0***	**0**	**4**	**2**	**0**	***6***

#4 West St & Front St

Peak Hour

Date: 05/31/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM





	HV %:	PHF
EB	1.0%	0.89
WB	2.1%	0.93
NB	-	-
SB	0.9%	0.90
TOTAL	1.3%	0.91

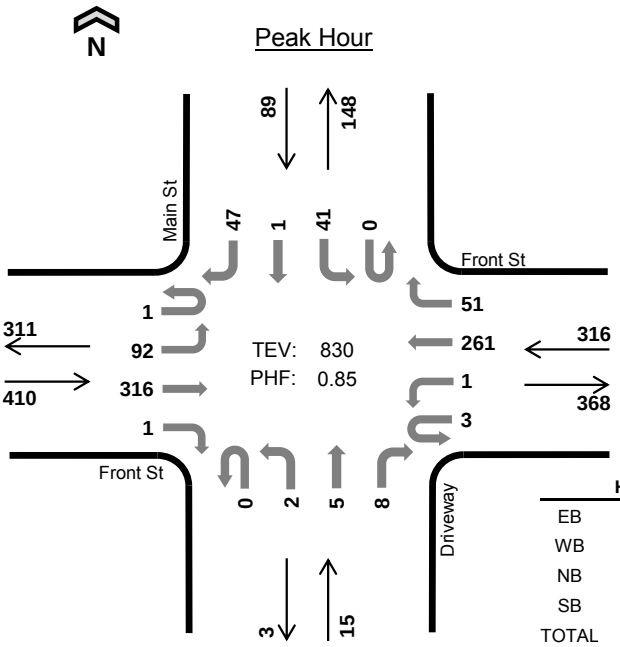
Two-Hour Count Summaries

Interval Start		Front St Eastbound				Front St Westbound				0 Northbound				West St Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		1	67	81	0	0	0	54	20	0	0	0	0	0	11	0	14	248	0
4:15 PM		1	72	89	0	0	0	38	17	0	0	0	0	0	11	0	17	245	0
4:30 PM		2	68	101	0	0	0	45	29	0	0	0	0	0	10	0	20	275	0
4:45 PM		**0**	**69**	**120**	**0**	**0**	**0**	**49**	**22**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**19**	**284**	1,052
5:00 PM		**2**	**69**	**120**	**0**	**0**	**0**	**40**	**24**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**26**	**286**	1,090
5:15 PM		**1**	**71**	**108**	**0**	**0**	**0**	**53**	**17**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**23**	**281**	1,126
5:30 PM		**1**	**81**	**137**	**0**	**0**	**0**	**60**	**15**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**19**	**320**	**1,171**
5:45 PM		0	75	97	0	0	0	34	19	0	0	0	0	0	10	0	12	247	1,134
Count Total		8	572	853	0	0	0	373	163	0	0	0	0	0	67	0	150	2,186	0
Peak Hour	**All**	**4**	**290**	**485**	**0**	**0**	**0**	**202**	**78**	**0**	**0**	**0**	**0**	**0**	**25**	**0**	**87**	**1,171**	**0**
	HV	**0**	**1**	**7**	**0**	**0**	**0**	**5**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**15**	**0**
	HV%	**0%**	**0%**	**1%**	**-**	**-**	**-**	**2%**	**1%**	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**1%**	**1%**	**0**

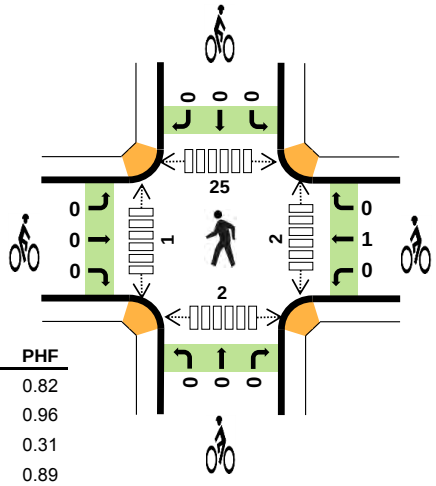
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	2	2	0	0	*4*	0	0	0	0	*0*	0	0	1	0	*1*
4:15 PM	0	0	0	0	*0*	0	0	0	1	*1*	0	0	3	0	*3*
4:30 PM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	**3**	**2**	**0**	**0**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**2**	**0**	*3*
5:00 PM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**1**	**0**	*2*
5:15 PM	**3**	**1**	**0**	**0**	***4***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	*0*
5:30 PM	**2**	**3**	**0**	**0**	***5***	**0**	**2**	**0**	**0**	***2***	**0**	**0**	**1**	**0**	***1***
5:45 PM	3	1	0	0	*4*	0	0	0	0	*0*	0	0	2	0	*2*
Count Total	14	9	0	1	*24*	0	3	0	1	*4*	1	1	10	0	*12*
Peak Hr	**8**	**6**	**0**	**1**	***15***	**0**	**3**	**0**	**0**	***3***	**1**	**1**	**4**	**0**	***6***

#5 Main St & Front St



Date: 05/31/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM



	HV %:	PHF
EB	1.7%	0.82
WB	1.6%	0.96
NB	0.0%	0.31
SB	0.0%	0.89
TOTAL	1.4%	0.85

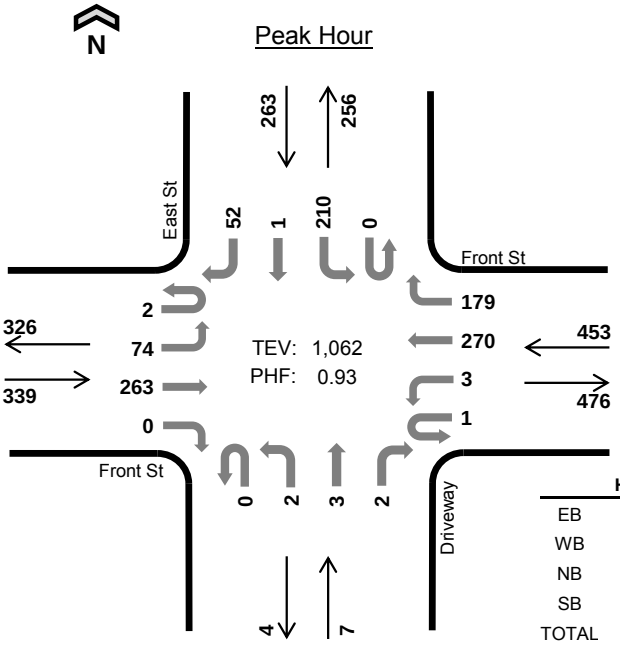
Two-Hour Count Summaries

Interval Start	Front St Eastbound				Front St Westbound				Driveway Northbound				Main St Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	10	59	1	1	1	56	11	0	1	1	3	0	8	0	15	167	0
4:15 PM	0	17	70	0	0	1	62	15	0	0	0	1	0	7	0	13	186	0
4:30 PM	0	20	75	0	1	1	49	18	0	1	0	1	0	3	0	18	187	0
4:45 PM	**1**	**21**	**79**	**0**	**2**	**0**	**65**	**13**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**15**	**206**	746
5:00 PM	**0**	**14**	**75**	**0**	**0**	**0**	**65**	**10**	**0**	**1**	**0**	**1**	**0**	**10**	**0**	**11**	**187**	766
5:15 PM	**0**	**23**	**72**	**0**	**0**	**0**	**63**	**16**	**0**	**0**	**0**	**1**	**0**	**9**	**1**	**9**	**194**	774
5:30 PM	**0**	**34**	**90**	**1**	**1**	**1**	**68**	**12**	**0**	**1**	**5**	**6**	**0**	**12**	**0**	**12**	**243**	**830**
5:45 PM	0	20	70	0	2	2	55	17	0	0	0	2	0	5	0	7	180	804
Count Total	1	159	590	2	7	6	483	112	0	4	6	15	0	64	1	100	1,550	0
Peak Hour All	**1**	**92**	**316**	**1**	**3**	**1**	**261**	**51**	**0**	**2**	**5**	**8**	**0**	**41**	**1**	**47**	**830**	**0**
Peak Hour HV	**0**	**1**	**6**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	**0**
Peak Hour HV%	**0%**	**1%**	**2%**	**0%**	**0%**	**0%**	**2%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**1%**	**0**

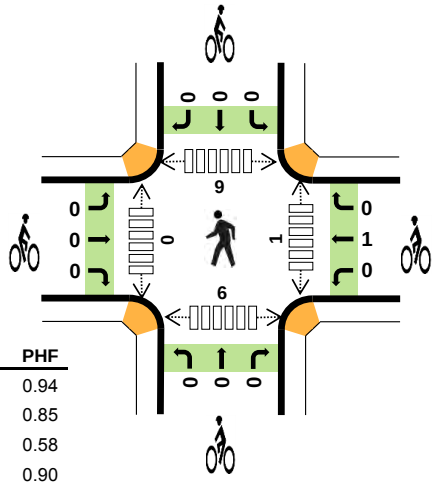
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	1	0	0	*1*	0	0	0	0	*0*	2	0	8	1	*11*
4:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	1	1	8	3	*13*
4:30 PM	1	1	0	0	*2*	0	0	0	0	*0*	0	0	6	0	*6*
4:45 PM	**1**	**1**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**2**	**1**	**7**	**0**	*10*
5:00 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**9**	**0**	*9*
5:15 PM	**1**	**2**	**0**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**6**	**1**	*7*
5:30 PM	**5**	**2**	**0**	**0**	***7***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**3**	**1**	***4***
5:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	6	0	*6*
Count Total	8	7	0	0	*15*	0	1	0	0	*1*	5	2	53	6	*66*
Peak Hour	**7**	**5**	**0**	**0**	***12***	**0**	**1**	**0**	**0**	***1***	**2**	**1**	**25**	**2**	***30***

#6 East St & Front St



Date: 05/31/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM



	HV %:	PHF
EB	2.1%	0.94
WB	2.4%	0.85
NB	0.0%	0.58
SB	0.8%	0.90
TOTAL	1.9%	0.93

Two-Hour Count Summaries

Interval Start		Front St Eastbound				Front St Westbound				Driveway Northbound				East St Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	15	49	0	0	0	59	49	0	1	0	2	0	55	2	13	245	0
4:15 PM		0	14	50	0	0	1	69	39	0	1	2	0	0	47	1	16	240	0
4:30 PM		0	15	50	0	0	1	57	37	0	2	1	0	0	78	1	13	255	0
4:45 PM		**0**	**16**	**67**	**0**	**0**	**1**	**68**	**65**	**0**	**1**	**1**	**1**	**0**	**55**	**0**	**12**	**287**	1,027
5:00 PM		**1**	**20**	**67**	**0**	**1**	**0**	**64**	**36**	**0**	**0**	**0**	**0**	**0**	**56**	**0**	**17**	**262**	1,044
5:15 PM		**1**	**20**	**57**	**0**	**0**	**1**	**69**	**37**	**0**	**0**	**1**	**0**	**0**	**46**	**1**	**8**	**241**	1,045
5:30 PM		**0**	**18**	**72**	**0**	**0**	**1**	**69**	**41**	**0**	**1**	**1**	**1**	**0**	**53**	**0**	**15**	**272**	**1,062**
5:45 PM		0	22	54	0	1	0	67	56	0	0	1	0	0	37	0	11	249	1,024
Count Total		2	140	466	0	2	5	522	360	0	6	7	4	0	427	5	105	2,051	0
Peak Hour	**All**	**2**	**74**	**263**	**0**	**1**	**3**	**270**	**179**	**0**	**2**	**3**	**2**	**0**	**210**	**1**	**52**	**1,062**	**0**
	HV	**0**	**0**	**7**	**0**	**0**	**0**	**8**	**3**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**20**	**0**
	HV%	**0%**	**0%**	**3%**	**-**	**0%**	**0%**	**3%**	**2%**	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**0%**	**2%**	**2%**	**0**

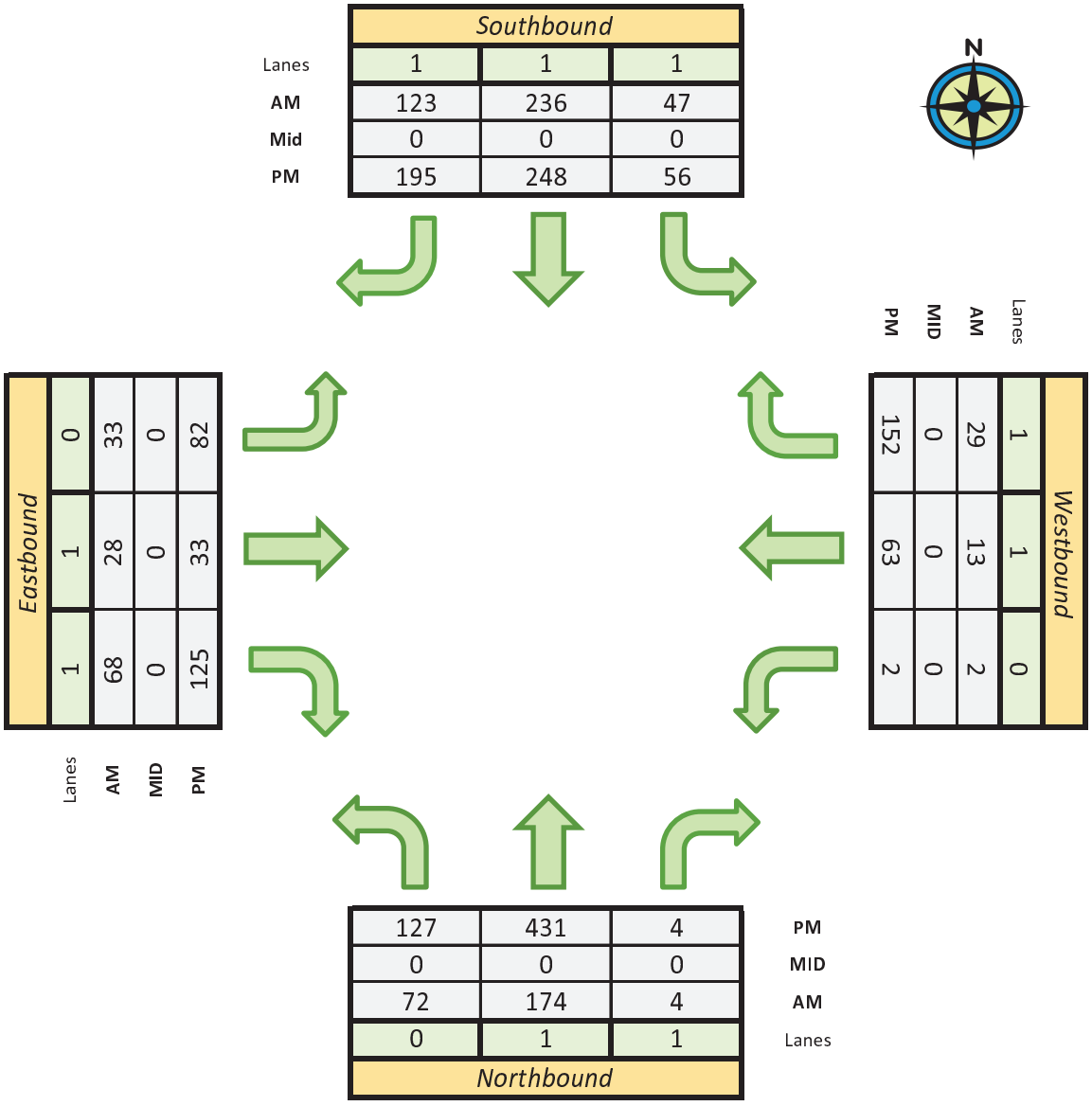
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	1	0	0	*1*	0	0	0	0	*0*	4	0	6	6	*16*
4:15 PM	0	0	0	2	*2*	0	0	0	0	*0*	0	1	3	3	*7*
4:30 PM	2	2	0	0	*4*	0	0	0	1	*1*	2	0	7	5	*14*
4:45 PM	**0**	**3**	**0**	**1**	***4***	**0**	**1**	**0**	**0**	***1***	**1**	**0**	**5**	**2**	*8*
5:00 PM	**1**	**2**	**0**	**1**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	*1*
5:15 PM	**2**	**0**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**1**	*2*
5:30 PM	**4**	**6**	**0**	**0**	***10***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**2**	**3**	***5***
5:45 PM	0	2	0	1	*3*	0	0	0	0	*0*	0	0	4	1	*5*
Count Total	9	16	0	5	*30*	0	1	0	1	*2*	7	1	29	21	*58*
Peak Hour	**7**	**11**	**0**	**2**	***20***	**0**	**1**	**0**	**0**	***1***	**1**	**0**	**9**	**6**	***16***

#7 Front St & Nestles Rd

Peak Hour Summary

Location ID:	6			***AM Peak:***	7:15
North/South:	Front St	***Date:***	06/12/13	***Mid Peak:***	
East/West:	Nestless Rd	***City:***	Soledad, CA	***PM Peak:***	16:30

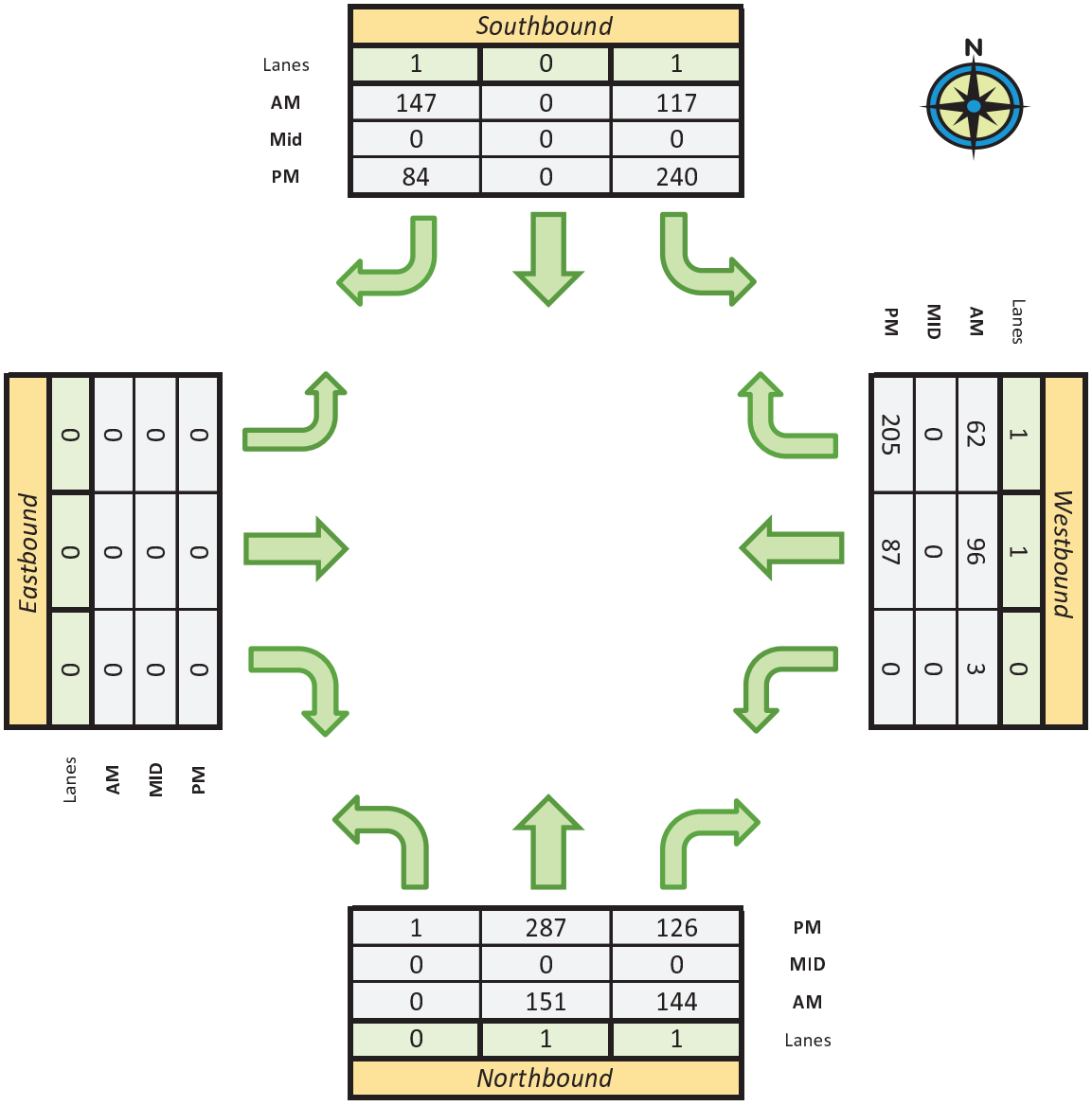


City Count, LLC.
314 E. Sycamore Ave. Arcadia, CA 91006
p: 800.286.5581 f: 800.286.5581
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#8 Front St & US 101 NB Ramps

Peak Hour Summary

Location ID:	7			***AM Peak:***	7:30
North/South:	SR-101 NB on/off ramps	***Date:***	06/12/13	***Mid Peak:***	
East/West:	Hector de la Rosa St	***City:***	Soledad, CA	***PM Peak:***	16:30

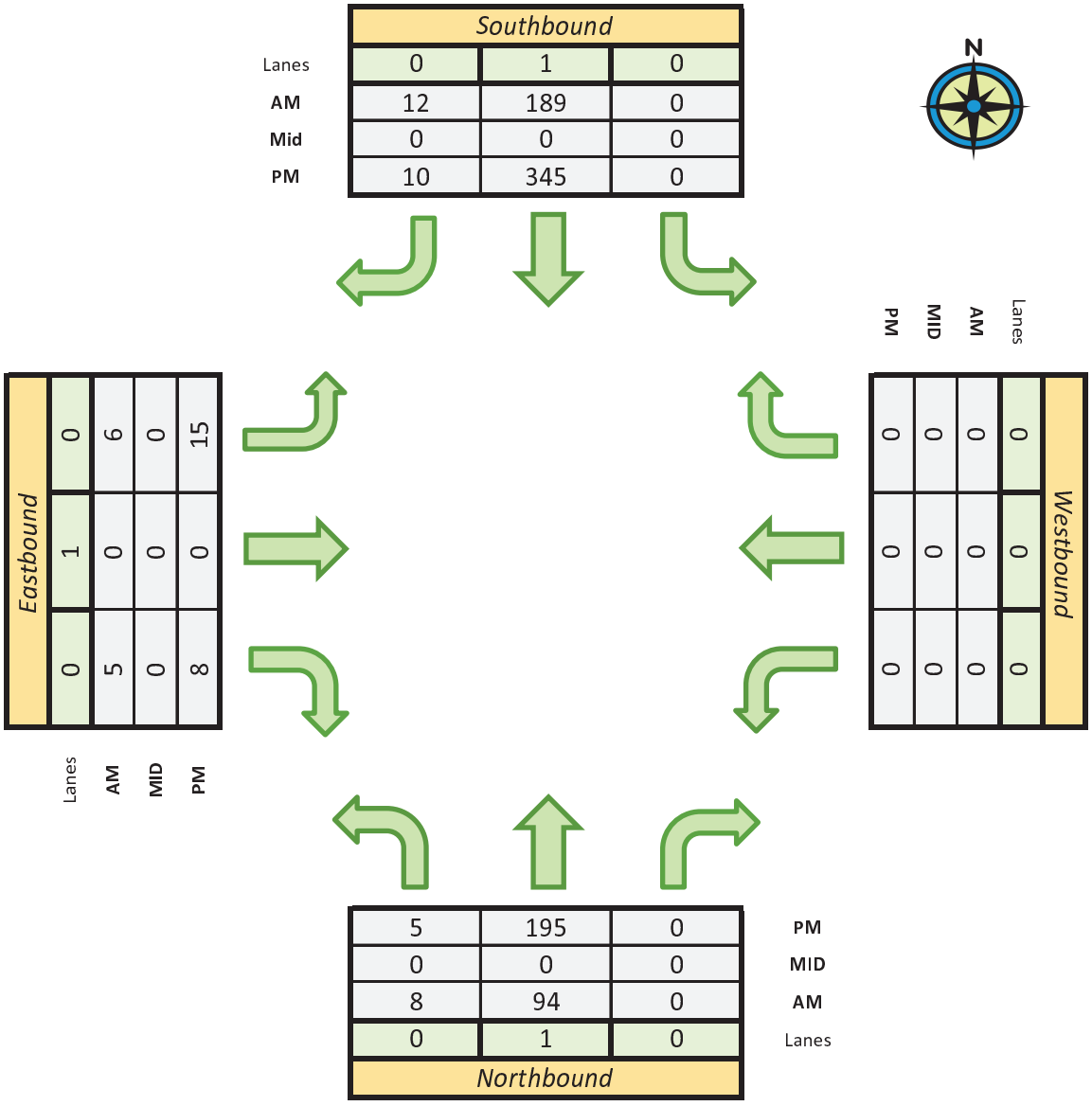


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#10 US 101 SB Ramps-Front St & Morisoli Rd

Peak Hour Summary

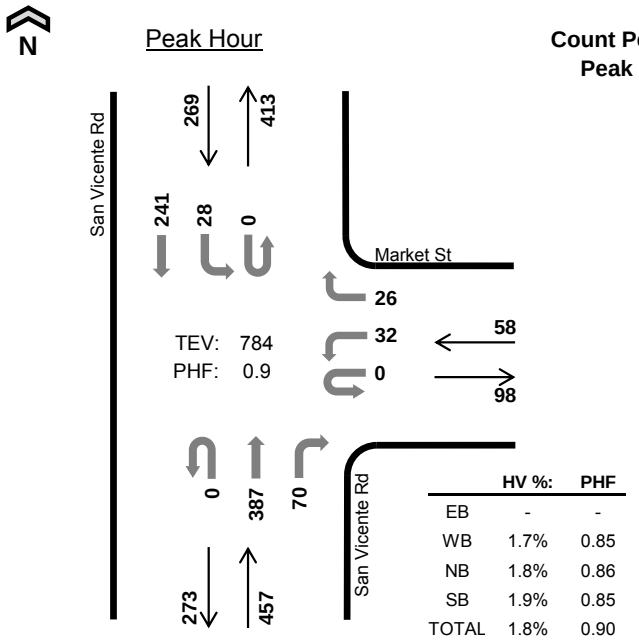
Location ID:	10			***AM Peak:***	7:30
North/South:	SR-101 SB off/on-ramp	***Date:***	06/12/13	***Mid Peak:***	
East/West:	Morisoli Rd	***City:***	Soledad, CA	***PM Peak:***	16:30



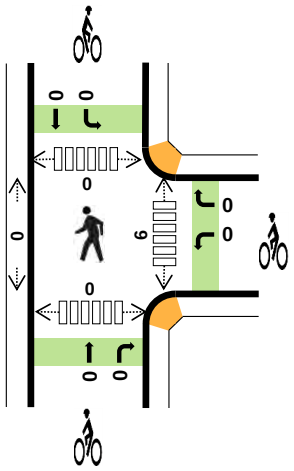
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#11 San Vicente Rd & Market St

Date: 05/31/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	-	-
WB	1.7%	0.85
NB	1.8%	0.86
SB	1.9%	0.85
TOTAL	1.8%	0.90



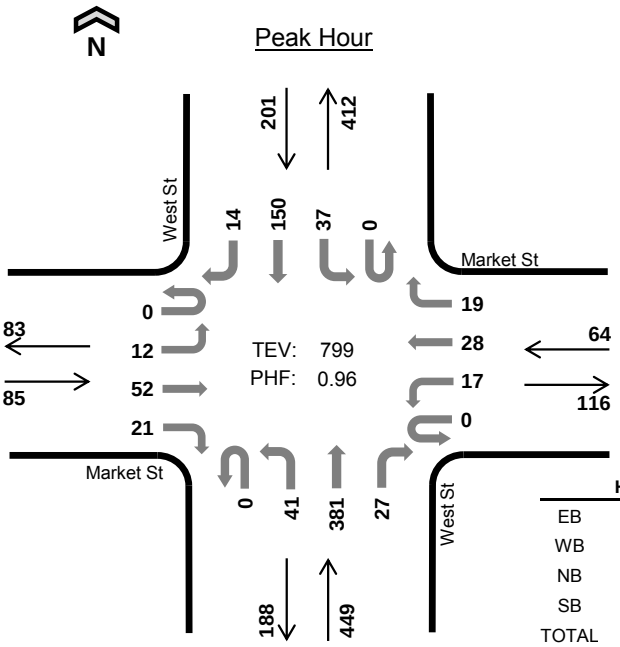
Two-Hour Count Summaries

Interval Start	0 Eastbound				Market St Westbound				San Vicente Rd Northbound				San Vicente Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	7	0	6	0	0	50	14	0	4	51	0	132	0
4:15 PM	0	0	0	0	0	7	0	9	0	0	53	12	0	7	50	0	138	0
4:30 PM	0	0	0	0	0	5	0	7	0	0	67	12	0	6	64	0	161	0
4:45 PM	0	0	0	0	0	5	0	4	0	0	79	7	0	7	50	0	152	583
5:00 PM	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**11**	**0**	**0**	**91**	**14**	**0**	**12**	**67**	**0**	**201**	652
5:15 PM	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**5**	**0**	**0**	**110**	**23**	**0**	**7**	**58**	**0**	**213**	727
5:30 PM	**0**	**0**	**0**	**0**	**0**	**9**	**0**	**6**	**0**	**0**	**108**	**19**	**0**	**4**	**71**	**0**	**217**	783
5:45 PM	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**4**	**0**	**0**	**78**	**14**	**0**	**5**	**45**	**0**	**153**	**784**
Count Total	0	0	0	0	0	56	0	52	0	0	636	115	0	52	456	0	1,367	0
Peak Hour All	**0**	**0**	**0**	**0**	**0**	**32**	**0**	**26**	**0**	**0**	**387**	**70**	**0**	**28**	**241**	**0**	**784**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**7**	**1**	**0**	**0**	**5**	**0**	**14**	**0**
Peak Hour HV%	**-**	**-**	**-**	**-**	**-**	**3%**	**-**	**0%**	**-**	**-**	**2%**	**1%**	**-**	**0%**	**2%**	**-**	**2%**	**0**

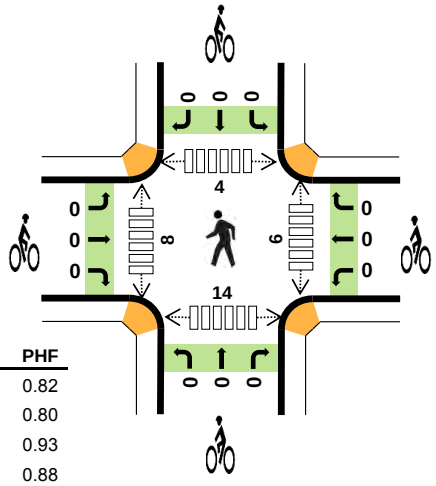
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	0	2	2	*4*	0	0	0	0	*0*	1	0	0	0	*1*
4:15 PM	0	0	2	3	*5*	0	0	0	0	*0*	4	0	0	0	*4*
4:30 PM	0	1	6	3	*10*	0	0	0	0	*0*	3	0	0	0	*3*
4:45 PM	0	0	4	3	*7*	0	0	0	0	*0*	1	0	0	0	*1*
5:00 PM	**0**	**1**	**5**	**1**	***7***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**0**	**0**	*2*
5:15 PM	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	*1*
5:30 PM	**0**	**0**	**2**	**2**	***4***	**0**	**0**	**0**	**0**	***0***	**3**	**0**	**0**	**0**	*3*
5:45 PM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
Count Total	0	2	22	16	*40*	0	0	0	0	*0*	15	0	0	0	*15*
Peak Hr	**0**	**1**	**8**	**5**	***14***	**0**	**0**	**0**	**0**	***0***	**6**	**0**	**0**	**0**	***6***

#12 West St & Market St



Date: 05/31/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	0.0%	0.82
WB	0.0%	0.80
NB	0.7%	0.93
SB	0.0%	0.88
TOTAL	0.4%	0.96

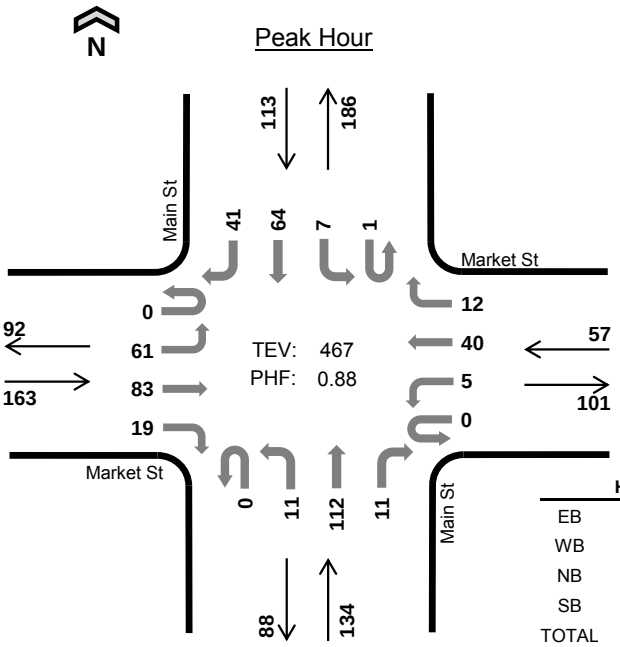
Two-Hour Count Summaries

Interval Start	Market St Eastbound				Market St Westbound				West St Northbound				West St Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	11	5	0	3	9	8	0	8	99	2	0	8	46	1	200	0
4:15 PM	0	4	10	8	0	7	5	6	0	13	96	3	0	8	42	2	204	0
4:30 PM	0	4	10	8	0	6	7	8	0	17	95	4	0	6	34	2	201	0
4:45 PM	0	4	13	3	0	3	3	4	0	17	87	3	0	7	44	1	189	794
5:00 PM	**0**	**5**	**14**	**7**	**0**	**1**	**5**	**1**	**0**	**16**	**82**	**8**	**0**	**11**	**44**	**2**	**196**	790
5:15 PM	**0**	**2**	**17**	**4**	**0**	**5**	**8**	**7**	**0**	**13**	**102**	**6**	**0**	**12**	**28**	**5**	**209**	795
5:30 PM	**0**	**2**	**9**	**6**	**0**	**5**	**8**	**7**	**0**	**5**	**95**	**7**	**0**	**8**	**42**	**3**	**197**	791
5:45 PM	**0**	**3**	**12**	**4**	**0**	**6**	**7**	**4**	**0**	**7**	**102**	**6**	**0**	**6**	**36**	**4**	**197**	**799**
Count Total	0	24	96	45	0	36	52	45	0	96	758	39	0	66	316	20	1,593	0
Peak Hour All	**0**	**12**	**52**	**21**	**0**	**17**	**28**	**19**	**0**	**41**	**381**	**27**	**0**	**37**	**150**	**14**	**799**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**3**	**0**
Peak Hour HV%	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**1%**	**4%**	**-**	**0%**	**0%**	**0%**	**0%**	**0**

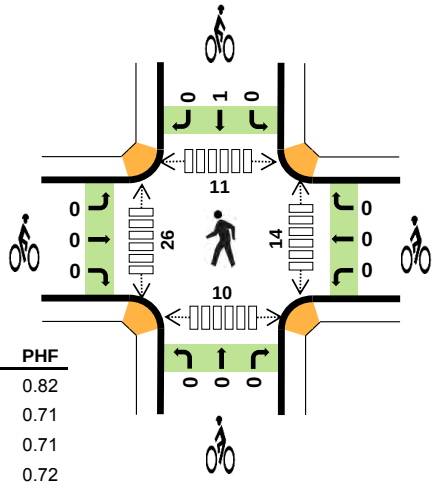
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	1	0	1	0	*2*	0	0	0	0	*0*	1	1	2	0	*4*
4:15 PM	0	0	0	0	*0*	1	0	0	0	*1*	0	1	0	0	*1*
4:30 PM	0	0	1	0	*1*	0	0	0	0	*0*	1	0	2	1	*4*
4:45 PM	0	0	1	1	*2*	0	0	0	0	*0*	0	2	2	0	*4*
5:00 PM	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**2**	**2**	**0**	**4**	*8*
5:15 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**1**	**0**	*3*
5:30 PM	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**2**	**1**	**0**	**6**	*9*
5:45 PM	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**2**	**3**	**3**	**4**	***12***
Count Total	1	0	6	1	*8*	1	0	0	0	*1*	8	12	10	15	*45*
Peak Hour	**0**	**0**	**3**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**6**	**8**	**4**	**14**	***32***

#13 Main St & Market St



Date: 05/31/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM



	HV %:	PHF
EB	0.0%	0.82
WB	0.0%	0.71
NB	2.2%	0.71
SB	0.0%	0.72
TOTAL	0.6%	0.88

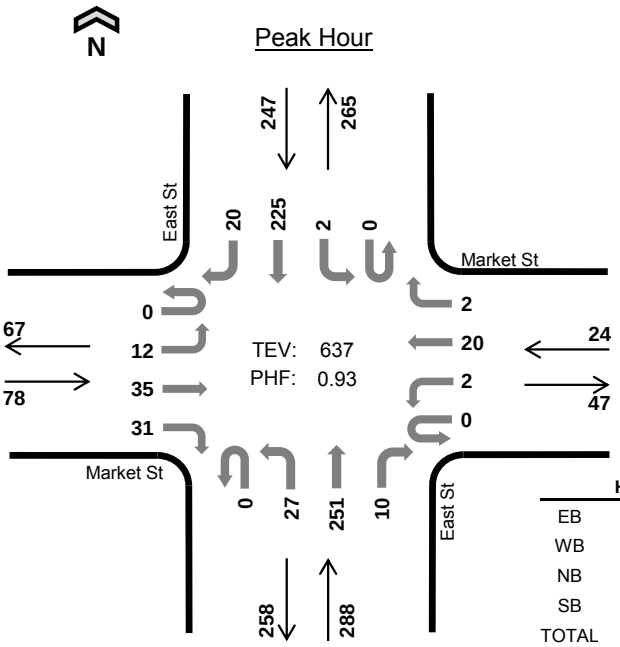
Two-Hour Count Summaries

Interval Start	Market St Eastbound				Market St Westbound				Main St Northbound				Main St Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	4	21	4	0	1	17	1	0	3	22	3	0	2	18	10	106	0
4:15 PM	0	12	18	3	0	1	4	1	0	5	17	3	0	1	15	12	92	0
4:30 PM	0	13	15	4	0	3	12	4	0	4	28	5	0	2	13	8	111	0
4:45 PM	**0**	**7**	**18**	**6**	**0**	**3**	**9**	**0**	**0**	**3**	**31**	**2**	**0**	**0**	**18**	**12**	**109**	418
5:00 PM	**0**	**22**	**23**	**5**	**0**	**0**	**7**	**5**	**0**	**2**	**19**	**2**	**0**	**1**	**10**	**4**	**100**	412
5:15 PM	**0**	**18**	**25**	**2**	**0**	**2**	**12**	**6**	**0**	**5**	**21**	**2**	**1**	**6**	**18**	**14**	**132**	452
5:30 PM	**0**	**14**	**17**	**6**	**0**	**0**	**12**	**1**	**0**	**1**	**41**	**5**	**0**	**0**	**18**	**11**	**126**	**467**
5:45 PM	0	13	16	2	0	2	8	1	0	3	22	5	0	1	17	9	99	457
Count Total	0	103	153	32	0	12	81	19	0	26	201	27	1	13	127	80	875	0
Peak Hour All	**0**	**61**	**83**	**19**	**0**	**5**	**40**	**12**	**0**	**11**	**112**	**11**	**1**	**7**	**64**	**41**	**467**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**3**	**0**
Peak Hour HV%	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**2%**	**9%**	**0%**	**0%**	**0%**	**0%**	**1%**	**0**

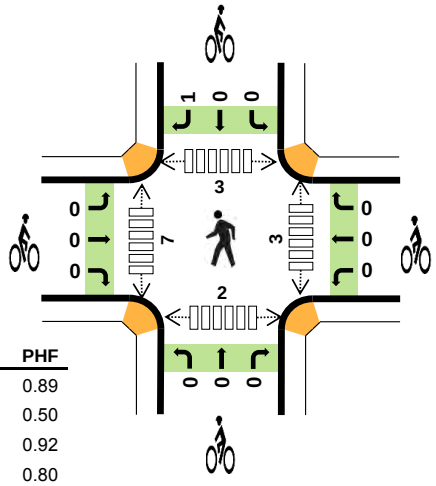
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	1	0	0	0	*1*	0	0	0	1	*1*	2	0	0	0	*2*
4:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	1	0	*1*
4:30 PM	0	0	1	0	*1*	0	0	0	1	*1*	0	1	1	0	*2*
4:45 PM	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**4**	**1**	**1**	**3**	*9*
5:00 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**2**	**5**	**0**	**3**	*10*
5:15 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**4**	**6**	**5**	**0**	*15*
5:30 PM	**0**	**0**	**2**	**0**	***2***	**0**	**0**	**0**	**1**	***1***	**4**	**14**	**5**	**4**	***27***
5:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	1	5	2	0	*8*
Count Total	1	0	4	0	*5*	0	0	0	3	*3*	17	32	15	10	*74*
Peak Hour	**0**	**0**	**3**	**0**	***3***	**0**	**0**	**0**	**1**	***1***	**14**	**26**	**11**	**10**	***61***

#14 East St & Market St



Date: 05/31/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



	HV %:	PHF
EB	0.0%	0.89
WB	0.0%	0.50
NB	1.4%	0.92
SB	1.2%	0.80
TOTAL	1.1%	0.93

Two-Hour Count Summaries

Interval Start	Market St Eastbound				Market St Westbound				East St Northbound				East St Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	4	9	13	0	0	7	2	0	5	63	3	0	1	46	4	157	0
4:15 PM	0	10	5	6	0	1	3	1	0	3	67	0	0	1	44	0	141	0
4:30 PM	**0**	**2**	**8**	**9**	**0**	**2**	**9**	**1**	**0**	**8**	**52**	**3**	**0**	**1**	**70**	**6**	**171**	0
4:45 PM	**0**	**1**	**7**	**11**	**0**	**0**	**3**	**0**	**0**	**6**	**68**	**3**	**0**	**0**	**54**	**6**	**159**	628
5:00 PM	**0**	**4**	**7**	**7**	**0**	**0**	**5**	**0**	**0**	**5**	**70**	**3**	**0**	**0**	**59**	**2**	**162**	633
5:15 PM	**0**	**5**	**13**	**4**	**0**	**0**	**3**	**1**	**0**	**8**	**61**	**1**	**0**	**1**	**42**	**6**	**145**	**637**
5:30 PM	0	7	4	2	0	2	4	2	0	4	67	3	0	1	49	4	149	615
5:45 PM	0	8	8	5	0	2	4	0	0	4	80	2	0	0	46	1	160	616
Count Total	0	41	61	57	0	7	38	7	0	43	528	18	0	5	410	29	1,244	0
Peak Hour All	**0**	**12**	**35**	**31**	**0**	**2**	**20**	**2**	**0**	**27**	**251**	**10**	**0**	**2**	**225**	**20**	**637**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**1**	**0**	**0**	**3**	**0**	**7**	**0**
Peak Hour HV%	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**1%**	**10%**	**-**	**0%**	**1%**	**0%**	**1%**	**0**

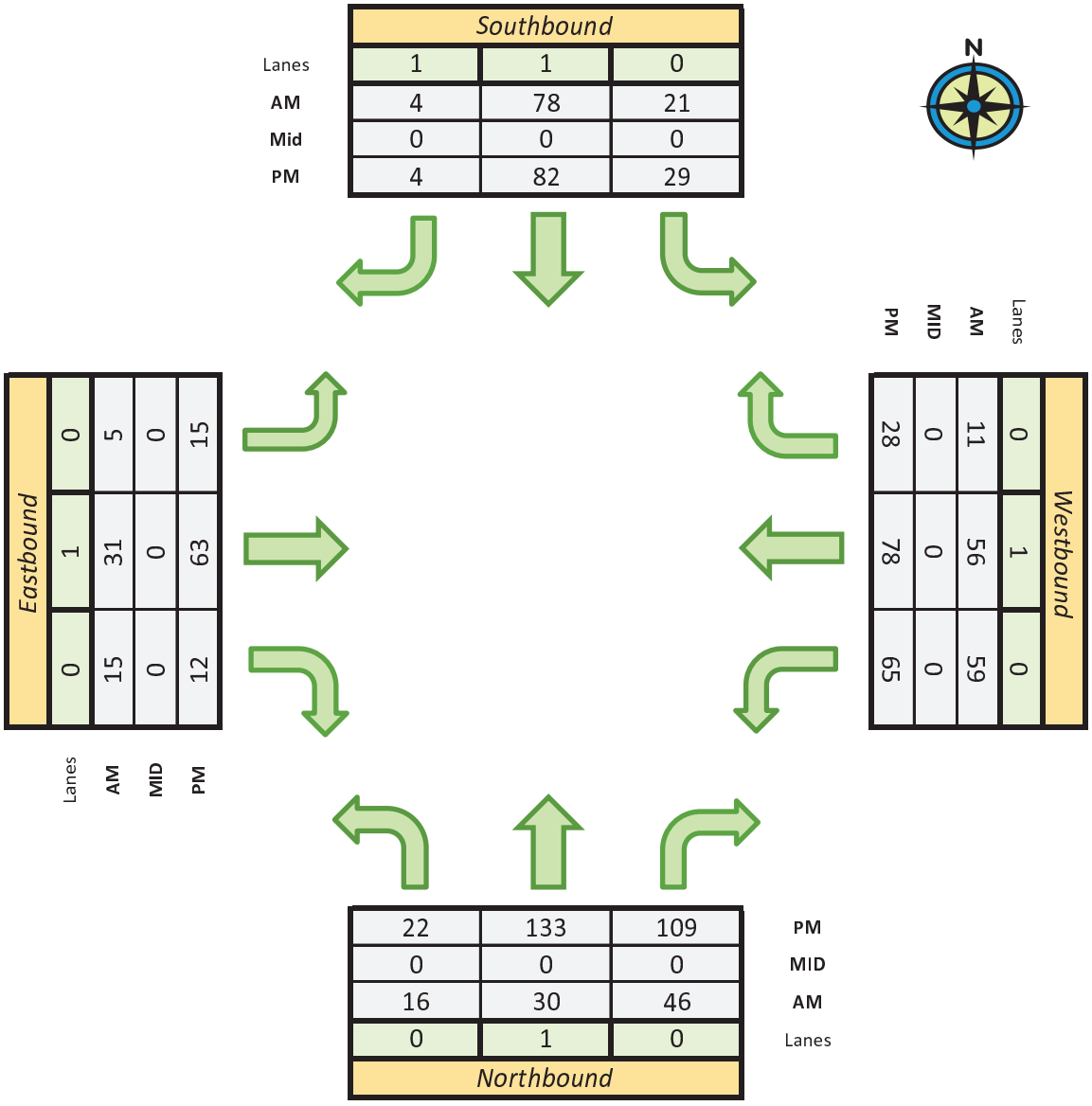
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	1	0	1	0	*2*	0	0	0	0	*0*	1	0	0	0	*1*
4:15 PM	0	0	0	1	*1*	0	0	0	0	*0*	1	0	1	1	*3*
4:30 PM	**0**	**0**	**3**	**0**	***3***	**0**	**0**	**0**	**1**	***1***	**1**	**0**	**0**	**0**	*1*
4:45 PM	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**0**	**0**	***0***	**2**	**1**	**1**	**0**	*4*
5:00 PM	**0**	**0**	**0**	**2**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**0**	**2**	*4*
5:15 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**4**	**2**	**0**	***6***
5:30 PM	0	0	1	1	*2*	0	0	0	0	*0*	1	3	0	4	*8*
5:45 PM	0	0	3	1	*4*	0	0	0	1	*1*	0	0	1	2	*3*
Count Total	1	0	9	6	*16*	0	0	0	2	*2*	6	10	5	9	*30*
Peak Hour	**0**	**0**	**4**	**3**	***7***	**0**	**0**	**0**	**1**	***1***	**3**	**7**	**3**	**2**	***15***

#15 East St-Andalucia Dr & Metz Rd

Peak Hour Summary

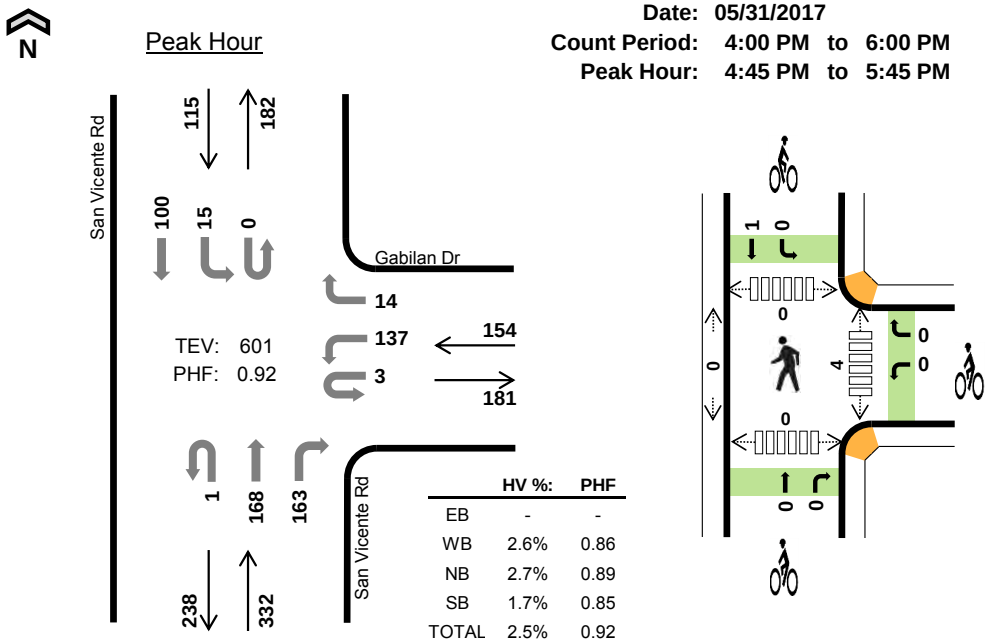
Location ID:	3			***AM Peak:***	7:30
North/South:	East St	***Date:***	06/12/13	***Mid Peak:***	
East/West:	Metz Rd	***City:***	Soledad, CA	***PM Peak:***	16:30



City Count, LLC.
314 E. Sycamore Ave. Arcadia, CA 91006
p: 800.286.5581 f: 800.286.5581
www.citycount.com

#16 San Vicente Rd & Gabilan Dr

Date: 05/31/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM



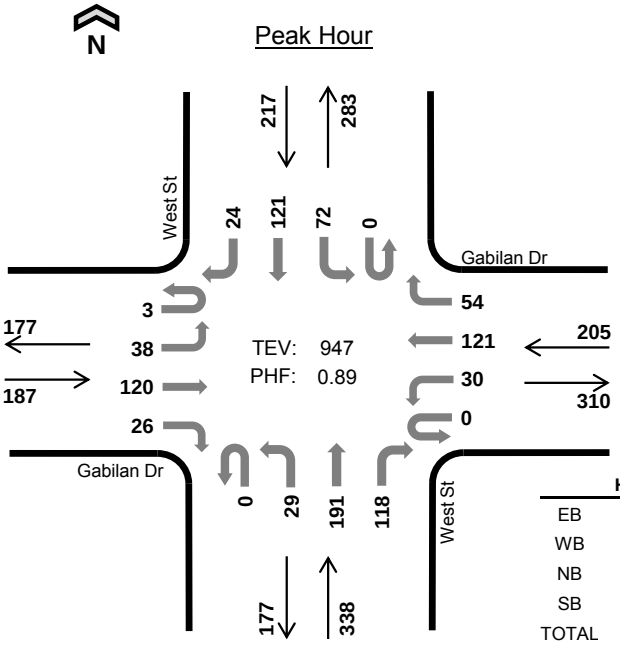
Two-Hour Count Summaries

Interval Start		0 Eastbound				Gabilan Dr Westbound				San Vicente Rd Northbound				San Vicente Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	0	0	0	0	25	0	2	0	0	23	24	0	4	26	0	104	0
4:15 PM		0	0	0	0	0	36	0	4	0	0	29	23	0	5	18	0	115	0
4:30 PM		0	0	0	0	0	32	0	4	0	0	26	30	0	1	31	0	124	0
4:45 PM		**0**	**0**	**0**	**0**	**0**	**26**	**0**	**4**	**0**	**0**	**32**	**36**	**0**	**10**	**21**	**0**	**129**	472
5:00 PM		**0**	**0**	**0**	**0**	**0**	**36**	**0**	**1**	**1**	**0**	**42**	**39**	**0**	**1**	**33**	**0**	**153**	521
5:15 PM		**0**	**0**	**0**	**0**	**1**	**37**	**0**	**4**	**0**	**0**	**47**	**46**	**0**	**2**	**18**	**0**	**155**	561
5:30 PM		**0**	**0**	**0**	**0**	**2**	**38**	**0**	**5**	**0**	**0**	**47**	**42**	**0**	**2**	**28**	**0**	**164**	**601**
5:45 PM		0	0	0	0	0	26	0	1	0	0	35	34	0	3	18	0	117	589
Count Total		0	0	0	0	3	256	0	25	1	0	281	274	0	28	193	0	1,061	0
Peak Hour	**All**	**0**	**0**	**0**	**0**	**3**	**137**	**0**	**14**	**1**	**0**	**168**	**163**	**0**	**15**	**100**	**0**	**601**	**0**
	HV	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**1**	**0**	**0**	**9**	**0**	**0**	**0**	**2**	**0**	**15**	**0**
	HV%	**-**	**-**	**-**	**-**	**0%**	**2%**	**-**	**7%**	**0%**	**-**	**5%**	**0%**	**-**	**0%**	**2%**	**-**	**2%**	**0**

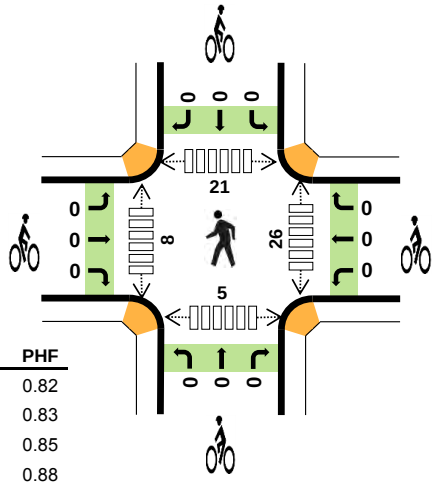
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	0	1	3	*4*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	0	1	1	1	*3*	0	0	0	1	*1*	0	0	0	0	*0*
4:30 PM	0	0	2	1	*3*	0	0	0	0	*0*	1	0	0	0	*1*
4:45 PM	**0**	**1**	**4**	**0**	***5***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	*1*
5:00 PM	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	*1*
5:15 PM	**0**	**2**	**3**	**0**	***5***	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	*0*
5:30 PM	**0**	**1**	**1**	**1**	***3***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**0**	**0**	***2***
5:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	5	13	7	*25*	0	0	0	2	*2*	5	0	0	0	*5*
Peak Hr	**0**	**4**	**9**	**2**	***15***	**0**	**0**	**0**	**1**	***1***	**4**	**0**	**0**	**0**	***4***

#17 West St & Gabilan Dr



Date: 05/31/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM



	HV %:	PHF
EB	0.0%	0.82
WB	2.0%	0.83
NB	0.3%	0.85
SB	0.0%	0.88
TOTAL	0.5%	0.89

Two-Hour Count Summaries

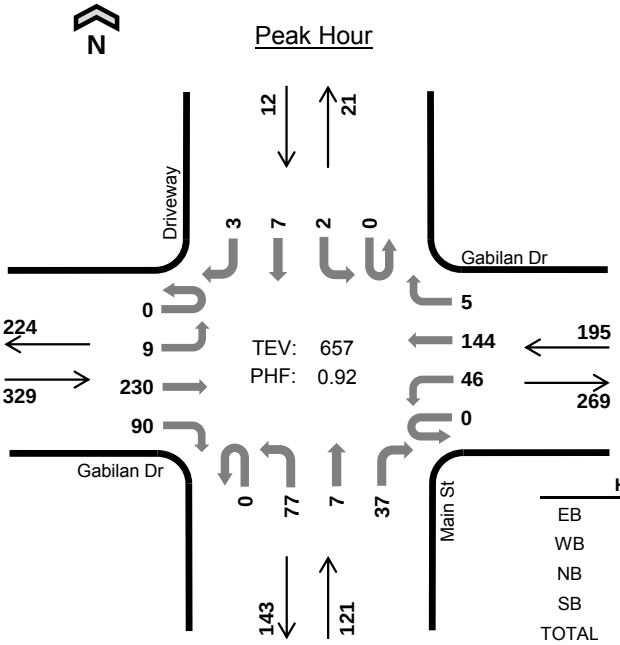
Interval Start		Gabilan Dr Eastbound				Gabilan Dr Westbound				West St Northbound				West St Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	8	22	8	0	6	24	21	0	9	59	28	0	13	33	4	235	0
4:15 PM		1	8	21	15	0	4	34	18	0	6	35	40	0	13	27	6	228	0
4:30 PM		0	8	28	9	0	7	30	15	0	16	35	32	0	8	20	5	213	0
4:45 PM		**2**	**12**	**37**	**6**	**0**	**5**	**21**	**9**	**0**	**6**	**46**	**26**	**0**	**19**	**32**	**8**	**229**	905
5:00 PM		**0**	**7**	**24**	**6**	**0**	**14**	**30**	**15**	**0**	**7**	**33**	**24**	**0**	**21**	**29**	**2**	**212**	882
5:15 PM		**1**	**12**	**31**	**8**	**0**	**7**	**28**	**14**	**0**	**13**	**54**	**29**	**0**	**18**	**19**	**7**	**241**	895
5:30 PM		**0**	**7**	**28**	**6**	**0**	**4**	**42**	**16**	**0**	**3**	**58**	**39**	**0**	**14**	**41**	**7**	**265**	**947**
5:45 PM		0	7	26	2	0	2	21	23	0	6	55	31	0	10	31	7	221	939
Count Total		4	69	217	60	0	49	230	131	0	66	375	249	0	116	232	46	1,844	0
Peak Hour	**All**	**3**	**38**	**120**	**26**	**0**	**30**	**121**	**54**	**0**	**29**	**191**	**118**	**0**	**72**	**121**	**24**	**947**	**0**
	HV	**0**	**0**	**0**	**0**	**0**	**1**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**5**	**0**
	HV%	**0%**	**0%**	**0%**	**0%**	**-**	**3%**	**2%**	**0%**	**-**	**0%**	**1%**	**0%**	**-**	**0%**	**0%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

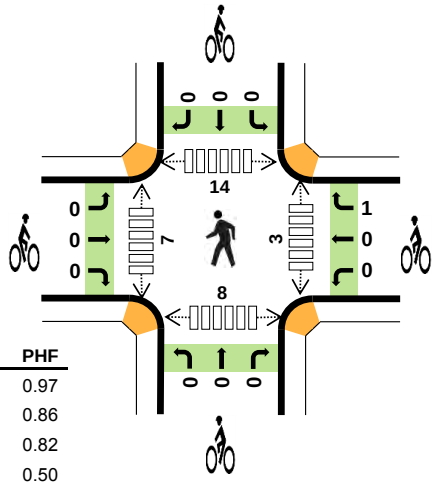
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	1	0	0	0	*1*	0	0	0	0	*0*	1	1	10	0	*12*
4:15 PM	0	0	0	0	*0*	1	0	0	0	*1*	0	0	4	2	*6*
4:30 PM	0	0	1	0	*1*	0	0	0	0	*0*	4	6	4	3	*17*
4:45 PM	**0**	**1**	**1**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**5**	**0**	**3**	**0**	*8*
5:00 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**8**	**0**	**8**	**3**	*19*
5:15 PM	**0**	**3**	**0**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**1**	**3**	**6**	**2**	*12*
5:30 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**12**	**5**	**4**	**0**	***21***
5:45 PM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	11	3	*14*
Count Total	1	4	3	0	*8*	1	0	0	0	*1*	31	15	50	13	*109*
Peak Hour	**0**	**4**	**1**	**0**	***5***	**0**	**0**	**0**	**0**	***0***	**26**	**8**	**21**	**5**	***60***

#18 Main St & Gabilan Dr

Date: 05/31/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM



	HV %:	PHF
EB	0.0%	0.97
WB	0.5%	0.86
NB	0.0%	0.82
SB	0.0%	0.50
TOTAL	0.2%	0.92



Two-Hour Count Summaries

Interval Start	Gabilan Dr Eastbound				Gabilan Dr Westbound				Main St Northbound				Driveway Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	2	51	17	0	8	27	1	0	17	0	5	0	1	0	1	130	0
4:15 PM	0	1	62	16	0	3	43	0	0	23	1	6	0	0	2	0	157	0
4:30 PM	0	0	60	15	0	2	32	0	0	20	0	13	0	1	0	1	144	0
4:45 PM	**0**	**2**	**61**	**20**	**0**	**7**	**28**	**1**	**0**	**18**	**2**	**7**	**0**	**0**	**1**	**0**	**147**	578
5:00 PM	**0**	**4**	**56**	**21**	**0**	**14**	**34**	**2**	**0**	**24**	**2**	**8**	**0**	**0**	**3**	**3**	**171**	619
5:15 PM	**0**	**2**	**54**	**29**	**0**	**15**	**36**	**1**	**0**	**16**	**1**	**6**	**0**	**1**	**0**	**0**	**161**	623
5:30 PM	**0**	**1**	**59**	**20**	**0**	**10**	**46**	**1**	**0**	**19**	**2**	**16**	**0**	**1**	**3**	**0**	**178**	**657**
5:45 PM	0	0	64	13	0	7	30	1	0	25	1	3	0	1	0	1	146	656
Count Total	0	12	467	151	0	66	276	7	0	162	9	64	0	5	9	6	1,234	0
Peak Hour All	**0**	**9**	**230**	**90**	**0**	**46**	**144**	**5**	**0**	**77**	**7**	**37**	**0**	**2**	**7**	**3**	**657**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**
Peak Hour HV%	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**1%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**0%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

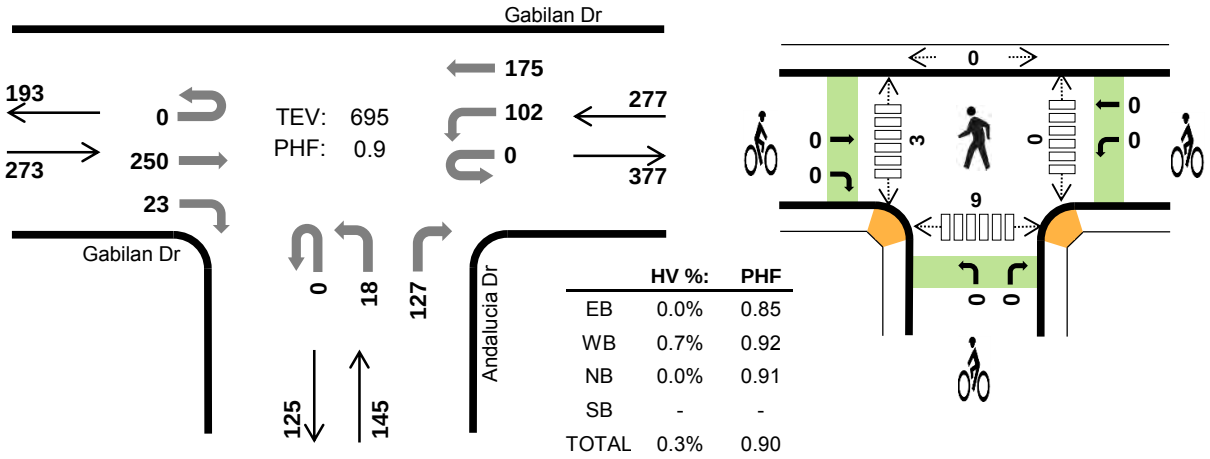
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	1	1	0	0	*2*	0	0	0	0	*0*	0	2	6	2	*10*
4:15 PM	0	1	0	0	*1*	1	0	0	0	*1*	7	0	4	0	*11*
4:30 PM	0	0	0	0	*0*	0	0	0	1	*1*	0	0	1	0	*1*
4:45 PM	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**2**	**1**	*3*
5:00 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**3**	**1**	**5**	**2**	*11*
5:15 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**4**	**6**	**2**	*12*
5:30 PM	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	***1***	**0**	**2**	**1**	**3**	***6***
5:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	2	0	8	2	*12*
Count Total	1	3	0	0	*4*	1	1	0	1	*3*	12	9	33	12	*66*
Peak Hour	**0**	**1**	**0**	**0**	***1***	**0**	**1**	**0**	**0**	***1***	**3**	**7**	**14**	**8**	***32***

#19 Andalucia Dr & Gabilan Dr

N

Peak Hour

Date: 05/31/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM



	HV %:	PHF
EB	0.0%	0.85
WB	0.7%	0.92
NB	0.0%	0.91
SB	-	-
TOTAL	0.3%	0.90

Two-Hour Count Summaries

Interval Start		Gabilan Dr Eastbound				Gabilan Dr Westbound				Andalucia Dr Northbound				0 Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	0	52	3	0	16	26	0	0	10	0	26	0	0	0	0	133	0
4:15 PM		0	0	60	7	0	16	35	0	0	12	0	22	0	0	0	0	152	0
4:30 PM		0	0	73	4	0	28	32	0	0	2	0	21	0	0	0	0	160	0
4:45 PM		**0**	**0**	**62**	**6**	**0**	**26**	**34**	**0**	**0**	**3**	**0**	**31**	**0**	**0**	**0**	**0**	**162**	607
5:00 PM		**0**	**0**	**61**	**6**	**0**	**27**	**48**	**0**	**0**	**2**	**0**	**37**	**0**	**0**	**0**	**0**	**181**	655
5:15 PM		**0**	**0**	**53**	**5**	**0**	**24**	**45**	**0**	**0**	**4**	**0**	**28**	**0**	**0**	**0**	**0**	**159**	662
5:30 PM		**0**	**0**	**74**	**6**	**0**	**25**	**48**	**0**	**0**	**9**	**0**	**31**	**0**	**0**	**0**	**0**	**193**	**695**
5:45 PM		0	0	61	8	0	15	35	0	0	5	0	35	0	0	0	0	159	692
Count Total		0	0	496	45	0	177	303	0	0	47	0	231	0	0	0	0	1,299	0
Peak Hour	**All**	**0**	**0**	**250**	**23**	**0**	**102**	**175**	**0**	**0**	**18**	**0**	**127**	**0**	**0**	**0**	**0**	**695**	**0**
	HV	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**
	HV%	**-**	**-**	**0%**	**0%**	**-**	**1%**	**1%**	**-**	**-**	**0%**	**-**	**0%**	**-**	**-**	**-**	**-**	**0%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	1	1	0	0	*2*	0	0	0	0	*0*	2	0	0	1	*3*
4:15 PM	0	1	0	0	*1*	1	1	0	0	*2*	0	0	0	0	*0*
4:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	**0**	**2**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**3**	*3*
5:00 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**1**	*2*
5:15 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**0**	**0**	*2*
5:30 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**5**	***5***
5:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	1	0	0	4	*5*
Count Total	1	4	0	0	*5*	1	1	0	0	*2*	3	3	0	14	*20*
Peak Hr	**0**	**2**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**3**	**0**	**9**	***12***

					PM PEAK HOUR												
					NB			SB			EB			WB			
	INTERSECTION		COUNT DATE	COUNT DAY OF WEEK	L	T	R	L	T	R	L	T	R	L	T	R	GRAND TOTAL
1	Moranda Road	US 101 NB Ramps															
			5/31/2017	Wednesday	330	4	0	0	0	0	0	0	123	0	0	0	457
2	Moranda Road	Front Street															
			5/31/2017	Wednesday	71	330	0	0	112	11	4	0	964	0	0	0	1,492
3	San Vicente Road	Front Street															
			5/31/2017	Wednesday	5	3	0	45	5	182	369	697	1	13	193	87	1,600
4	West Street	Front Street															
			5/31/2017	Wednesday	0	0	0	25	0	87	294	485	0	0	202	78	1,171
5	Main Street	Front Street															
			5/31/2017	Wednesday	2	5	8	41	1	47	93	316	1	4	261	51	830
6	East Street	Front Street															
			5/31/2017	Wednesday	2	3	2	210	1	52	76	263	0	4	270	179	1,062
7	Front Street	Nestles Road															
			6/12/2013	Wednesday	127	431	4	56	248	195	82	33	125	2	63	152	1,518
8	Front Street	US 101 NB Ramps															
			6/12/2013	Wednesday	1	287	126	240	0	84	0	0	0	0	87	205	1,030
9	Front Street	US 101 SB Ramps															
			5/31/2017	Wednesday	0	3	68	1	968	0	0	0	6	0	0	0	1,046
10	Front Street	Morisoli Road															
			6/12/2013	Wednesday	5	195	0	0	345	10	15	0	8	0	0	0	578
11	San Vicente Road	Market Street															
			5/31/2017	Wednesday	0	387	70	28	241	0	0	0	0	32	0	26	784
12	West Street	Market Street															
			5/31/2017	Wednesday	41	381	27	37	150	14	12	52	21	17	28	19	799
13	Main Street	Market Street															
			5/31/2017	Wednesday	11	112	11	8	64	41	61	83	19	5	40	12	467
14	East Street	Market Street															
			5/31/2017	Wednesday	27	251	10	2	225	20	12	35	31	2	20	2	637
15	East Street	North Street/Metz Road															
			6/12/2013	Wednesday	22	133	109	29	82	4	15	63	12	65	78	28	640
16	San Vicente Road	Gabilan Drive															
			5/31/2017	Wednesday	1	168	163	15	100	0	0	0	0	140	0	14	601
17	West Street	Gabilan Drive															
			5/31/2017	Wednesday	29	191	118	72	121	24	41	120	26	30	121	54	947
18	Main Street	Gabilan Drive															
			5/31/2017	Wednesday	77	7	37	2	7	3	9	230	90	46	144	5	657
19	Andalucia Drive	Gabilan Drive															
			5/31/2017	Wednesday	18	0	127	0	0	0	0	250	23	102	175	0	695

Appendix C

2017 Traffic Count Summary

						PM PEAK HOUR														
						NB			SB			EB			WB					
	INTERSECTION		COUNT DATE	COUNT DAY OF WEEK	L	T	R	L	T	R	L	T	R	L	T	R	GRAND TOTAL		PERCENT INCREASE
1	Moranda Road	US 101 NB Ramps	7/26/2006	Wednesday	242	0	0	0	0	0	0	0	86	0	0	0	328		
			5/31/2017	Wednesday	330	4	0	0	0	0	0	0	123	0	0	0	457	129	39.3%
2	Moranda Road	Front Street	7/26/2006	Wednesday	22	264	0	0	83	0	8	0	860	0	0	0	1,237		
			5/31/2017	Wednesday	71	330	0	0	112	11	4	0	964	0	0	0	1,492	255	20.6%
3	San Vicente Road	Front Street	7/26/2006	Wednesday	0	0	0	46	1	96	357	600	2	3	201	75	1,381		
			5/31/2017	Wednesday	5	3	0	45	5	182	369	697	1	13	193	87	1,600	219	15.9%
4	West Street	Front Street	7/26/2006	Wednesday	0	0	0	17	0	47	124	516	0	0	230	39	973		
			5/31/2017	Wednesday	0	0	0	25	0	87	294	485	0	0	202	78	1,171	198	20.3%
5	Main Street	Front Street	7/27/2006	Thursday	1	0	6	25	0	50	59	328	0	4	204	48	725		
			5/31/2017	Wednesday	2	5	8	41	1	47	93	316	1	4	261	51	830	105	14.5%
6	East Street	Front Street	7/27/2006	Thursday	2	2	5	240	2	80	125	223	4	2	202	125	1,012		
			5/31/2017	Wednesday	2	3	2	210	1	52	76	263	0	4	270	179	1,062	50	4.9%
7	Front Street	Nestles Road	7/26/2006	Wednesday	129	336	6	45	202	146	71	12	95	7	15	80	1,144		
			6/12/2013	Wednesday	127	431	4	56	248	195	82	33	125	2	63	152	1,518	374	32.7%
8	Front Street	US 101 NB Ramps	7/26/2006	Wednesday	1	292	100	224	0	61	0	0	0	0	73	230	981		
			6/12/2013	Wednesday	1	287	126	240	0	84	0	0	0	0	87	205	1,030	49	5.0%
9	Front Street	US 101 SB Ramps	7/26/2006	Wednesday	0	3	41	1	823	0	0	0	6	0	0	0	874		
			5/31/2017	Wednesday	0	3	68	1	968	0	0	0	6	0	0	0	1,046	172	19.7%
10	Front Street	Morisoli Road	7/27/2006	Thursday	5	165	0	0	280	6	6	0	3	0	0	0	465		
			6/12/2013	Wednesday	5	195	0	0	345	10	15	0	8	0	0	0	578	113	24.3%
11	San Vicente Road	Market Street	7/26/2006	Wednesday	0	306	39	8	128	0	0	0	0	24	0	10	515		
			5/31/2017	Wednesday	0	387	70	28	241	0	0	0	0	32	0	26	784	269	52.2%
12	West Street	Market Street	7/27/2006	Thursday	32	284	22	31	109	9	13	36	21	14	38	23	632		
			5/31/2017	Wednesday	41	381	27	37	150	14	12	52	21	17	28	19	799	167	26.4%
13	Main Street	Market Street	7/25/2006	Tuesday	4	59	21	4	40	20	20	70	11	10	59	1	319		
			5/31/2017	Wednesday	11	112	11	8	64	41	61	83	19	5	40	12	467	148	46.4%
14	East Street	Market Street	7/27/2006	Thursday	21	207	4	0	174	11	20	33	24	5	22	1	522		
			5/31/2017	Wednesday	27	251	10	2	225	20	12	35	31	2	20	2	637	115	22.0%
15	East Street	North Street/Metz Road	7/27/2006	Thursday	26	100	96	29	119	21	18	54	12	63	52	20	610		
			6/12/2013	Wednesday	22	133	109	29	82	4	15	63	12	65	78	28	640	30	4.9%
16	San Vicente Road	Gabilan Drive	7/26/2006	Wednesday	0	126	133	9	86	0	0	0	0	52	0	13	419		
			5/31/2017	Wednesday	1	168	163	15	100	0	0	0	0	140	0	14	601	182	43.4%
17	West Street	Gabilan Drive	7/27/2006	Thursday	23	149	99	49	79	15	37	73	22	22	61	61	690		
			5/31/2017	Wednesday	29	191	118	72	121	24	41	120	26	30	121	54	947	257	37.2%
18	Main Street	Gabilan Drive	7/27/2006	Thursday	61	2	30	1	1	0	0	172	72	20	93	3	455		
			5/31/2017	Wednesday	77	7	37	2	7	3	9	230	90	46	144	5	657	202	44.4%
19	Andalucia Drive	Gabilan Drive	7/27/2006	Thursday	29	0	43	0	0	0	0	177	27	43	82	0	401		
			5/31/2017	Wednesday	18	0	127	0	0	0	0	250	23	102	175	0	695	294	73.3%
	GRAND TOTAL	**2006**															**13,683**		
		2013/2017															**17,011**	3,328	24.3%

Appendix D

Comparison of 2007 and 2017 Traffic Counts

						PM PEAK HOUR														
						NB			SB			EB			WB					
	INTERSECTION		COUNT DATE	COUNT DAY OF WEEK	L	T	R	L	T	R	L	T	R	L	T	R	GRAND TOTAL		PERCENT INCREASE
1	Moranda Road	US 101 NB Ramps	5/31/2017	Wednesday	330	4	0	0	0	0	0	0	123	0	0	0	457		
			Background		482	0	0	0	0	0	0	0	86	0	0	0	568	111	24.3%
					152	4	0	0	0	0	0	0	37	0	0	0			
2	Moranda Road	Front Street	5/31/2017	Wednesday	71	330	0	0	112	11	4	0	964	0	0	0	1,492		
			Background		22	504	0	0	83	0	8	0	1,143	0	0	0	1,760	268	18.0%
					49	174	0	0	29	11	4	0	179	0	0	0			
3	San Vicente Road	Front Street	5/31/2017	Wednesday	5	3	0	45	5	182	369	697	1	13	193	87	1,600		
			Background		0	0	0	46	1	260	545	695	2	3	276	75	1,903	303	18.9%
					5	3	0	1	4	78	176	2	1	10	83	12			
4	West Street	Front Street	5/31/2017	Wednesday	0	0	0	25	0	87	294	485	0	0	202	78	1,171		
			Background		0	0	0	17	0	47	124	611	0	0	305	39	1,143	-28	-2.4%
					0	0	0	8	0	40	170	126	0	0	103	39			
5	Main Street	Front Street	5/31/2017	Wednesday	2	5	8	41	1	47	93	316	1	4	261	51	830		
			Background		1	0	6	25	0	50	59	423	0	4	279	48	895	65	7.8%
					1	5	2	16	1	3	34	107	1	0	18	3			
6	East Street	Front Street	5/31/2017	Wednesday	2	3	2	210	1	52	76	263	0	4	270	179	1,062		
			Background		2	2	5	437	2	155	220	223	4	2	202	382	1,636	574	54.0%
					0	1	3	227	1	103	144	40	4	2	68	203			
7	Front Street	Nestles Road	6/12/2013	Wednesday	127	431	4	56	248	195	82	33	125	2	63	152	1,518		
			Background		129	451	6	68	283	239	184	12	95	7	15	108	1,597	79	5.2%
					2	20	2	12	35	44	102	21	30	5	48	44			
8	Front Street	US 101 NB Ramps	6/12/2013	Wednesday	1	287	126	240	0	84	0	0	0	0	87	205	1,030		
			Background		1	407	100	224	0	142	0	0	0	0	73	230	1,177	147	14.3%
					0	120	26	16	0	58	0	0	0	0	14	25			
9	Front Street	US 101 SB Ramps	5/31/2017	Wednesday	0	3	68	1	968	0	0	0	6	0	0	0	1,046		
			Background		0	3	41	1	1,106	0	0	0	6	0	0	0	1,157	111	10.6%
					0	0	27	0	138	0	0	0	0	0	0	0			
10	Front Street	Morisoli Road	6/12/2013	Wednesday	5	195	0	0	345	10	15	0	8	0	0	0	578		
			Background		5	278	0	0	373	6	6	0	3	0	0	0	671	93	16.1%
					0	83	0	0	28	4	9	0	5	0	0	0			
11	San Vicente Road	Market Street	5/31/2017	Wednesday	0	387	70	28	241	0	0	0	0	32	0	26	784		
			Background		0	465	68	8	261	0	0	0	0	56	0	10	868	84	10.7%
					0	78	2	20	20	0	0	0	0	24	0	16			
12	West Street	Market Street	5/31/2017	Wednesday	41	381	27	37	150	14	12	52	21	17	28	19	799		
			Background		32	292	22	31	116	9	13	65	21	14	70	23	708	-91	-11.4%
					9	89	5	6	34	5	1	13	0	3	42	4			
13	Main Street	Market Street	5/31/2017	Wednesday	11	112	11	8	64	41	61	83	19	5	40	12	467		
			Background		4	63	23	4	45	20	20	99	11	11	91	1	392	-75	-16.1%
					7	49	12	4	19	21	41	16	8	6	51	11			
14	East Street	Market Street	5/31/2017	Wednesday	27	251	10	2	225	20	12	35	31	2	20	2	637		
			Background		21	492	4	0	417	43	51	33	24	5	22	1	1,113	476	74.7%
					6	241	6	2	192	23	39	2	7	3	2	1			
15	East Street	North Street/Metz Road	6/12/2013	Wednesday	22	133	109	29	82	4	15	63	12	65	78	28	640		
			Background		26	155	357	29	159	21	18	58	12	297	57	20	1,209	569	88.9%
					4	22	248	0	77	17	3	5	0	232	21	8			
16	San Vicente Road	Gabilan Drive	5/31/2017	Wednesday	1	168	163	15	100	0	0	0	0	140	0	14	601		
			Background		0	126	292	13	86	0	0	0	0	185	0	18	720	119	19.8%
					1	42	129	2	14	0	0	0	0	45	0	4			
17	West Street	Gabilan Drive	5/31/2017	Wednesday	29	191	118	72	121	24	41	120	26	30	121	54	947		
			Background		23	149	108	50	79	15	37	236	22	31	200	62	1,012	65	6.9%
					6	42	10	22	42	9	4	116	4	1	79	8			
18	Main Street	Gabilan Drive	5/31/2017	Wednesday	77	7	37	2	7	3	9	230	90	46	144	5	657		
			Background		61	2	31	1	1	0	5	345	72	21	241	3	783	126	19.2%
					16	5	6	1	6	3	4	115	18	25	97	2			
19	Andalucia Drive	Gabilan Drive	5/31/2017	Wednesday	18	0	127	0	0	0	0	250	23	102	175	0	695		
			Background		29	0	99	1	0	0	0	351	27	85	231	2	825	130	18.7%
					11	0	28	1	0	0	0	101	4	17	56	2			
	GRAND TOTAL	**2013/2017**															**17,011**		
		Background															**20,137**	3,126	18.4%

Appendix E

Comparison of 2017 Existing and 2007 Background

					PM PEAK HOUR														
					NB			SB			EB			WB					
	INTERSECTION		COUNT SOURCE		L	T	R	L	T	R	L	T	R	L	T	R	GRAND TOTAL		PERCENT INCREASE
1	Moranda Road	US 101 NB Ramps	Hexagon Background		482	0	0	0	0	0	0	0	86	0	0	0	568		
			Background		482	4	0	0	0	0	0	0	123	0	0	0	609	41	7.2%
					0	4	0	0	0	0	0	0	37	0	0	0			
2	Moranda Road	Front Street	Hexagon Background		22	504	0	0	83	0	8	0	1,143	0	0	0	1,760		
			Background		71	504	0	0	112	11	8	0	1,143	0	0	0	1,849	89	5.1%
					49	0	0	0	29	11	0	0	0	0	0	0			
3	San Vicente Road	Front Street	Hexagon Background		0	0	0	46	1	260	545	695	2	3	276	75	1,903		
			Background		5	3	0	46	5	260	545	697	2	13	276	87	1,939	36	1.9%
					5	3	0	0	4	0	0	2	0	10	0	12			
4	West Street	Front Street	Hexagon Background		0	0	0	17	0	47	124	611	0	0	305	39	1,143		
			Background		0	0	0	25	0	87	294	611	0	0	305	78	1,400	257	22.5%
					0	0	0	8	0	40	170	0	0	0	0	39			
5	Main Street	Front Street	Hexagon Background		1	0	6	25	0	50	59	423	0	4	279	48	895		
			Background		2	5	8	41	1	50	93	423	1	4	279	51	958	63	7.0%
					1	5	2	16	1	0	34	0	1	0	0	3			
6	East Street	Front Street	Hexagon Background		2	2	5	437	2	155	220	223	4	2	202	382	1,636		
			Background		2	3	5	437	2	155	220	263	4	4	270	382	1,747	111	6.8%
					0	1	0	0	0	0	0	40	0	2	68	0			
7	Front Street	Nestles Road	Hexagon Background		129	451	6	68	283	239	184	12	95	7	15	108	1,597		
			Background		129	451	6	68	283	239	184	38	125	7	68	152	1,750	153	9.6%
					0	0	0	0	0	0	0	26	30	0	53	44			
8	Front Street	US 101 NB Ramps	Hexagon Background		1	407	100	224	0	142	0	0	0	0	73	230	1,177		
			Background		1	407	249	240	0	142	0	0	0	0	95	230	1,364	187	15.9%
					0	0	149	16	0	0	0	0	0	0	22	0			
9	Front Street	US 101 SB Ramps	Hexagon Background		0	3	41	1	1,106	0	0	0	6	0	0	0	1,157		
			Background		0	3	68	1	1,106	0	0	0	6	0	0	0	1,184	27	2.3%
					0	0	27	0	0	0	0	0	0	0	0	0			
10	Front Street	Morisoli Road	Hexagon Background		5	278	0	0	373	6	6	0	3	0	0	0	671		
			Background		5	278	0	0	373	10	15	0	8	0	0	0	689	18	2.7%
					0	0	0	0	0	4	9	0	5	0	0	0			
11	San Vicente Road	Market Street	Hexagon Background		0	465	68	8	261	0	0	0	0	56	0	10	868		
			Background		0	465	70	28	261	0	0	0	0	56	0	26	906	38	4.4%
					0	0	2	20	0	0	0	0	0	0	0	16			
12	West Street	Market Street	Hexagon Background		32	292	22	31	116	9	13	65	21	14	70	23	708		
			Background		41	381	27	37	150	14	13	65	21	17	70	23	859	151	21.3%
					9	89	5	6	34	5	0	0	0	3	0	0			
13	Main Street	Market Street	Hexagon Background		4	63	23	4	45	20	20	99	11	11	91	1	392		
			Background		11	112	23	8	64	41	61	99	19	11	91	12	552	160	40.8%
					7	49	0	4	19	21	41	0	8	0	0	11			
14	East Street	Market Street	Hexagon Background		21	492	4	0	417	43	51	33	24	5	22	1	1,113		
			Background		27	492	10	2	417	43	51	35	31	5	22	2	1,137	24	2.2%
					6	0	6	2	0	0	0	2	7	0	0	1			
15	East Street	North Street/Metz Road	Hexagon Background		26	155	357	29	159	21	18	58	12	297	57	20	1,209		
			Background		26	155	357	29	159	21	18	63	12	297	78	28	1,243	34	2.8%
					0	0	0	0	0	0	0	5	0	0	21	8			
16	San Vicente Road	Gabilan Drive	Hexagon Background		0	126	292	13	86	0	0	0	0	185	0	18	720		
			Background		1	168	292	15	100	0	0	0	0	185	0	18	779	59	8.2%
					1	42	0	2	14	0	0	0	0	0	0	0			
17	West Street	Gabilan Drive	Hexagon Background		23	149	108	50	79	15	37	236	22	31	200	62	1,012		
			Background		29	191	118	72	121	24	41	236	26	31	200	62	1,151	139	13.7%
					6	42	10	22	42	9	4	0	4	0	0	0			
18	Main Street	Gabilan Drive	Hexagon Background		61	2	31	1	1	0	5	345	72	21	241	3	783		
			Background		77	7	37	2	7	3	9	345	90	46	241	5	869	86	11.0%
					16	5	6	1	6	3	4	0	18	25	0	2			
19	Andalucia Drive	Gabilan Drive	Hexagon Background		29	0	99	1	0	0	0	351	27	85	231	2	825		
			Background		29	0	127	1	0	0	0	351	27	102	231	2	870	45	5.5%
					0	0	28	0	0	0	0	0	0	17	0	0			
	GRAND TOTAL	**Hexagon Back**															**20,137**		
		Background															**21,855**	1,718	8.5%

Appendix F

Comparison of 2017 Background with 2007 Background

					PM PEAK HOUR														
					NB			SB			EB			WB					
	INTERSECTION		COUNT SOURCE		L	T	R	L	T	R	L	T	R	L	T	R	GRAND TOTAL		PERCENT INCREASE
1	Moranda Road	US 101 NB Ramps	Hexagon Back+Proj		984	0	0	0	0	0	0	0	158	0	0	0	1,142		
			Back+Project		778	4	0	0	0	0	0	0	165	0	0	0	947	-195	-17.1%
					206	4	0	0	0	0	0	0	7	0	0	0			
2	Moranda Road	Front Street	Hexagon Back+Proj		58	1,006	0	0	155	0	8	0	2,145	0	0	0	3,372		
			Back+Project		92	800	0	0	154	11	8	0	1,734	0	0	0	2,799	-573	-17.0%
					34	206	0	0	1	11	0	0	411	0	0	0			
3	San Vicente Road	Front Street	Hexagon Back+Proj		0	0	0	57	1	609	1,243	1,071	2	3	464	97	3,547		
			Back+Project		5	3	0	52	5	466	957	919	2	13	387	100	2,909	-638	-18.0%
					5	3	0	5	4	143	286	152	0	10	77	3			
4	West Street	Front Street	Hexagon Back+Proj		0	0	0	73	157	47	437	685	0	0	359	151	1,909		
			Back+Project		0	0	0	58	0	180	479	655	0	0	337	144	1,853	-56	-2.9%
					0	0	0	15	157	133	42	30	0	0	22	7			
5	Main Street	Front Street	Hexagon Back+Proj		1	0	6	85	0	81	122	490	0	4	413	169	1,371		
			Back+Project		2	5	8	76	1	68	130	463	1	4	358	122	1,238	-133	-9.7%
					1	5	2	9	1	13	8	27	1	0	55	47			
6	East Street	Front Street	Hexagon Back+Proj		2	2	5	623	2	155	220	351	4	2	457	753	2,576		
			Back+Project		2	3	5	547	2	155	220	339	4	4	420	601	2,302	-274	-10.6%
					0	1	0	76	0	0	0	12	0	2	37	152			
7	Front Street	Nestles Road	Hexagon Back+Proj		129	737	6	113	408	382	435	12	95	7	15	198	2,537		
			Back+Project		129	620	6	95	357	323	332	38	125	7	68	205	2,305	-232	-9.1%
					0	117	0	18	51	59	103	26	30	0	53	7			
8	Front Street	US 101 NB Ramps	Hexagon Back+Proj		1	693	100	224	0	267	0	0	0	0	73	230	1,588		
			Back+Project		1	576	249	240	0	216	0	0	0	0	95	230	1,607	19	1.2%
					0	117	149	16	0	51	0	0	0	0	22	0			
9	Front Street	US 101 SB Ramps	Hexagon Back+Proj		0	3	77	1	2,108	0	0	0	6	0	0	0	2,195		
			Back+Project		0	3	89	1	1,697	0	0	0	6	0	0	0	1,796	-399	-18.2%
					0	0	12	0	411	0	0	0	0	0	0	0			
10	Front Street	Morisoli Road	Hexagon Back+Proj		5	529	0	0	516	6	6	0	3	0	0	0	1,065		
			Back+Project		5	426	0	0	457	10	15	0	8	0	0	0	921	-144	-13.5%
					0	103	0	0	59	4	9	0	5	0	0	0			
11	San Vicente Road	Market Street	Hexagon Back+Proj		0	1,185	68	17	622	0	0	0	0	56	0	28	1,976		
			Back+Project		0	890	70	33	474	0	0	0	0	56	0	37	1,560	-416	-21.1%
					0	295	2	16	148	0	0	0	0	0	0	9			
12	West Street	Market Street	Hexagon Back+Proj		41	744	22	44	342	9	13	69	25	14	79	50	1,452		
			Back+Project		41	846	97	45	411	14	13	65	21	73	70	49	1,745	293	20.2%
					0	102	75	1	69	5	0	4	4	59	9	1			
13	Main Street	Market Street	Hexagon Back+Proj		4	258	23	4	144	24	29	99	11	11	91	1	699		
			Back+Project		11	227	23	8	122	43	66	99	19	11	91	12	732	33	4.7%
					7	31	0	4	22	19	37	0	8	0	0	11			
14	East Street	Market Street	Hexagon Back+Proj		21	863	4	0	603	43	51	33	24	5	22	1	1,670		
			Back+Project		27	711	10	2	527	43	51	35	31	5	22	2	1,466	-204	-12.2%
					6	152	6	2	76	0	0	2	7	0	0	1			
15	East Street	North Street/Metz Road	Hexagon Back+Proj		26	325	558	33	244	21	18	61	12	398	59	23	1,778		
			Back+Project		26	255	476	31	209	21	18	65	12	357	79	30	1,579	-199	-11.2%
					0	70	82	2	35	0	0	4	0	41	20	7			
16	San Vicente Road	Gabilan Drive	Hexagon Back+Proj		0	560	605	51	310	0	0	0	0	342	0	47	1,915		
			Back+Project		1	424	477	37	232	0	0	0	0	278	0	35	1,484	-431	-22.5%
					1	136	128	14	78	0	0	0	0	64	0	12			
17	West Street	Gabilan Drive	Hexagon Back+Proj		32	633	108	118	325	172	350	262	33	31	220	189	2,473		
			Back+Project		34	477	118	112	266	117	226	251	32	43	275	62	2,013	-460	-18.6%
					2	156	10	6	59	55	124	11	1	12	55	127			
18	Main Street	Gabilan Drive	Hexagon Back+Proj		194	2	112	1	1	0	5	364	148	61	256	3	1,147		
			Back+Project		155	7	85	2	7	3	9	356	135	70	250	5	1,084	-63	-5.5%
					39	5	27	1	6	3	4	8	13	9	6	2			
19	Andalucia Drive	Gabilan Drive	Hexagon Back+Proj		37	0	269	1	0	7	9	432	37	170	271	2	1,235		
			Back+Project		34	0	227	1	0	4	5	399	33	152	255	2	1,112	-123	-10.0%
					3	0	42	0	0	3	4	33	4	18	16	0			
	GRAND TOTAL	**Hexagon B+P**															**35,647**		
		Back+Project															**31,452**	-4,195	-11.8%

Appendix G

Comparison of 2017 and 2007 Background Plus Project

HCM 2010 AWSC
3: San Vicente

08/11/2017

Intersection	
Intersection Delay, s/veh	9.3
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations			↕				↕				↕	
Traffic Vol, veh/h	0	273	1	1	0	1	1	1	0	1	1	1
Future Vol, veh/h	0	273	1	1	0	1	1	1	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	297	1	1	0	1	1	1	0	1	1	1
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	1
HCM Control Delay	10.1	7.5	7.7
HCM LOS	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	33%	99%	33%	1%
Vol Thru, %	33%	0%	33%	1%
Vol Right, %	33%	0%	33%	99%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	3	275	3	157
LT Vol	1	273	1	1
Through Vol	1	1	1	1
RT Vol	1	1	1	155
Lane Flow Rate	3	299	3	171
Geometry Grp	1	1	1	1
Degree of Util (X)	0.004	0.368	0.004	0.193
Departure Headway (Hd)	4.71	4.437	4.503	4.071
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	763	801	796	887
Service Time	2.72	2.52	2.524	2.071
HCM Lane V/C Ratio	0.004	0.373	0.004	0.193
HCM Control Delay	7.7	10.1	7.5	8
HCM Lane LOS	A	B	A	A
HCM 95th-tile Q	0	1.7	0	0.7

HCM 2010 AWSC
3: San Vicente

08/11/2017

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations			↕	
Traffic Vol, veh/h	0	1	1	155
Future Vol, veh/h	0	1	1	155
Peak Hour Factor	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	1	1	168
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	8
HCM LOS	A

						PM PEAK HOUR														
						NB			SB			EB			WB					
	INTERSECTION		COUNT SOURCE		L	T	R	L	T	R	L	T	R	L	T	R	GRAND TOTAL		PERCENT INCREASE
1	Moranda Road	US 101 NB Ramps	Hexagon Cum+Project		1,049	0	0	0	0	0	0	0	303	0	0	0	1,352		
			Cumulative + Project		843	0	0	0	0	0	0	0	273	0	0	0	1,116	-236	-17.5%
					206	0	0	0	0	0	0	0	30	0	0	0			
2	Moranda Road	Front Street	Hexagon Cum+Project		71	1,045	0	145	155	0	8	24	2,194	0	157	26	3,825		
			Cumulative + Project		92	839	0	145	154	0	8	24	1,783	0	157	26	3,228	-597	-15.6%
					21	206	0	0	1	0	0	0	411	0	0	0			
3	San Vicente Road	Front Street	Hexagon Cum+Project		5	3	0	189	5	635	1,267	1,096	2	13	477	242	3,934		
			Cumulative + Project		5	3	0	184	5	492	981	942	2	13	400	233	3,260	-674	-17.1%
					0	0	0	5	0	143	286	154	0	0	77	9			
4	West Street	Front Street	Hexagon Cum+Project		0	0	0	76	0	204	437	842	0	0	517	154	2,230		
			Cumulative + Project		0	0	0	58	0	180	479	812	0	0	495	144	2,168	-62	-2.8%
					0	0	0	18	0	24	42	30	0	0	22	10			
5	Main Street	Front Street	Hexagon Cum+Project		2	0	8	99	0	85	126	621	0	4	559	184	1,688		
			Cumulative + Project		2	0	8	76	0	72	130	594	0	4	504	134	1,524	-164	-9.7%
					0	0	0	23	0	13	4	27	0	0	55	50			
6	East Street	Front Street	Hexagon Cum+Project		2	3	5	686	2	155	220	496	4	4	617	821	3,015		
			Cumulative + Project		2	3	5	610	2	155	220	444	4	4	512	669	2,630	-385	-12.8%
					0	0	0	76	0	0	0	52	0	0	105	152			
7	Front Street	Nestles Road	Hexagon Cum+Project		129	744	6	317	408	386	435	39	125	7	68	419	3,083		
			Cumulative + Project		129	627	6	299	357	327	332	39	125	7	68	382	2,698	-385	-12.5%
					0	117	0	18	51	59	103	0	0	0	0	37			
8	Front Street	US 101 NB Ramps	Hexagon Cum+Project		1	700	249	240	0	267	0	0	0	0	100	230	1,787		
			Cumulative + Project		1	583	249	240	0	216	0	0	0	0	100	230	1,619	-168	-9.4%
					0	117	0	0	0	51	0	0	0	0	0	0			
9	Front Street	US 101 SB Ramps	Hexagon Cum+Project		0	3	234	1	2,181	0	0	0	6	0	0	0	2,425		
			Cumulative + Project		0	3	219	1	1,770	0	0	0	6	0	0	0	1,999	-426	-17.6%
					0	0	15	0	411	0	0	0	0	0	0	0			
10	Front Street	Morisoli Road	Hexagon Cum+Project		5	556	0	0	565	10	15	0	8	0	0	0	1,159		
			Cumulative + Project		5	453	0	0	506	10	15	0	8	0	0	0	997	-162	-14.0%
					0	103	0	0	59	0	0	0	0	0	0	0			
11	San Vicente Road	Market Street	Hexagon Cum+Project		0	1,354	70	95	781	0	0	0	0	56	0	100	2,456		
			Cumulative + Project		0	1,059	70	91	633	0	0	0	0	56	0	93	2,002	-454	-18.5%
					0	295	0	4	148	0	0	0	0	0	0	7			
12	West Street	Market Street	Hexagon Cum+Project		41	747	27	44	344	33	39	121	25	17	127	50	1,615		
			Cumulative + Project		46	648	27	45	283	33	39	119	23	22	116	50	1,451	-164	-10.2%
					5	99	0	1	61	0	0	2	2	5	11	0			
13	Main Street	Market Street	Hexagon Cum+Project		11	275	23	8	159	41	61	151	19	11	139	12	910		
			Cumulative + Project		11	227	23	8	122	43	66	151	19	11	139	12	832	-78	-8.6%
					0	48	0	0	37	2	5	0	0	0	0	0			
14	East Street	Market Street	Hexagon Cum+Project		69	918	10	0	653	43	51	33	76	5	22	2	1,882		
			Cumulative + Project		69	766	10	0	577	43	51	35	76	5	22	2	1,656	-226	-12.0%
					0	152	0	0	76	0	0	2	0	0	0	0			
15	East Street	North Street/Metz Road	Hexagon Cum+Project		26	380	558	33	294	21	18	63	12	398	78	28	1,909		
			Cumulative + Project		26	310	476	31	259	21	18	65	12	357	79	30	1,684	-225	-11.8%
					0	70	82	2	35	0	0	2	0	41	1	2			
16	San Vicente Road	Gabilan Drive	Hexagon Cum+Project		1	886	710	51	609	93	209	131	0	439	121	47	3,297		
			Cumulative + Project		1	708	582	37	517	93	209	131	0	375	121	35	2,809	-488	-14.8%
					0	178	128	14	92	0	0	0	0	64	0	12			
17	West Street	Gabilan Drive	Hexagon Cum+Project		56	634	118	118	326	220	402	419	59	31	365	189	2,937		
			Cumulative + Project		52	477	118	112	266	156	274	408	54	43	313	189	2,462	-475	-16.2%
					4	157	0	6	60	64	128	11	5	12	52	0			
18	Main Street	Gabilan Drive	Hexagon Cum+Project		291	7	113	2	7	3	9	416	253	62	304	5	1,472		
			Cumulative + Project		236	7	85	2	7	3	9	408	222	70	298	5	1,352	-120	-8.2%
					55	0	28	0	0	0	0	8	31	8	6	0			
19	Andalucia Drive	Gabilan Drive	Hexagon Cum+Project		37	27	269	1	25	56	62	432	37	170	271	2	1,389		
			Cumulative + Project		34	27	227	1	25	53	58	399	33	152	255	2	1,266	-123	-8.9%
					3	0	42	0	0	3	4	33	4	18	16	0			
	GRAND TOTAL	**Hexagon Cum+Proj**															**42,365**		
		Cum+Proj															**36,753**	-5,612	-13.2%

Appendix I

Comparison of 2017 and 2007 Cumulative Plus Project

Keith Higgins

Traffic Engineer

August 15, 2017

Sally Rideout
EMC Planning Group
301 Lighthouse Avenue, Suite C
Monterey, CA 93940

Re: Miramonte Specific Plan Traffic Study Supplemental Analysis, Soledad, CA

Dear Sally,

This supplemental traffic analysis is in response to your request to review the latest version of the "Miravale Phase III Mixed-Use Development Transportation Impact Analysis," Hexagon Transportation Consultants, Inc., August 15, 2007. The "Miramonte Specific Plan Traffic Impact Analysis Administrative Draft Report," Keith Higgins, Traffic Engineer, August 11, 2017 was based on the "Miravale Phase III Mixed-Use Development Transportation Impact Analysis," Hexagon Transportation Consultants, Inc., May 4, 2007. The August 15, 2007 report analyzed a revised project and included two additional intersections. This supplemental analysis incorporates information added or revised in the more recent report.

1. Revised Project Description - The August 15, 2007 report analyzed a project that included 1,470 single family homes, 2,230 multi-family units, 500 senior housing units, 120 hotel rooms, and up to 275,000 s.f. of supporting retail. The project was estimated to generate 34,856 daily trips with 2,451 trips in the AM peak hour and 3,143 trips in the PM peak hour. This was a slight reduction (about 2% less) traffic than the project analyzed in the May 4, 2007 draft report. The May 4, 2007 project description included 1,470 single family homes, 2,430 multi-family units, 300 senior housing units, 120 hotel rooms, and up to 275,000 s.f. of supporting retail. It was estimated to generate 35,504 daily trips with 2,537 trips in the AM peak hour and 3,245 trips in the PM peak hour. The project traffic distribution percentages were the same in the two reports.

2. The impacts identified in the two reports for all development scenarios are virtually the same. The only exceptions are that the later report added the following intersections.
    a. Intersection 20 – Metz Road / Orchard Lane currently is controlled by stop signs on the Orchard Lane and 3rd Street approaches. The Orchard Lane connection between Metz Road and Gabilan Drive has not yet been complete. Traffic volumes on Orchard Lane and Metz Road are essentially the same as in 2007. No improvements are warranted at this intersection. No improvements will be warranted under Background Without Project conditions. However, a signal will be warranted under Cumulative Without Project Conditions. Improvements should also include left turn lanes on both Metz Road approaches. The Orchard Lane and Metz Road approaches are offset by about 80 feet so

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should have separate signal phasing, which is known as split phasing. This was identified in the August,2007 report.

b. Intersection 21 - Front Street / Oak Street intersection, which was determined to meet signal warrants for existing (2007) conditions. A traffic signal is already in place at this intersection, so this mitigation is complete.
Front Street was also determined in both 2007 reports to require widening to four lanes from East Street to Nestles Road at Project Buildout, which would add a second through lane in each direction at the Oak Street intersection. No additional improvements would be required through Cumulative conditions.

3. The current study also continues to recommend widening Front Street to four lanes. However, a second alternative is to extend Los Coches Drive (also known as Pinnacles Parkway) and Palm Ave to Metz Road. This roadway would provide an additional access connecting the southern US 101 / Front Street interchange and Los Coches business park with the northern and western portions of Soledad. According to the "Soledad Business Park Traffic Impact Study," Yamabe & Horn Engineering, December 2014, Front Street would carry about 1,291 PM peak hour trips (714 northbound and 577 southbound) without Cumulative without Miramonte. Assuming about half of the Miramonte traffic using this section of Front Street via East Street would be diverted to the Los Coches Drive extension, about 269 PM peak hour trips (179 westbound and 90 westbound) would be added by Miramonte. It would then carry about 1,560 PM peak hour trips (893 westbound and 667 eastbound) in the Cumulative plus Project scenario. This would be a V/C ratio of 0.744 westbound and 0.555 eastbound. The Los Coches Drive Extension would preclude the need to widen Front Street to four lanes between East Street and Nestles Road.

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No other information is included in the August 2007, report.

Please call me if you have any questions about the above information.

Thank you for the opportunity to assist you with this project,
Sincerely yours,

Keith B. Higgins, PE, TE

Keith Higgins

Traffic Engineer

August 17, 2018

Sally Rideout
EMC Planning Group
301 Lighthouse Avenue, Suite C
Monterey, CA 93940

Re: Miramonte Specific Plan Conversion of Farmer's Community to Single-family or Apartments – Traffic Impact Evaluation, Soledad, CA

Dear Sally,

This supplemental traffic analysis is in response to your request to review the change in impacts and corresponding mitigations from the conversion of 400 Farmer's Community housing units to 314 Apartments or 314 Single Family Homes. The findings of this analysis are as follows.

A. CONVERSION TO APARTMENTS

1. The Farmer's Community housing portion of the project was proposed to include 400 units with 8 individuals per unit. As described in the *Miramonte Specific Plan Traffic Impact Analysis* included in the project's environmental document, this use would be estimated to generate about 651 daily trips with 117 in the PM peak hour. The Apartments conversion alternative that would include 314 Apartments is expected to generate trips at a rate comparable to the apartments already included in the project. The apartments are expected to generate about 2,088 daily trips with 195 in the PM peak hour. A 10% reduction in net trips are expected to be added to the street system external to the project. This accounts for trips to and from the proposed shopping center and other land uses in the project.

   As indicated on **Table 1**, this results in an increase for the total project from the previous estimate of 18,549 daily trips and 1,912 PM peak hour trips to 19,987 daily trips with 1,989 in the PM peak hour. Increases of about 1,437 daily trips and 77 PM peak hour trips are expected. The PM peak hour, which is the critical time period for traffic operations, would experience a 4.0% increase in project traffic throughout the study area. An increase of 77 PM peak hour trips is the equivalent to the PM peak hour traffic generated by about 77 single family homes, which generate about 1.00 PM peak hour trips per unit.

2. The effects in traffic operations are tabulated for the study intersections on **Table 2**, Soledad streets on **Table 3**, US 101 freeway segments on **Tables 4** and **5**, and US 101 freeway ramps on **Table 6**. **Table 12** includes a comparison of US 101 ramp volumes in 2040 for the project with a Farmer's Community, apartments and single-family homes. The increases in traffic throughout the study area will not result in any noticeable increase in traffic. No additional impacts have been identified. No additional mitigations are therefore recommended.

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3. The *Miramonte Specific Plan Traffic Impact Analysis* estimated that the improvements at the Moranda Road / Front Street intersection would be warranted at 26% of project buildout. With the increase of 4% in project trip generation, this improvement will be warranted at 25% of project buildout.

   The Gabilan Drive Extension and modification of the northbound US 101 ramps was estimated to be warranted at 42% of project buildout. This will now be warranted at about 40% of project buildout.

B. CONVERSION TO SINGLE FAMILY HOMES

1. The Farmer's Community housing portion of the project was proposed to include 400 units with 8 individuals per unit. As described in the Miramonte Specific Plan Traffic Impact Analysis included in the project's environmental document, this use would be estimated to generate about 651 daily trips with 117 in the PM peak hour. The Single-Family Homes conversion alternative that would include 314 Single Family Homes is expected to generate trips at a rate comparable to the single-family homes already included in the project. The single-family homes are expected to generate about 2,989 daily trips with 314 in the PM peak hour. A 10% reduction in net trips are expected to be added to the street system external to the project. This accounts for trips to and from the proposed shopping center and other land uses in the project.

As indicated on **Table 1**, this results in an increase for the total project from the previous estimate of 18,549 daily trips and 1,912 PM peak hour trips to 20,888 daily trips with 2,109 in the PM peak hour. An increase of about 2,339 daily trips and 197 PM peak hour trips are expected. The PM peak hour, which is the critical time period for traffic, would experience a 10.3% increase in project traffic throughout the study area.

2. The effects in traffic operations are tabulated for the study intersections on **Table 7**, Soledad streets on **Table 8**, US 101 freeway segments on **Tables 9** and **10**, and US 101 freeway ramps on **Table 11**. **Table 12** includes a comparison of US 101 ramp volumes in 2040 for the project with a Farmer's Community, apartments and single-family homes. The increases in traffic throughout the study area will not result in an increase in traffic that would result in any additional traffic impacts. No additional mitigations are therefore recommended.

3. The Miramonte Specific Plan Traffic Impact Analysis estimated that the improvements at the Moranda Road / Front Street intersection would be warranted at 26% of project buildout. With the increase of 10.3% in project trip generation, this improvement will be warranted at 23.5% of project buildout.

The Gabilan Drive Extension and modification of the northbound US 101 ramps was estimated to be warranted at 42% of project buildout. This will now be warranted at about 38% of project buildout.

Please call me if you have any questions. Thank you for the opportunity to assist you with this project.

Sincerely yours,

Keith B. Higgins

Keith B. Higgins, PE, TE
Attachments

Table 1

Trip Generation Estimates

TRIP GENERATION RATES[1]	ITE Land Use Code	Daily Trip Rate	PM Peak Hour			
			Peak Hour Rate	% of ADT	% In	% Out
Single-Family Detached Housing	210	9.52	1.00	11%	63%	37%
Apartment	220	6.65	0.62	9%	65%	35%
Senior Adult Housing Detached	251	3.68	0.27	7%	61%	39%
Shopping Center[2]	820	68.15	2.71	4%	44%	56%

GENERATED TRIPS - WITH FARMERS COMMUNITY	Project Size	Daily Trips	Peak Hour Trips	% of ADT	In	Out
PROPOSED PROJECT (Revised Project)						
Single-Family Detached Housing (Market Rate)	1,353 Units	12,881	1,353	11%	852	501
Single-Family Detached Housing (Affordable Housing)	169 Units	1,609	169	11%	106	63
Apartment	338 Units	2,248	210	9%	137	73
Senior Adult Housing Detached	132 Units	486	36	7%	22	14
Farmer's Community	400 Units	651	117	18%	59	59
Residential Development	**2,392 Units**	**17,875**	**1,885**	**11%**	**1,176**	**710**
Internal Trip Reduction[3]		**-6,072**	**-241**		**-106**	**-135**
Shopping Center	99,000 SF	6,747	268	4%	118	150
Commercial Development		**6,747**	**268**	**4%**	**118**	**150**
Total Net Trips		**18,549**	**1,912**		**1,187**	**725**

GENERATED TRIPS WITH SINGLE FAMILY	Project Size	Daily Trips	Peak Hour Trips	% of ADT	In	Out
PROPOSED PROJECT (Revised Project)						
Single-Family Detached Housing (Market Rate)	1,353 Units	12,881	1,353	11%	852	501
Single-Family Detached Housing (Affordable Housing)	169 Units	1,609	169	11%	106	63
Apartment	338 Units	2,248	210	9%	137	73
Senior Adult Housing Detached	132 Units	486	36	7%	22	14
Single-Family Detached Housing (Market Rate) - replaces Farmer's Community	314 Units	2,989	314	11%	198	116
Residential Development	**2,306 Units**	**20,213**	**2,082**	**10%**	**1,315**	**767**
Internal Trip Reduction[3]		**-6,072**	**-241**		**-106**	**-135**
Shopping Center	99,000 SF	6,747	268	4%	118	150
Commercial Development		**6,747**	**268**	**4%**	**118**	**150**
Total Net Trips		**20,888**	**2,109**		**1,327**	**782**
PROJECT INCREASE WITH SINGLE FAMILY ABOVE WITH FARMERS COMMUNITY		**2,339**	**197**		**139**	**58**
PERCENT INCREASE WITH SINGLE FAMILY ABOVE WITH FARMERS COMMUNITY		**12.6%**	**10.3%**		**11.7%**	**7.9%**

GENERATED TRIPS WITH APARTMENTS	Project Size	Daily Trips	Peak Hour Trips	% of ADT	In	Out
PROPOSED PROJECT (Revised Project)						
Single-Family Detached Housing (Market Rate)	1,353 Units	12,881	1,353	11%	852	501
Single-Family Detached Housing (Affordable Housing)	169 Units	1,609	169	11%	106	63
Apartment	338 Units	2,248	210	9%	137	73
Senior Adult Housing Detached	132 Units	486	36	7%	22	14
Apartment (replaces Farmer's Community)	314 Units	2,088	195	9%	127	68
Residential Development	**2,306 Units**	**19,312**	**1,963**	**10%**	**1,244**	**719**
Internal Trip Reduction[3]		**-6,072**	**-241**		**-106**	**-135**
Shopping Center	99,000 SF	6,747	268	4%	118	150
Commercial Development		**6,747**	**268**	**4%**	**118**	**150**
Total Net Trips		**19,987**	**1,989**		**1,255**	**734**
PROJECT INCREASE WITH APARTMENTS ABOVE WITH FARMERS COMMUNITY		**1,437**	**77**		**68**	**9**
PERCENT INCREASE WITH APARTMENTS ABOVE WITH FARMERS COMMUNITY		**7.7%**	**4.0%**		**5.7%**	**1.3%**

Notes:

1. Trip generation rates published by Institute of Transportation Engineers, "Trip Generation," 9th Edition, 2012.
2. Shopping center trip rates based ITE on fitted curve equation.
3. A reduction of 90% of commercial trips was applied to the residential trips to account for internal trips between residential and commercial land uses.

Table 2

Intersection Levels of Service - Apartments

	N-S Street	E-W Street	Intersection Control	Mitigated Intersection Control	Background plus Project PM Peak Hour			Background plus Project Mitigated PM Peak Hour			Project With Gabilan Ext. PM Peak Hour			Intersection Control	No Project PM Peak Hour		Cumulative With Project - PM Peak Hour					
																	No Gabilan Ext.			With Gabilan Ext.		
					Avg. Delay Farmer's Community	Avg. Delay Apartments	LOS	Avg. Delay Farm Community	Avg. Delay Apartments	LOS	Avg. Delay Farm Community	Avg. Delay Apartments	LOS		Avg. Delay	LOS	Avg. Delay Farm Community	Avg. Delay Apartments	LOS	Avg. Delay Farm Community	Avg. Delay Apartments	LOS
1	Moranda Road	US 101 Ramps	TWSC	TWSC	**65**	**66**	F	10	10	A	10	10	A	Signal	16	B	15	15	B	10	10	A
2	Moranda Road	Front Street	TWSC	Signal	**166**	**167**	F	5	5	A	12	12	B	Signal	20	B	11	11	B	14	14	B
3	San Vicente Road	Front Street	Signal	Signal	**126**	**127**	F	12	12	B	16	17	B	Signal	20	B	13	13	B	18	18	B
4	West Street	Front Street	AWSC	AWSC	***36***	**36**	*E*	20	20	C	12	12	B	Signal	21	C	31	31	C	14	14	B
5	Main Street	Front Street	AWSC	AWSC	***26***	**26**	*D*	21	21	C	20	20	C	Signal	21	C	20	20	B	18	18	B
6	East Street	Front Street	AWSC	Signal	24	**24**	C				24	24	C	Signal	25	C	31	31	C	30	30	C
7	Front Street	Nestles Road	Signal	Signal	25	**25**	C				21	21	C	Signal	22	C	42	42	D	39	39	D
8	Front St-US 101 NB Off-Ramp	US 101 NB On-Ramp	Signal	Signal	20	**18**	C				24	24	C	Signal	18	B	16	16	B	22	22	C
9	Front St-US 101 SB Off-Ramp	US 101 SB On-Ramp	TWSC	TWSC	**54**	**54**	F	7	7	A	7	7	A	Signal	21	C	12	12	B	13	13	B
10	Front St-US 101 SB On-Ramp	Morisoli Road	TWSC	TWSC	15	**15**	B				14	14	B	TWSC	13	B	16	16	C	15	15	B
11	San Vicente Road	Market Street	TWSC	TWSC	**100**	**102**	F	6	6	A	15	15	B	Signal	***30***	***C***	8	8	A	8	8	A
12	West Street	Market Street	AWSC	AWSC	***19***	**19**	*C*	8	8	A	13	13	B	Signal	10	A	8	8	A	10	10	A
13	Main Street	Market Street	AWSC	AWSC	11	**10**	B				9	9	A	AWSC	9	A	10	10	A	8	8	A
14	East Street	Market Street	AWSC	AWSC	***89***	**89**	*F*				5	5	A	Signal	***27***	***C***	***7***	***7***	***A***	6	6	A
15	Andalucia Drive	Metz Road	AWSC	Signal	37	**37**	D				28	29	C	Signal	20	C	43	43	D	32	32	C
16	San Vicente Road	Gabilan Drive	TWSC	TWSC	***342***	**346**	*F*	9	9	A	13	13	B	Signal	21	C	25	25	C	27	27	C
17	West Street	Gabilan Drive	Signal	Signal	13	**0**	B	30	30	C	30	30	C	Signal	14	B	36	36	D	34	34	C
18	Main Street	Gabilan Drive	AWSC	AWSC	***11***	**11**	*B*	15	15	C	10	10	B	Signal	11	B	16	16	B	15	15	B
19	Andalucia Drive	Gabilan Drive	TWSC	TWSC	***17***	**17**	*C*				20	20	C	TWSC	18	C	21	21	C	21	21	C

Notes:

1. TWSC = Two-way stop-controlled intersection.
2. AWSC = Four-way stop-controlled intersection.
3. Existing conditions delay at Intersections 3 and 17 calculated using Traffix analysis software.
4. Existing conditions delay at Intersections 7 and 8 referenced from the *Soledad Event Center TIA* , Mott MacDonald, June 2017.
5. Background and background plus project conditions delay at Intersection 17 calculated using Traffix analysis software.
6. LOS below LOS standard shown highlighted in red.
7. Significant impacts are shown in **BOLD** and boxed.
8. *Italics* and **BOLD** indicates signal warrant met.

Table 3
Roadway Segment Analysis - Apartments

Street Segment	Direction	# of Lanes	Capacity (vph)	Project with Farmers Community					Project with Apartments										Project with Farmer's Community			Project with Apartments		
				Project Trips PM Peak Hour		Background + Project PM Peak Hour			Project Trips PM Peak Hour		Project Conditions PM Peak Hour			Cumulative Trips PM Peak Hour		Cumulative Conditions PM Peak Hour			Cumulative With Project PM Peak Hour			Cumulative With Project PM Peak Hour		
				Volume	Increase	Volume	V/C	LOS	Volume	Increase	Volume	V/C	LOS	Volume	Increase	Cumulative Volumes	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS
Front Street																								
1 Moranda Rd and San Vicente Rd	EB	2	2,400	634	52.69%	1,837	0.766	C	659	54.79%	1,863	0.776	C	49	4.07%	1,252	0.522	A	1,886	0.786	C	1,912	0.797	C
	WB	2	2,400	317	62.28%	826	0.344	A	330	64.77%	839	0.349	A	39	7.66%	548	0.228	A	865	0.360	A	878	0.366	A
2 San Vicente and West St	EB	2	2,400	228	27.64%	1,053	0.439	A	237	28.75%	1,062	0.442	A	158	19.16%	983	0.409	A	1,211	0.504	A	1,220	0.508	A
	WB	2	2,400	124	37.95%	451	0.188	A	129	39.47%	456	0.190	A	157	48.05%	484	0.202	A	608	0.253	A	613	0.255	A
3 West St and Main St	EB	1	1,200	77	13.93%	630	0.525	A	80	14.49%	633	0.527	A	156	28.22%	709	0.591	A	786	0.655	B	789	0.657	B
	WB	1	1,200	98	28.51%	442	0.368	A	102	29.65%	446	0.371	A	153	44.51%	497	0.414	A	595	0.496	A	599	0.499	A
4 Main St and East St	EB	1	1,200	76	18.64%	484	0.403	A	79	19.38%	487	0.406	A	145	35.56%	553	0.461	A	629	0.524	A	632	0.526	A
	WB	1	1,200	150	41.93%	508	0.423	A	156	43.61%	514	0.428	A	160	44.72%	518	0.431	A	668	0.556	A	674	0.561	A
5 East St and Nestles Rd	EB	1	1,200	185	31.48%	773	0.644	B	192	32.74%	780	0.650	B	207	35.23%	795	0.662	B	980	0.816	D	987	0.823	D
	WB	1	1,200	**370**	**47.40%**	**1,151**	**0.959**	**E**	**385**	**49.29%**	**1,165**	**0.971**	**E**	228	29.21%	1,009	0.841	D	**1,379**	**1.149**	**F**	**1,393**	**1.161**	**F**
Gabilan Drive																								
6 San Vicente Rd and West St	EB	2	2,400	207	79.51%	467	0.195	A	215	82.69%	476	0.198	A	235	90.26%	495	0.206	A	702	0.293	A	711	0.296	A
	WB	2	2,400	110	46.59%	346	0.144	A	114	48.45%	351	0.146	A	217	91.91%	453	0.189	A	563	0.235	A	568	0.236	A
7 West St and Andalucia Dr	EB	2	2,400	56	13.75%	463	0.193	A	58	14.30%	466	0.194	A	157	38.55%	564	0.235	A	620	0.258	A	623	0.259	A
	WB	2	2,400	87	29.94%	378	0.157	A	90	31.14%	381	0.159	A	145	49.90%	436	0.182	A	523	0.218	A	526	0.219	A
San Vicente Road																								
8 Market St and Gabilan Dr	NB	1	1,200	435	89.77%	920	0.766	C	452	93.36%	937	0.781	C	241	49.74%	726	0.605	A	**1,161**	**0.967**	**E**	**1,178**	**0.982**	**E**
	SB	1	1,200	218	66.29%	547	0.456	A	227	68.94%	556	0.463	A	237	72.07%	566	0.472	A	784	0.653	B	793	0.660	B
9 North of Gabilan Dr	NB	1	1,200	273	148.17%	457	0.381	A	284	154.09%	468	0.390	A	535	290.37%	719	0.599	A	992	0.827	D	1,003	0.836	D
	SB	1	1,200	155	132.71%	272	0.227	A	161	138.01%	278	0.232	A	492	421.23%	609	0.507	A	764	0.637	B	770	0.642	B
West Street																								
10 Market St and Gabilan Dr	NB	2	2,400	283	68.09%	699	0.291	A	294	70.82%	710	0.296	A	29	6.98%	445	0.185	A	728	0.303	A	739	0.308	A
	SB	2	2,400	142	69.56%	346	0.144	A	148	72.34%	352	0.147	A	26	12.74%	230	0.096	A	372	0.155	A	378	0.157	A
11 North of Gabilan Dr	NB	2	2,400	545	190.26%	831	0.346	A	567	197.87%	853	0.356	A	54	18.85%	340	0.142	A	885	0.369	A	907	0.378	A
	SB	2	2,400	278	127.85%	495	0.206	A	289	132.96%	507	0.211	A	49	22.53%	266	0.111	A	544	0.227	A	556	0.231	A

Notes:

1. Capacity of roadways based on assumed capacity of 1,200 vphpl and existing lanes on roadways.
2. **BOLD** indicates significant increase in roadway segment volume and LOS.
3. LOS below LOS standard shown highlighted in red.

Table 4

Freeway Segment Analysis - Apartments

Freeway Segment	Direction	# of Lanes	Capacity (vph)	24-Hr Tot Volume	Background Conditions			Project with Farmer's Community					Project with Apartments					Cumulative No Project			Project with Farmer's Community			Project with Apartments		
								Project Trips		Background plus Project			Project Trips		Background plus Project						Cumulative plus Project			Cumulative plus Project		
					Volume	V/C	LOS	Volume	Increase	Volume	V/C	LOS	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS
US 101																										
1 North Gonzales and Gonzales-5th Street	Both	4	9,600	39,800	4,476	0.466	B	865	19.32%	5,341	0.556	C	899	16.84%	5,375	0.560	C	4,676	0.487	B	5,541	0.577	C	5,575	0.581	C
	NB	2	4,800	19,900	1,658	0.345	A	289	17.40%	1,947	0.406	B	300	15.41%	1,958	0.408	B	1,793	0.374	B	2,082	0.434	B	2,093	0.436	B
	SB	2	4,800	19,900	2,818	0.587	C	576	20.45%	3,394	0.707	C	599	17.66%	3,417	0.712	C	2,882	0.600	C	3,458	0.720	C	3,481	0.725	C
2 Gonzales-5th Street and Gloria Road	Both	4	9,600	37,700	4,409	0.459	B	901	20.43%	5,310	0.553	C	937	17.64%	5,346	0.557	C	4,637	0.483	B	5,538	0.577	C	5,574	0.581	C
	NB	2	4,800	18,850	1,637	0.341	A	301	18.36%	1,938	0.404	B	313	16.13%	1,950	0.406	B	1,791	0.373	B	2,092	0.436	B	2,104	0.438	B
	SB	2	4,800	18,850	2,772	0.578	C	600	21.65%	3,372	0.703	C	624	18.51%	3,396	0.708	C	2,846	0.593	C	3,446	0.718	C	3,470	0.723	C
3 Gloria Road and Soledad Prison	Both	4	9,600	40,100	3,541	0.369	B	1,001	28.27%	4,542	0.473	B	1,041	22.92%	4,582	0.477	B	3,798	0.396	B	4,799	0.500	B	4,839	0.504	B
	NB	2	4,800	20,050	1,321	0.275	A	334	25.28%	1,655	0.345	A	347	20.98%	1,668	0.348	A	1,495	0.311	A	1,829	0.381	B	1,842	0.384	B
	SB	2	4,800	20,050	2,220	0.463	B	667	30.04%	2,887	0.601	C	694	24.03%	2,914	0.607	C	2,303	0.480	B	2,970	0.619	C	2,997	0.624	C
4 Soledad Prison and Camphora	Both	4	9,600	38,500	3,457	0.360	B	1,054	30.48%	4,511	0.470	B	1,096	24.29%	4,553	0.474	B	3,727	0.388	B	4,781	0.498	B	4,823	0.502	B
	NB	2	4,800	19,250	1,291	0.269	A	352	27.23%	1,643	0.342	A	366	22.26%	1,657	0.345	A	1,474	0.307	A	1,826	0.380	B	1,840	0.383	B
	SB	2	4,800	19,250	2,166	0.451	B	702	32.41%	2,868	0.598	C	730	25.46%	2,896	0.603	C	2,253	0.469	B	2,955	0.616	C	2,983	0.621	C
5 Camphora and North Soledad	Both	4	9,600	39,000	4,573	0.476	B	1,109	24.25%	5,682	0.592	C	1,153	20.30%	5,726	0.596	C	4,766	0.496	B	5,875	0.612	C	5,919	0.617	C
	NB	2	4,800	19,500	1,701	0.354	A	370	21.75%	2,071	0.431	B	385	18.58%	2,086	0.435	B	1,793	0.374	B	2,163	0.451	B	2,178	0.454	B
	SB	2	4,800	19,500	2,872	0.598	C	739	25.73%	3,611	0.752	C	769	21.28%	3,641	0.758	C	2,973	0.619	C	3,712	0.773	C	3,742	0.779	C
6 North Soledad and South Soledad	Both	4	9,600	37,200	4,137	0.431	B	285	6.89%	4,422	0.461	B	296	6.70%	4,433	0.462	B	4,493	0.468	B	4,778	0.498	B	4,789	0.499	B
	NB	2	4,800	18,600	1,520	0.317	A	116	7.63%	1,636	0.341	A	121	7.37%	1,641	0.342	A	1,692	0.353	A	1,808	0.377	B	1,813	0.378	B
	SB	2	4,800	18,600	2,617	0.545	B	169	6.46%	2,786	0.580	C	176	6.31%	2,793	0.582	C	2,801	0.584	C	2,970	0.619	C	2,977	0.620	C
7 South Soledad and Arroyo Seco Road	Both	4	9,600	37,500	4,144	0.432	B	317	7.65%	4,461	0.465	B	330	7.39%	4,474	0.466	B	4,543	0.473	B	4,860	0.506	B	4,873	0.508	B
	NB	2	4,800	18,750	1,536	0.320	A	211	13.74%	1,747	0.364	B	219	12.56%	1,755	0.366	B	1,730	0.360	B	1,941	0.404	B	1,949	0.406	B
	SB	2	4,800	18,750	2,608	0.543	B	106	4.06%	2,714	0.565	C	110	4.06%	2,718	0.566	C	2,813	0.586	C	2,919	0.608	C	2,923	0.609	C
8 Arroyo Seco Road and North Greenfield	Both	4	9,600	34,700	3,689	0.384	B	301	8.16%	3,990	0.416	B	313	7.85%	4,002	0.417	B	4,068	0.424	B	4,369	0.455	B	4,381	0.456	B
	NB	2	4,800	17,350	1,368	0.285	A	201	14.69%	1,569	0.327	A	209	13.32%	1,577	0.329	A	1,552	0.323	A	1,753	0.365	B	1,761	0.367	B
	SB	2	4,800	17,350	2,321	0.484	B	100	4.31%	2,421	0.504	B	104	4.30%	2,425	0.505	B	2,516	0.524	B	2,616	0.545	B	2,620	0.546	B
9 North Greenfield and Walnut Avenue	Both	4	9,600	32,400	3,280	0.342	A	269	8.20%	3,549	0.370	B	280	7.88%	3,560	0.371	B	3,619	0.377	B	3,888	0.405	B	3,899	0.406	B
	NB	2	4,800	16,200	1,216	0.253	A	179	14.72%	1,395	0.291	A	186	13.34%	1,402	0.292	A	1,381	0.288	A	1,560	0.325	A	1,567	0.326	A
	SB	2	4,800	16,200	2,064	0.430	B	90	4.36%	2,154	0.449	B	94	4.35%	2,158	0.450	B	2,238	0.466	B	2,328	0.485	B	2,332	0.486	B
10 Walnut Avenue and Oak Avenue	Both	4	9,600	29,300	2,971	0.309	A	238	8.01%	3,209	0.334	A	248	7.71%	3,219	0.335	A	3,271	0.341	A	3,509	0.366	B	3,519	0.367	B
	NB	2	4,800	14,650	1,102	0.230	A	159	14.43%	1,261	0.263	A	165	13.11%	1,267	0.264	A	1,248	0.260	A	1,407	0.293	A	1,413	0.294	A
	SB	2	4,800	14,650	1,869	0.389	B	79	4.23%	1,948	0.406	B	82	4.22%	1,951	0.406	B	2,023	0.421	B	2,102	0.438	B	2,105	0.439	B
11 Oak Avenue and South Greenfield	Both	4	9,600	24,100	2,411	0.251	A	205	8.50%	2,616	0.273	A	213	8.15%	2,624	0.273	A	2,670	0.278	A	2,875	0.299	A	2,883	0.300	A
	NB	2	4,800	12,050	895	0.186	A	137	15.31%	1,032	0.215	A	142	13.81%	1,037	0.216	A	1,021	0.213	A	1,158	0.241	A	1,163	0.242	A
	SB	2	4,800	12,050	1,516	0.316	A	68	4.49%	1,584	0.330	A	71	4.46%	1,587	0.331	A	1,649	0.344	A	1,717	0.358	A	1,720	0.358	A

Notes:

1. Capacity of freeway lanes based on assumed capacity of 2,400 vphpl, as prescribed by the Highway Capacity Manual.

Table 5

Year 2040 Freeway Segment Analysis - Apartments

Freeway Segment	Direction	# of Lanes	Capacity (vph)	Year 2040 Conditions PM Peak Hour			Project Trips PM Peak Hour with Farmer's Community		Project Trips PM Peak Hour with Apartments	
				Volume	V/C	LOS	Volume	Increase	Volume	Increase
US 101										
4 Soledad Prison and Camphora										
	NB	2	4,800	3,066	0.639	C	89	3%	93	3%
	SB	2	4,800	4,379	0.912	D	454	10%	472	11%
5 Camphora and North Soledad										
	NB	2	4,800	2,426	0.505	B	30	1%	31	1%
	SB	2	4,800	3,287	0.685	C	0	0%	0	0%
6 North Soledad and South Soledad										
	NB	2	4,800	2,027	0.422	B	118	6%	123	6%
	SB	2	4,800	2,825	0.589	C	0	0%	0	0%
7 South Soledad and Arroyo Seco Road										
	NB	2	4,800	2,027	0.422	B	189	9%	197	10%
	SB	2	4,800	2,888	0.602	C	35	1%	36	1%
8 Arroyo Seco Road and North Greenfield										
	NB	2	4,800	1,985	0.414	B	171	9%	178	9%
	SB	2	4,800	2,835	0.591	C	35	1%	36	1%

Notes:

1. Capacity of freeway lanes based on assumed capacity of 2,400 vphpl, as prescribed by the Highway Capacity Manual.

Table 6

Freeway Ramp Analysis- Apartments

Interchange	Direction	# of Lanes	Type	Capacity (vph)	Background PM Peak Hour			Project with Farmers Community					Project with Apartments					Cumulative No Project PM Peak Hour			Project with Farmers Community					Project with Apartments				
								Project Trips PM Peak Hour		Background with Project PM Peak Hour			Project Trips PM Peak Hour		Background with Project PM Peak Hour						Project Trips PM Peak Hour		Cumulative With Project PM Peak Hour			Project Trips PM Peak Hour		Cumulative With Project PM Peak Hour		
					Volume	V/C	LOS	Volume	Increase	Volume	V/C	LOS	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	V/C	LOS	Volume	Increase	Volume	V/C	LOS
US 101																													
1 Camphora Road	SB to Camphora Road	1	Diagonal	1,830	82	0.045	A	0	0.00%	82	0.045	A	0	0.00%	0	0.000	A	82	0.045	A	0	0.00%	82	0.045	A	0	0.00%	82	0.045	A
	NB from Camphora Road	1	Diagonal	1,830	92	0.050	A	0	0.00%	92	0.050	A	0	0.00%	0	0.000	A	92	0.050	A	0	0.00%	92	0.050	A	0	0.00%	92	0.050	A
	SB from Camphora Road	1	Diagonal	1,830	189	0.103	A	37	19.58%	226	0.123	A	38	20.36%	39	0.021	A	194	0.106	A	37	19.07%	231	0.126	A	38	16.66%	232	0.127	A
	NB to Camphora Road	1	Diagonal	1,830	151	0.083	A	18	11.90%	169	0.092	A	19	12.38%	19	0.010	A	156	0.085	A	18	11.52%	174	0.095	A	19	10.75%	175	0.096	A
2 Moranda Road	SB to Moranda Road	1	Diagonal	1,830	1,096	0.599	A	**591**	**53.91%**	**1,687**	**0.922**	E	**615**	**56.06%**	**615**	**0.336**	**A**	1,169	0.639	B	591	50.54%	1,760	0.962	E	615	34.92%	1,784	0.975	E
	NB from Moranda Road	1	Loop	1,500	438	0.292	A	296	67.58%	734	0.489	A	308	70.28%	309	0.206	A	503	0.335	A	296	58.85%	799	0.533	A	308	38.53%	811	0.541	A
	SB from Moranda Road	1	Loop	1,500	69	0.046	A	21	30.43%	90	0.060	A	22	31.65%	22	0.015	A	226	0.151	A	21	9.29%	247	0.165	A	22	8.84%	248	0.165	A
	NB to Moranda Road	1	Loop	1,500	123	0.082	A	42	34.15%	165	0.110	A	44	35.51%	44	0.029	A	268	0.179	A	42	15.67%	310	0.207	A	44	14.09%	312	0.208	A
3 Front Street	SB to Front Street	1	Loop	1,500	291	0.194	A	148	50.89%	439	0.293	A	154	52.92%	154	0.103	A	318	0.212	A	148	46.56%	466	0.311	A	154	33.04%	472	0.315	A
	NB from Front Street	1	Loop	1,500	208	0.139	A	74	35.50%	282	0.188	A	77	36.92%	77	0.052	A	235	0.157	A	74	31.43%	309	0.206	A	77	24.87%	312	0.208	A
	SB from Front Street	1	Diagonal	1,830	427	0.233	A	84	19.68%	511	0.279	A	87	20.47%	88	0.048	A	476	0.260	A	84	17.65%	560	0.306	A	87	15.60%	563	0.308	A
	NB to Front Street	1	Diagonal	1,830	466	0.255	A	169	36.29%	635	0.347	A	176	37.74%	176	0.096	A	515	0.281	A	169	32.83%	684	0.374	A	176	25.71%	691	0.377	A
4 Arroyo Seco Road	SB to Arroyo Seco Road	1	Diagonal	1,830	183	0.100	A	5	2.73%	188	0.103	A	5	2.84%	5	0.003	A	193	0.106	A	5	2.59%	198	0.108	A	5	2.62%	198	0.108	A
	NB from Arroyo Seco Road	1	Diagonal	1,830	182	0.099	A	11	6.05%	193	0.105	A	11	6.30%	12	0.006	A	189	0.103	A	11	5.83%	200	0.109	A	11	5.73%	200	0.109	A

Table 7

Intersection Levels of Service - Single Family

	N-S Street	E-W Street	Intersection Control	Mitigated Intersection Control	Background PM Peak Hour		Background plus Project PM Peak Hour			Background plus Project Mitigated PM Peak Hour			Project With Gabilan Ext. PM Peak Hour			Intersection Control	No Project PM Peak Hour		Cumulative With Project - PM Peak Hour					
																			No Gabilan Ext.			With Gabilan Ext.		
					Avg. Delay	LOS	Avg. Delay Farmer's Community	Avg. Delay Single Family	LOS	Avg. Delay Farmer's Community	Avg. Delay Single Family	LOS	Avg. Delay Farmer's Community	Avg. Delay Single Family	LOS		Avg. Delay	LOS	Avg. Delay Farmer's Community	Avg. Delay Single Family	LOS	Avg. Delay Farm Community	Avg. Delay Single Family	LOS
1	Moranda Road	US 101 Ramps	TWSC	TWSC	15	B	**65**	**67**	F	10	10	A	10	10	A	Signal	16	B	15	15	B	10	10	A
2	Moranda Road	Front Street	TWSC	Signal	22	C	**166**	**169**	F	5	5	A	12	12	B	Signal	20	B	11	11	B	14	14	B
3	San Vicente Road	Front Street	Signal	Signal	18	B	**126**	**129**	F	12	13	B	16	17	B	Signal	20	B	13	14	B	18	19	B
4	West Street	Front Street	AWSC	AWSC	16	C	***36***	**36**	***E***	20	20	C	12	12	B	Signal	21	C	31	31	C	14	14	B
5	Main Street	Front Street	AWSC	AWSC	13	B	***26***	**26**	***D***	21	21	C	20	20	C	Signal	21	C	20	20	B	18	18	B
6	East Street	Front Street	AWSC	Signal	25	C	24	**24**	C				24	24	C	Signal	25	C	31	31	C	30	30	C
7	Front Street	Nestles Road	Signal	Signal	18	B	25	**25**	C				21	21	C	Signal	22	C	42	43	D	39	39	D
8	Front St-US 101 NB Off-Ramp	US 101 NB On-Ramp	Signal	Signal	20	B	20	**18**	C				24	24	C	Signal	18	B	16	16	B	22	22	C
9	Front St-US 101 SB Off-Ramp	US 101 SB On-Ramp	TWSC	TWSC	19	C	**54**	**55**	F	7	7	A	7	7	A	Signal	21	C	12	13	B	13	13	B
10	Front St-US 101 SB On-Ramp	Morisoli Road	TWSC	TWSC	13	B	15	**15**	B				14	14	B	TWSC	13	B	16	16	C	15	15	B
11	San Vicente Road	Market Street	TWSC	TWSC	17	C	**100**	**103**	F	6	6	A	15	15	B	Signal	***30***	***C***	8	8	A	8	8	A
12	West Street	Market Street	AWSC	AWSC	11	B	***19***	**19**	***C***	8	8	A	13	13	B	Signal	10	A	8	8	A	10	10	A
13	Main Street	Market Street	AWSC	AWSC	11	B	11	**10**	B				9	9	A	AWSC	9	A	10	10	A	8	8	A
14	East Street	Market Street	AWSC	AWSC	16	C	***89***	**90**	***F***				5	5	A	Signal	***27***	***C***	***7***	***7***	***A***	6	6	A
15	Andalucia Drive	Metz Road	AWSC	Signal	21	C	37	**38**	D				28	29	C	Signal	20	C	43	44	D	32	32	C
16	San Vicente Road	Gabilan Drive	TWSC	TWSC	14	B	***342***	**351**	***F***	9	10	A	13	14	B	Signal	21	C	25	25	C	27	28	C
17	West Street	Gabilan Drive	Signal	Signal	11	B	13	**0**	B	30	31	C	30	31	C	Signal	14	B	36	37	D	34	34	C
18	Main Street	Gabilan Drive	AWSC	AWSC	10	A	***11***	**11**	***B***	15	15	C	10	10	B	Signal	11	B	16	16	B	15	15	B
19	Andalucia Drive	Gabilan Drive	TWSC	TWSC	17	C	***17***	**17**	***C***				20	20	C	TWSC	18	C	21	21	C	21	21	C

Notes:

1. TWSC = Two-way stop-controlled intersection.
2. AWSC = Four-way stop-controlled intersection.
3. Existing conditions delay at Intersections 3 and 17 calculated using Traffix analysis software.
4. Existing conditions delay at Intersections 7 and 8 referenced from the *Soledad Event Center TIA* , Mott MacDonald, June 2017.
5. Background and background plus project conditions delay at Intersection 17 calculated using Traffix analysis software.
6. LOS below LOS standard shown highlighted in red.
7. Significant impacts are shown in **BOLD** and boxed.
8. *Italics* and **BOLD** indicates signal warrant met.

Table 8
Roadway Segment Analysis - Single Family

Street Segment	Direction	# of Lanes	Capacity (vph)	Project with Farmers Community					Project with Single Family												Project with Farmer's Community			Project with Apartments		
				Project Trips PM Peak Hour		Background + Project PM Peak Hour			Project Trips PM Peak Hour		Project Conditions PM Peak Hour			Cumulative Trips PM Peak Hour		Cumulative Conditions PM Peak Hour			Project Trips PM Peak Hour		Cumulative With Project PM Peak Hour			Cumulative With Project PM Peak Hour		
				Volume	Increase	Volume	V/C	LOS	Volume	Increase	Volume	V/C	LOS	Volume	Increase	Cumulative Volumes	V/C	LOS	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS
Front Street																										
1 Moranda Rd and San Vicente Rd	EB	2	2,400	634	52.69%	1,837	0.766	C	699	54.79%	1,903	0.793	C	49	4.07%	1,252	0.522	A	699	55.84%	1,886	0.786	C	1,952	0.813	D
	WB	2	2,400	317	62.28%	826	0.344	A	350	64.77%	859	0.358	A	39	7.66%	548	0.228	A	350	63.80%	865	0.360	A	898	0.374	A
2 San Vicente and West St	EB	2	2,400	228	27.64%	1,053	0.439	A	251	28.75%	1,076	0.448	A	158	19.16%	983	0.409	A	251	25.59%	1,211	0.504	A	1,234	0.514	A
	WB	2	2,400	124	37.95%	451	0.188	A	137	39.47%	464	0.193	A	157	48.05%	484	0.202	A	137	28.27%	608	0.253	A	621	0.259	A
3 West St and Main St	EB	1	1,200	77	13.93%	630	0.525	A	85	14.49%	638	0.531	A	156	28.22%	709	0.591	A	85	11.98%	786	0.655	B	794	0.661	B
	WB	1	1,200	98	28.51%	442	0.368	A	108	29.65%	452	0.377	A	153	44.51%	497	0.414	A	108	21.76%	595	0.496	A	605	0.504	A
4 Main St and East St	EB	1	1,200	76	18.64%	484	0.403	A	84	19.38%	492	0.410	A	145	35.56%	553	0.461	A	84	15.17%	629	0.524	A	637	0.530	A
	WB	1	1,200	150	41.93%	508	0.423	A	165	43.61%	523	0.436	A	160	44.72%	518	0.431	A	165	31.96%	668	0.556	A	683	0.569	A
5 East St and Nestles Rd	EB	1	1,200	185	31.48%	773	0.644	B	204	32.74%	792	0.660	B	207	35.23%	795	0.662	B	204	25.68%	980	0.816	D	999	0.832	D
	WB	1	1,200	**370**	**47.40%**	**1,151**	**0.959**	**E**	**408**	**49.29%**	**1,189**	**0.991**	**E**	228	29.21%	1,009	0.841	D	**408**	**40.46%**	**1,379**	**1.149**	**F**	**1,417**	**1.181**	**F**
Gabilan Drive																										
6 San Vicente Rd and West St	EB	2	2,400	207	79.51%	467	0.195	A	228	82.69%	489	0.204	A	235	90.26%	495	0.206	A	228	46.09%	702	0.293	A	724	0.302	A
	WB	2	2,400	110	46.59%	346	0.144	A	121	48.45%	357	0.149	A	217	91.91%	453	0.189	A	121	26.78%	563	0.235	A	574	0.239	A
7 West St and Andalucia Dr	EB	2	2,400	56	13.75%	463	0.193	A	62	14.30%	469	0.195	A	157	38.55%	564	0.235	A	62	10.95%	620	0.258	A	626	0.261	A
	WB	2	2,400	87	29.94%	378	0.157	A	96	31.14%	387	0.161	A	145	49.90%	436	0.182	A	96	22.03%	523	0.218	A	532	0.221	A
San Vicente Road																										
8 Market St and Gabilan Dr	NB	1	1,200	435	89.77%	920	0.766	C	480	93.36%	964	0.804	C	241	49.74%	726	0.605	A	**480**	**66.13%**	**1,161**	**0.967**	**E**	**1,205**	**1.004**	**F**
	SB	1	1,200	218	66.29%	547	0.456	A	240	68.94%	569	0.474	A	237	72.07%	566	0.472	A	240	42.49%	784	0.653	B	806	0.672	B
9 North of Gabilan Dr	NB	1	1,200	273	148.17%	457	0.381	A	301	154.09%	485	0.404	A	535	290.37%	719	0.599	A	301	41.87%	992	0.827	D	1,020	0.850	D
	SB	1	1,200	155	132.71%	272	0.227	A	171	138.01%	288	0.240	A	492	421.23%	609	0.507	A	171	28.08%	764	0.637	B	780	0.650	B
West Street																										
10 Market St and Gabilan Dr	NB	2	2,400	283	68.09%	699	0.291	A	312	70.82%	728	0.303	A	29	6.98%	445	0.185	A	312	70.21%	728	0.303	A	757	0.315	A
	SB	2	2,400	142	69.56%	346	0.144	A	157	72.34%	361	0.150	A	26	12.74%	230	0.096	A	157	68.05%	372	0.155	A	387	0.161	A
11 North of Gabilan Dr	NB	2	2,400	545	190.26%	831	0.346	A	601	197.87%	888	0.370	A	54	18.85%	340	0.142	A	601	176.57%	885	0.369	A	942	0.392	A
	SB	2	2,400	278	127.85%	495	0.206	A	307	132.96%	524	0.218	A	49	22.53%	266	0.111	A	307	115.08%	544	0.227	A	573	0.239	A

Notes:
1. Capacity of roadways based on assumed capacity of 1,200 vphpl and existing lanes on roadways.
2. **BOLD** indicates significant increase in roadway segment volume and LOS.
3. LOS below LOS standard shown highlighted in red.

Table 9

Freeway Segment Analysis - Single Family

Freeway Segment	Direction	# of Lanes	Capacity (vph)	24-Hr Tot Volume	2007 Report Background Conditions	Background Conditions			Project with Farmer's Community: Project Trips		Project with Farmer's Community: Background plus Project			Project with Single Family: Project Trips		Project with Single Family: Background plus Project			Cumulative No Project			Project with Farmer's Community: Cumulative plus Project			Project with Single Family: Cumulative plus Project		
					LOS	Volume	V/C	LOS	Volume	Increase	Volume	V/C	LOS	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS
US 101																											
1 North Gonzales and Gonzales-5th Street	Both	4	9,600	39,800	B	4,476	0.466	B	865	19.32%	5,341	0.556	C	954	17.86%	5,430	0.566	C	4,676	0.487	B	5,541	0.577	C	5,630	0.586	C
	NB	2	4,800	19,900	B	1,658	0.345	A	289	17.40%	1,947	0.406	B	318	16.35%	1,976	0.412	B	1,793	0.374	B	2,082	0.434	B	2,111	0.440	B
	SB	2	4,800	19,900	C	2,818	0.587	C	576	20.45%	3,394	0.707	C	636	18.73%	3,454	0.719	C	2,882	0.600	C	3,458	0.720	C	3,518	0.733	C
2 Gonzales-5th Street and Gloria Road	Both	4	9,600	37,700	B	4,409	0.459	B	901	20.43%	5,310	0.553	C	994	18.71%	5,403	0.563	C	4,637	0.483	B	5,538	0.577	C	5,631	0.587	C
	NB	2	4,800	18,850	B	1,637	0.341	A	301	18.36%	1,938	0.404	B	331	17.11%	1,968	0.410	B	1,791	0.373	B	2,092	0.436	B	2,122	0.442	B
	SB	2	4,800	18,850	C	2,772	0.578	C	600	21.65%	3,372	0.703	C	662	19.63%	3,434	0.715	C	2,846	0.593	C	3,446	0.718	C	3,508	0.731	C
3 Gloria Road and Soledad Prison	Both	4	9,600	40,100	B	3,541	0.369	B	1,001	28.27%	4,542	0.473	B	1,104	24.31%	4,645	0.484	B	3,798	0.396	B	4,799	0.500	B	4,902	0.511	B
	NB	2	4,800	20,050	A	1,321	0.275	A	334	25.28%	1,655	0.345	A	368	22.26%	1,689	0.352	A	1,495	0.311	A	1,829	0.381	B	1,863	0.388	B
	SB	2	4,800	20,050	B	2,220	0.463	B	667	30.04%	2,887	0.601	C	736	25.48%	2,956	0.616	C	2,303	0.480	B	2,970	0.619	C	3,039	0.633	C
4 Soledad Prison and Camphora	Both	4	9,600	38,500	B	3,457	0.360	B	1,054	30.48%	4,511	0.470	B	1,162	25.76%	4,619	0.481	B	3,727	0.388	B	4,781	0.498	B	4,889	0.509	B
	NB	2	4,800	19,250	A	1,291	0.269	A	352	27.23%	1,643	0.342	A	388	23.60%	1,679	0.350	A	1,474	0.307	A	1,826	0.380	B	1,862	0.388	B
	SB	2	4,800	19,250	B	2,166	0.451	B	702	32.41%	2,868	0.598	C	774	27.00%	2,940	0.613	C	2,253	0.469	B	2,955	0.616	C	3,027	0.631	C
5 Camphora and North Soledad	Both	4	9,600	39,000	B	4,573	0.476	B	1,109	24.25%	5,682	0.592	C	1,223	21.53%	5,796	0.604	C	4,766	0.496	B	5,875	0.612	C	5,989	0.624	C
	NB	2	4,800	19,500	B	1,701	0.354	A	370	21.75%	2,071	0.431	B	408	19.71%	2,109	0.439	B	1,793	0.374	B	2,163	0.451	B	2,201	0.459	B
	SB	2	4,800	19,500	C	2,872	0.598	C	739	25.73%	3,611	0.752	C	815	22.57%	3,687	0.768	C	2,973	0.619	C	3,712	0.773	C	3,788	0.789	C
6 North Soledad and South Soledad	Both	4	9,600	37,200	B	4,137	0.431	B	285	6.89%	4,422	0.461	B	314	7.11%	4,451	0.464	B	4,493	0.468	B	4,778	0.498	B	4,807	0.501	B
	NB	2	4,800	18,600	A	1,520	0.317	A	116	7.63%	1,636	0.341	A	128	7.82%	1,648	0.343	A	1,692	0.353	A	1,808	0.377	B	1,820	0.379	B
	SB	2	4,800	18,600	B	2,617	0.545	B	169	6.46%	2,786	0.580	C	186	6.69%	2,803	0.584	C	2,801	0.584	C	2,970	0.619	C	2,987	0.622	C
7 South Soledad and Arroyo Seco Road	Both	4	9,600	37,500	B	4,144	0.432	B	317	7.65%	4,461	0.465	B	350	7.84%	4,494	0.468	B	4,543	0.473	B	4,860	0.506	B	4,893	0.510	B
	NB	2	4,800	18,750	B	1,536	0.320	A	211	13.74%	1,747	0.364	B	233	13.32%	1,769	0.368	B	1,730	0.360	B	1,941	0.404	B	1,963	0.409	B
	SB	2	4,800	18,750	B	2,608	0.543	B	106	4.06%	2,714	0.565	C	117	4.31%	2,725	0.568	C	2,813	0.586	C	2,919	0.608	C	2,930	0.610	C
8 Arroyo Seco Road and North Greenfield	Both	4	9,600	34,700	B	3,689	0.384	B	301	8.16%	3,990	0.416	B	332	8.32%	4,021	0.419	B	4,068	0.424	B	4,369	0.455	B	4,400	0.458	B
	NB	2	4,800	17,350	A	1,368	0.285	A	201	14.69%	1,569	0.327	A	222	14.13%	1,590	0.331	A	1,552	0.323	A	1,753	0.365	B	1,774	0.370	B
	SB	2	4,800	17,350	B	2,321	0.484	B	100	4.31%	2,421	0.504	B	110	4.56%	2,431	0.507	B	2,516	0.524	B	2,616	0.545	B	2,626	0.547	B
9 North Greenfield and Walnut Avenue	Both	4	9,600	32,400	A	3,280	0.342	A	269	8.20%	3,549	0.370	B	297	8.36%	3,577	0.373	B	3,619	0.377	B	3,888	0.405	B	3,916	0.408	B
	NB	2	4,800	16,200	A	1,216	0.253	A	179	14.72%	1,395	0.291	A	197	14.15%	1,413	0.294	A	1,381	0.288	A	1,560	0.325	A	1,578	0.329	A
	SB	2	4,800	16,200	B	2,064	0.430	B	90	4.36%	2,154	0.449	B	99	4.61%	2,163	0.451	B	2,238	0.466	B	2,328	0.485	B	2,337	0.487	B
10 Walnut Avenue and Oak Avenue	Both	4	9,600	29,300	A	2,971	0.309	A	238	8.01%	3,209	0.334	A	263	8.18%	3,234	0.337	A	3,271	0.341	A	3,509	0.366	B	3,534	0.368	B
	NB	2	4,800	14,650	A	1,102	0.230	A	159	14.43%	1,261	0.263	A	175	13.91%	1,277	0.266	A	1,248	0.260	A	1,407	0.293	A	1,423	0.297	A
	SB	2	4,800	14,650	A	1,869	0.389	B	79	4.23%	1,948	0.406	B	87	4.47%	1,956	0.408	B	2,023	0.421	B	2,102	0.438	B	2,110	0.440	B
11 Oak Avenue and South Greenfield	Both	4	9,600	24,100	A	2,411	0.251	A	205	8.50%	2,616	0.273	A	226	8.64%	2,637	0.275	A	2,670	0.278	A	2,875	0.299	A	2,896	0.302	A
	NB	2	4,800	12,050	A	895	0.186	A	137	15.31%	1,032	0.215	A	151	14.64%	1,046	0.218	A	1,021	0.213	A	1,158	0.241	A	1,172	0.244	A
	SB	2	4,800	12,050	A	1,516	0.316	A	68	4.49%	1,584	0.330	A	75	4.74%	1,591	0.331	A	1,649	0.344	A	1,717	0.358	A	1,724	0.359	A

Notes:

1. Capacity of freeway lanes based on assumed capacity of 2,400 vphpl, as prescribed by the Highway Capacity Manual.

Table 10

Year 2040 Freeway Segment Analysis - Single Family

Freeway Segment	Direction	# of Lanes	Capacity (vph)	Year 2040 Conditions PM Peak Hour			Project Trips PM Peak Hour with Farmer's Community		Project Trips PM Peak Hour with Single Family Homes	
				Volume	V/C	LOS	Volume	Increase	Volume	Increase
US 101										
4 Soledad Prison and Camphora										
	NB	2	4,800	3,066	0.639	C	89	3%	98	3%
	SB	2	4,800	4,379	0.912	D	454	10%	501	11%
5 Camphora and North Soledad										
	NB	2	4,800	2,426	0.505	B	30	1%	33	1%
	SB	2	4,800	3,287	0.685	C	0	0%	0	0%
6 North Soledad and South Soledad										
	NB	2	4,800	2,027	0.422	B	118	6%	130	6%
	SB	2	4,800	2,825	0.589	C	0	0%	0	0%
7 South Soledad and Arroyo Seco Road										
	NB	2	4,800	2,027	0.422	B	189	9%	208	10%
	SB	2	4,800	2,888	0.602	C	35	1%	39	1%
8 Arroyo Seco Road and North Greenfield										
	NB	2	4,800	1,985	0.414	B	171	9%	189	10%
	SB	2	4,800	2,835	0.591	C	35	1%	39	1%

Notes:

1. Capacity of freeway lanes based on assumed capacity of 2,400 vphpl, as prescribed by the Highway Capacity Manual.

Table 11

Freeway Ramp Analysis - Single Family Homes

Interchange	Direction	# of Lanes	Type	Capacity (vph)	Background PM Peak Hour			Project with Farmers Community					Project with Single Family Homes					Cumulative No Project PM Peak Hour			Project with Farmers Community					Project with Single Family Homes				
								Project Trips PM Peak Hour		Background with Project PM Peak Hour			Project Trips PM Peak Hour		Background with Project PM Peak Hour						Project Trips PM Peak Hour		Cumulative With Project PM Peak Hour			Project Trips PM Peak Hour		Cumulative With Project PM Peak Hour		
					Volume	V/C	LOS	Volume	Increase	Volume	V/C	LOS	Volume	Increase	Volume	V/C	LOS	Volume	V/C	LOS	Volume	Increase	Volume	V/C	LOS	Volume	Increase	Volume	V/C	LOS
US 101																													
1 Camphora Road	SB to Camphora Road	1	Diagonal	1,830	82	0.045	A	0	0.00%	82	0.045	A	0	0.00%	82	0.045	A	82	0.045	A	0	0.00%	82	0.045	A	0	0.00%	82	0.045	A
	NB from Camphora Road	1	Diagonal	1,830	92	0.050	A	0	0.00%	92	0.050	A	0	0.00%	92	0.050	A	92	0.050	A	0	0.00%	92	0.050	A	0	0.00%	92	0.050	A
	SB from Camphora Road	1	Diagonal	1,830	189	0.103	A	37	19.58%	226	0.123	A	41	21.59%	230	0.126	A	194	0.106	A	37	19.07%	231	0.126	A	41	17.67%	235	0.128	A
	NB to Camphora Road	1	Diagonal	1,830	151	0.083	A	18	11.90%	169	0.092	A	20	13.13%	171	0.093	A	156	0.085	A	18	11.52%	174	0.095	A	20	11.40%	176	0.096	A
2 Moranda Road	SB to Moranda Road	1	Diagonal	1,830	1,096	0.599	A	**591**	**53.91%**	**1,687**	**0.922**	**E**	**652**	**59.46%**	**1,748**	**0.955**	**E**	1,169	0.639	B	**591**	**50.54%**	**1,760**	**0.962**	**E**	**652**	**37.03%**	**1,821**	**0.995**	**E**
	NB from Moranda Road	1	Loop	1,500	438	0.292	A	296	67.58%	734	0.489	A	326	74.54%	764	0.510	A	503	0.335	A	296	58.85%	799	0.533	A	326	40.86%	829	0.553	A
	SB from Moranda Road	1	Loop	1,500	69	0.046	A	21	30.43%	90	0.060	A	23	33.57%	92	0.061	A	226	0.151	A	21	9.29%	247	0.165	A	23	9.38%	249	0.166	A
	NB to Moranda Road	1	Loop	1,500	123	0.082	A	42	34.15%	165	0.110	A	46	37.66%	169	0.113	A	268	0.179	A	42	15.67%	310	0.207	A	46	14.94%	314	0.210	A
3 Front Street	SB to Front Street	1	Loop	1,500	291	0.194	A	148	50.89%	439	0.293	A	163	56.13%	454	0.303	A	318	0.212	A	148	46.56%	466	0.311	A	163	35.04%	481	0.321	A
	NB from Front Street	1	Loop	1,500	208	0.139	A	74	35.50%	282	0.188	A	82	39.16%	290	0.193	A	235	0.157	A	74	31.43%	309	0.206	A	82	26.38%	317	0.211	A
	SB from Front Street	1	Diagonal	1,830	427	0.233	A	84	19.68%	511	0.279	A	93	21.71%	520	0.284	A	476	0.260	A	84	17.65%	560	0.306	A	93	16.55%	569	0.311	A
	NB to Front Street	1	Diagonal	1,830	466	0.255	A	169	36.29%	635	0.347	A	186	40.02%	652	0.356	A	515	0.281	A	169	32.83%	684	0.374	A	186	27.26%	701	0.383	A
4 Arroyo Seco Road	SB to Arroyo Seco Road	1	Diagonal	1,830	183	0.100	A	5	2.73%	188	0.103	A	6	3.01%	189	0.103	A	193	0.106	A	5	2.59%	198	0.108	A	6	2.78%	199	0.109	A
	NB from Arroyo Seco Road	1	Diagonal	1,830	182	0.099	A	11	6.05%	193	0.105	A	12	6.68%	194	0.106	A	189	0.103	A	11	5.83%	200	0.109	A	12	6.08%	201	0.110	A

Notes:

1. Capacity for diagonal ramps (1,830 vphpl) and loop ramps (1,500 vphpl) based on assumed capacity as prescribed by the Highway Capacity Manual

Table 12

Year 2040 Freeway Ramp Analysis - Apartments and Homes

Interchange	Direction	# of Lanes	Type	Capacity (vph)	Year 2040 Conditions PM Peak Hour			Project Trips PM Peak Hour - Farmer's Community		Project Trips PM Peak Hour - Apartments		Project Trips PM Peak Hour - Single Family Homes	
					Volume	V/C	LOS	Volume	Increase	Volume	Increase	Volume	Increase
US 101													
1 Camphora Road	SB to Camphora Road	1	Diagonal	1,830	1,355	0.740	C	454	34%	472	35%	501	37%
	NB from Camphora Road	1	Diagonal	1,830	714	0.390	A	59	8%	61	9%	65	9%
	SB from Camphora Road	1	Diagonal	1,830	263	0.144	A	0	0%	0	0%	0	0%
	NB to Camphora Road	1	Diagonal	1,830	74	0.040	A	0	0%	0	0%	0	0%
2 Moranda Road	SB to Moranda Road	1	Diagonal	1,830	578	0.316	A	0	0%	0	0%	0	0%
	NB from Moranda Road	1	Loop	1,500	609	0.406	A	30	5%	31	5%	33	5%
	SB from Moranda Road	1	Loop	1,500	116	0.077	A	0	0%	0	0%	0	0%
	NB to Moranda Road	1	Loop	1,500	210	0.140	A	118	56%	123	58%	130	62%
3 Front Street	SB to Front Street	1	Loop	1,500	336	0.224	A	0	0%	0	0%	0	0%
	NB from Front Street	1	Loop	1,500	263	0.175	A	12	5%	12	5%	13	5%
	SB from Front Street	1	Diagonal	1,830	399	0.218	A	35	9%	36	9%	39	10%
	NB to Front Street	1	Diagonal	1,830	263	0.144	A	83	32%	86	33%	92	35%
4 Arroyo Seco Road	SB to Arroyo Seco Road	1	Diagonal	1,830	158	0.086	A	6	4%	6	4%	7	4%
	NB from Arroyo Seco Road	1	Diagonal	1,830	116	0.063	A	18	16%	19	16%	20	17%

Note:

1. Capacity for diagonal ramps (1,830 vphpl) and loop ramps (1,500 vphpl) based on assumed capacity as prescribed by the Highway Capacity Manual

RESOLUTION NO. 5431

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SOLEDAD CERTIFYING AN ADDENDUM TO THE FINAL ENVIRONMENTAL IMPACT REPORT FOR THE MIRAVALE III SPECIFIC PLAN (SCH #2006081129)

WHEREAS, the City Council of the City of Soledad received an application for a proposed Specific Plan and related vesting tentative map, along with a request for a city Sphere of Influence boundary adjustment and annexation of territory within the plan boundaries of the Specific Plan. This application was for the phased development of a 920-acre area north and west of the current boundaries of the City of Soledad, including residential, commercial, recreational and public facility uses and supporting infrastructure (Miravale III Project); and

WHEREAS, the City of Soledad has adopted the role of lead agency for the purposes of conducting environmental review of the proposed Miravale III Project under the California Environmental Quality Act (CEQA), and, as lead agency, has caused to be prepared a draft environmental impact report for the Miravale III project in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and related Guidelines (Title 14 California Code of Regulations, Section 15000 et seq.); and

WHEREAS, the City prepared a Notice of Preparation (NOP) of an EIR, which was circulated for public comment between August 24, 2006, and September 22, 2006, and on September 7, 2006, the City conducted a public meeting to refine the scope of the draft EIR in accordance with Section 15082(c)(1) of the State CEQA Guidelines; and

WHEREAS, the Draft EIR on the Miravale III Project was prepared in response to the concerns raised during the NOP public comment period and at the public meeting, and in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and related Guidelines (Title 14 California Code of Regulations, Section 15000 et seq.), and the City's rules and procedures for the implementation of CEQA; and

WHEREAS, the Draft EIR was circulated for public review and comment for 45 days between November 4, 2008, and December 18, 2008, in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and related Guidelines (Title 14 California Code of Regulations, Section 15000 et seq.); and

WHEREAS, on December 11, 2008, the Planning Commission conducted a duly noticed public hearing to consider the Draft EIR, related staff report, and all public comments received; and

WHEREAS, a Final Environmental Impact Report ("FEIR") was prepared for the Miravale III Project in compliance with all requirements of CEQA, and which addressed all elements of the Miravale III Project and Miravale III Project approvals; and

WHEREAS, the FEIR for the Miravale III Project consists of the Draft EIR for the Miravale III project (SCH No. 2006081129), all public written comments submitted within the statutory circulation period for the DEIR, the written responses by the EIR author to all comments received, such additional oral and written comments and responses to those comments

as entered in the public hearing record on the matter, and an Errata Summary (all of which is incorporated herein by reference); and

WHEREAS, the FEIR determined that implementation of the Miravale III Project has the potential to generate significant environmental impacts that could be reduced to a less-than-significant level with full implementation of mitigation measures as recommended in the FEIR; and that potentially significant environmental impacts that can be reduced through the implementation of mitigation measures include the following: aesthetic resources (light and glare); agricultural resources (land use compatibility); geology, seismic hazards and soils; air quality (short-term construction emissions and nuisance odors); biological resources (e.g., habitat alteration, removal of vegetation and trees); cultural resources (historic structure); hydrology, drainage and water quality; local and regional transportation systems; noise; public services and facilities; utilities and infrastructure; health hazards; land use and planning; and population and housing; and

WHEREAS, the FEIR has also determined that implementation of the Miravale III Project, as proposed, has the potential to generate significant unavoidable environmental effects, and that such significant impacts which cannot be mitigated to a less-than-significant level with implementation of the Project are identified as follows: aesthetic resources (permanent alteration of visual character and scenic resources); agricultural resources (conversion of prime agricultural land and cancellation of Williamson Act contract); air quality (e.g., ozone precursor pollutants and greenhouse gas emissions); biological resources (potential impacts to Special-status wildlife species, impacts to wildlife habitat, wildlife corridors and nursery sites); land use and planning (conflicts with General Plan policies intended to avoid and/or mitigate environmental impacts to biological and aesthetic resources); noise; population and housing (significant portion of General Plan's projected growth and growth-inducement); regional transportation system (if necessary improvements are not implemented); and cumulative impacts to aesthetics, agricultural resources, air quality, biological resources, climate change and transportation and traffic; and

WHEREAS, on August 12, 2010, the Planning Commission, conducted a noticed public hearing to consider the adequacy of the FEIR and all comments received, and considered the Staff Report and oral report for the FEIR; and

WHEREAS, the Planning Commission determined that the FEIR for the Miravale III project met all CEQA requirements and constituted a complete, comprehensive and adequate documentation of all environmental effects and impacts of the project and included appropriate and effective implementation measures and alternatives to reduce identified significant impacts; and

WHEREAS, the Planning Commission, through adoption of Resolution 2010-14, resolved to recommend that the City Council of the City of Soledad hold a public hearing and, thereupon, certify the Final EIR for the Miravale III Specific Plan project; and

WHEREAS, on September 1, 2010, the City Council of the City of Soledad conducted a noticed public hearing to consider the FEIR, related staff report and oral presentation of the item, all public comments received, and the recommendation of the Planning Commission; and

WHEREAS, the City Council of the City of Soledad, exercised their independent judgment of the FEIR, herein incorporated by reference, and based upon the evidence presented herein and in the public record, determined that the proposed Miravale III Project was adequately analyzed in the Miravale III Specific Plan Environmental Impact Report; and

WHEREAS, the City Council of the City of Soledad found that the City complied with the requirements of the California Environmental Quality Act ("CEQA"), Public Resources Code Section 21000 *et seq.*, the CEQA Guidelines, California Code of Regulations, Title 14, Section 15000 *et seq.*; and

WHEREAS, The City Council of the City of Soledad resolved to certify the FEIR on September 1, 2010 and adopted Resolution 4564 (included hereto as **Exhibit A**) to do so finding that:

1. The FEIR for the Miravale III project has been completed in compliance with the requirements of CEQA and CEQA Guidelines; and

2. The FEIR for the Miravale III project has been reviewed and considered by the City Council prior to their action; and

3. The FEIR reflects the City of Soledad's independent judgment and analysis; and

WHEREAS, The City Council authorized City Staff to request LAFCO consider initiating a Sphere of Influence amendment for the area proposed by the project, but took no other actions to approve the project; and

WHEREAS, The City Council made recommendations to the City Staff and the applicant for revisions to the project that would make it consistent with the City's General Plan and the city's vision for the area before the City Council would further consider requested actions on the project; and

WHEREAS, The Applicant resubmitted project applications on July 26, 2016 for a revised and reduced size project (647 acres vs. the original project at 920 acres) (hereinafter "Miramonte Project") in an attempt to address the City Council's direction from 2010; and

WHEREAS, It has been determined by City Staff and recommended by the Planning Commission that due to the reduction in size of the project boundary by (273 acres) and density (by 2,081 residential units) that the 2010 certified FEIR is adequate to evaluate the proposed project with the addition of an Addendum, prepared in accordance with Section 15164 of the CEQA Guidelines, to describe the revised and reduced Miramonte Project and to clarify mitigations contained in the 2010 certified FEIR; and

WHEREAS, the City prepared an Addendum to the Miravale III Specific Plan FEIR (hereinafter EIR Addendum), attached hereto as **Exhibit B** and incorporated herein by reference; and

WHEREAS, the City, based on the conclusions of the EIR Addendum, has prepared CEQA findings and a Statement of Overriding Considerations attached hereto as **Exhibit C** and incorporated herein by reference; and

WHEREAS, the City of Soledad Planning Commission and City Council members held a joint duly noticed public workshop on September 14, 2017 to review the previous plan area and project history, past actions, the current plan area and project description, available documentation on the project, currently proposed actions, and to hear public testimony; and

WHEREAS, notice of time and place of hearing for the Planning Commission's deliberations recommending to the City Council adoption of the EIR Addendum was given in the manner prescribed by law and by the City; and

WHEREAS, the City of Soledad Planning Commission held duly-noticed public hearings on April 12, 2018, May 10, 2018, and June 14, 2018, during which it considered the EIR Addendum, CEQA Findings and Statement of Overriding Considerations, Staff Report and presentation, public testimony, and documentary evidence introduced and received during the public hearing along with the entire public record, including the environmental documentation; and,

WHEREAS, the City of Soledad City Council held a duly noticed public workshop on July 18, 2018, to revisit the previous plan area and project history, past actions, the current plan area and project description, available documentation on the project, currently proposed actions, Planning Commission actions and to hear public testimony; and

WHEREAS, the City Council held duly noticed public hearings on August 28, 2018, October 23, 2018 and November 7, 2018 at which it considered the Addendum, the Staff Report and presentation, public testimony, and documentary evidence introduced and received during the public hearing, including all environmental documentation, and

WHEREAS, notice of time and place of hearing for the City Council's deliberations to certify the EIR Addendum was given in the manner prescribed by law and by the City.

NOW THEREFORE BE IT RESOLVED that the City Council of the City of Soledad herby certifies the EIR Addendum and finds that:

1. The FEIR for the Miravale III project was certified by the City of Soledad City Council in 2010 and was completed in compliance with the requirements of CEQA and the CEQA Guidelines and is hereby incorporated by reference; and

2. The Miramonte Project proposed in 2016 is based on the direction of the City Council in 2010 to reduce the physical size and total density of the project; and

3. The environmental effects of the reduced scale Miramonte Project have been studied in the EIR Addendum and will not result in new significant environmental effects or a substantial increase in the severity of significant effects previously identified in the certified Miravale III Specific Plan FEIR; and

4. That certain mitigations in the certified Miravale III FEIR require clarification, and as such are so clarified in the EIR Addendum; and

5. The actions necessary to carry out approval of the project are within the scope of the projects analyzed in the Final EIR and EIR Addendum; and that the Final EIR and EIR Addendum are fully adequate to consider the Miramonte Project; and

6. Findings for the purposes of CEQA and a Statement of Overriding Considerations have been prepared and are attached hereto as **Exhibit C** and

7. Pursuant to CEQA Guidelines Section 15162 et. seq. the City of Soledad makes the following determinations:

   (1) Substantial changes are proposed in the project, but the changes did not require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

   (2) Substantial changes occur with respect to the circumstances under which the project is undertaken, but the change in circumstances does not require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and

   (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, shows the following:

      (A) The project does not have significant effects that were not already discussed in the previous EIR;

      (B) The significant effects previously examined will not be substantially more severe than shown in the previous EIR;

      (C) There are no mitigation measures previously found not to be feasible that would in fact be feasible, that would substantially reduce one or more significant effects of the project, and are not declined by the project proponents;

      (D) No mitigation measures which are considerably different from those analyzed in the previous EIR and would substantially reduce one or more significant effects on the environment have been declined by the project proponent.

8. The EIR Addendum and the certified FEIR been reviewed and considered by the City Council; and

9. The EIR Addendum reflects the independent judgement and analysis of the City Council of the City of Soledad; and

10. The location and custodian of records for the basis of decision of the City of Soledad as Lead Agency approving the actions described herein is the Soledad City Clerk, City Hall, 248 Main Street, Soledad, CA 93960.

PASSED AND ADOPTED by the City Council of the City of Soledad a regular meeting duly noticed and held on the 7th day of November, 2018, by the following vote:

AYES, and in favor thereof, Councilmembers: Christopher Bourke, Mayor Pro Tem Alejandro Chavez, Carla Stewart and Mayor Fred Ledesma

NOES, Councilmembers: Velazquez

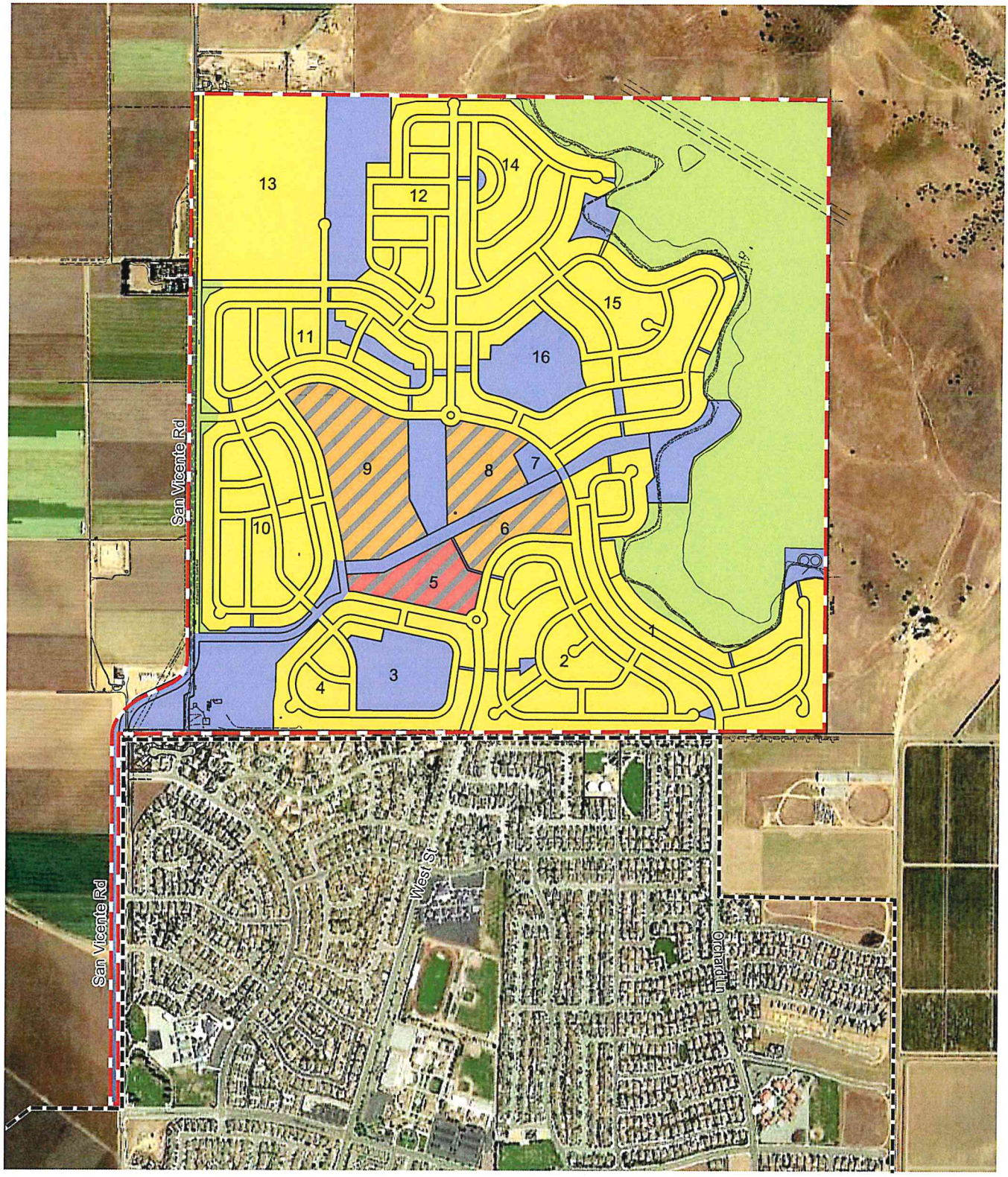
ABSENT, Councilmembers: None

ABSTAIN, Councilmembers: None

FRED J. LEDESMA, Mayor

ATTEST:

MICHAEL MCHATTEN, City Clerk



Note: Neighborhood Park locations are conceptual within Sub-areas

Figure 2-4

Miramonte Specific Plan Zoning Map

Miramonte Specific Plan

Resolution No. 5431 - EXHIBIT A

RESOLUTION NO. 4564

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SOLEDAD ANNOUNCING FINDINGS AND CERTIFYING THE FINAL ENVIRONMENTAL IMPACT REPORT FOR THE PROPOSED MIRAVALE III SPECIFIC PLAN

(SCH NO. 2006081129)

WHEREAS, the City Council of the City of Soledad has received an application initiated by Nader Agha. for a proposed Specific Plan and related vesting tentative map for the phased development for a 920-acre area north and west of the current boundaries of the City of Soledad, including residential, commercial, recreational and public facility uses and supporting infrastructure ("Project"); and

WHEREAS, the City of Soledad has adopted the role of lead agency for the purposes of conducting environmental review of the proposed Project under the California Environmental Quality Act (CEQA), and, as lead agency, has caused to be prepared a draft environmental impact report for the Miravale III Specific Plan accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and related Guidelines (Title 14 California Code of Regulations, Section 15000 et seq.); and

WHEREAS, the City prepared a Notice of Preparation (NOP) of an EIR, which was circulated for public comment between August 24, 2006, and September 22, 2006, and on September 7, 2006, the City conducted a public meeting to refine the scope of the draft EIR in accordance with Section 15082(c)(1) of the State CEQA Guidelines; and

WHEREAS, the Draft EIR on the Miravale III project was prepared in response to the concerns raised during the NOP public comment period and at the public meeting, and in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and related Guidelines (Title 14 California Code of Regulations, Section 15000 et seq.), and the City's rules and procedures for the implementation of CEQA; and

WHEREAS, the Draft EIR was circulated for public review and comment for 45 days between November 4, 2008, and December 18, 2008, in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and related Guidelines (Title 14 California Code of Regulations, Section 15000 et seq.); and

WHEREAS, on December 11, 2008, the Planning Commission conducted a duly noticed public hearing to consider the draft EIR, related staff report, and all public comments received; and

WHEREAS, a Final Environmental Impact Report ("FEIR") was prepared on the project in compliance with all requirements of CEQA, and which addresses all elements and phases of the Project and Project approvals as described above; and

WHEREAS, the FEIR for the Miravale III Project consists of the Draft EIR for the Miravale III Specific Plan (SCH No. 2006081129), all public written comments submitted within the statutory circulation period for the DEIR, the written responses by the EIR author to

all comments received, such additional oral and written comments and responses to those comments as entered in the public hearing record on the matter, and an Errata Summary (attached hereto\\as **Exhibit B**); and

WHEREAS, the FEIR has determined that implementation of the Project has the potential to generate significant environmental impacts that could be reduced to a less-than-significant level with full implementation of mitigation measures as recommended in the FEIR; and that the areas of potentially significant environmental impacts which can be reduced through mitigation measures include the following: aesthetic resources (light and glare); agricultural resources (land use compatibility); geology, seismic hazards and soils; air quality (short-term construction emissions and nuisance odors); biological resources (e.g., habitat alteration, removal of vegetation and trees); cultural resources (historic structure); hydrology, drainage and water quality; local and regional transportation systems; noise; public services and facilities; utilities and infrastructure; health hazards; land use and planning; and population and housing; and

WHEREAS, the FEIR has also determined that implementation of the Project, as proposed, has the potential to generate significant unavoidable environmental effects, and that such significant impacts which cannot be mitigated to a less-than-significant level with implementation of the Project are identified as follows: aesthetic resources (permanent alteration of visual character and scenic resources); agricultural resources (conversion of prime agricultural land and cancellation of Williamson Act contract); air quality (e.g., ozone precursor pollutants and greenhouse gas emissions); biological resources (potential impacts to Special-status wildlife species, impacts to wildlife habitat, wildlife corridors and nursery sites); land use and planning (conflicts with General Plan policies intended to avoid and/or mitigate environmental impacts to biological and aesthetic resources); noise; population and housing (significant portion of General Plan's projected growth and growth-inducement); regional transportation system (if necessary improvements are not implemented); and cumulative impacts to aesthetics, agricultural resources, air quality, biological resources, climate change and transportation and traffic; and

WHEREAS, on August 12, 2010, the Planning Commission, conducted a noticed public hearing to consider the adequacy of the Final EIR and all comments received, and considered the Staff Report and oral report for the Final EIR; and

WHEREAS, the Planning Commission has determined that the Final EIR for the Miravale III Specific Plan meets all CEQA requirements and constitutes a complete, comprehensive and adequate documentation of all environmental effects and impacts of the project and includes appropriate and effective implementation measures and alternatives to reduce identified significant impacts; and

WHEREAS, the Planning Commission, through adoption of Resolution 2010-14, resolved to recommend that the City Council of the City of Soledad hold a public hearing and, thereupon, certify the Final EIR for the Miravale III Specific Plan project, and

WHEREAS, on September 1, 2010, the City Council of the City of Soledad conducted a noticed public hearing to consider the Final EIR, related staff report and oral presentation of the item, all public comments received, and the recommendation of the Planning Commission; and

WHEREAS, the City Council of the City of Soledad, exercising their independent judgment of the FEIR, herein incorporated by reference, and based upon the evidence presented herein, has determined that the proposed Project has been adequately analyzed in the Miravale III Specific Plan Environmental Impact Report; and

WHEREAS, the City Council of the City of Soledad has found that the City has complied with the requirements of the California Environmental Quality Act ("CEQA"), Public Resources Code Section 21000 *et seq*., the CEQA Guidelines, California Code of Regulations, Title 14, Section 15000 *et seq*.; and

WHEREAS, the FEIR reflects the City's independent judgment and analysis and constitutes the FEIR for the Miravale III Specific Plan project.

NOW THEREFORE BE IT RESOLVED that the City Council of the City of Soledad certifies said FEIR and finds that:

1. The FEIR for the Miravale III Specific Plan has been completed in compliance with the requirements of CEQA and CEQA Guidelines; and

2. The FEIR for the Miravale III Specific Plan has been reviewed and considered by the City Council prior to their recommended action; and

3. The FEIR reflects the City of Soledad's independent judgment and analysis.

PASSED AND ADOPTED by the City Council of the City of Soledad a regular meeting duly held on the 1st day of September, 2010, by the following vote:

AYES, and in favor thereof, Councilmembers:

NOES, Councilmembers:

ABSTAIN, Councilmembers:

ABSENT, Councilmembers:

_____
RICHARD V. ORTIZ, Mayor

ATTEST:

_____
ADELA P. GONZALEZ, City Clerk

RESOLUTION NO. 5431 – EXHIBIT B

ADDENDUM TO MIRAVALE III SPECIFIC PLAN EIR
(REFER BACK TO EXHIBIT E OF THIS LAFCO PACKAGE)

EXHIBIT C
City of Soledad Resolution No. 5431

FINDINGS REQUIRED BY THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) AND FACTS AND EVIDENCE IN SUPPORT OF FINDINGS FOR THE MIRAMONTE SPECIFIC PLAN AND VESTING TENTTIVE MAP PROJECT

Pursuant to the requirements of California Public Resources Code Section 21000 et seq. and Title 14, California Code of Regulations Section 15000 et seq. the City of Soledad as Lead Agency adopts the following findings, along with the facts and evidence upon which each finding is based.

I

BACKGROUND

The Miramonte Specific Plan and Tentative Map proposes a mixed-use development consisting of approximately 1,318 low-density residential units, 626 medium-density residential units, 134 senior housing units, 100,000 square feet of retail commercial space, 140 acres of open space, and 56 acres of parkland. The specific plan also includes a 35.9-acre residential study area that would provide an opportunity for additional parklands and/or an additional 314 low density residential or medium density residential lots, or a mix of both to provide flexibility as growth within the plan area proceeds. Land uses would be arranged around a core area of neighborhood commercial and higher density residential uses. Some parcels within the core area provide a mixed-use opportunity. The specific plan would allow a variety of residential types, including apartments, townhouses, and detached homes on small and large lots. The specific plan also would create opportunities for two elementary school sites, a fire/police substation, storm water facilities, paved pathways, a community park, and an unimproved trail system within the hillside open space.

A. The Final EIR, incorporated herein by reference, for the project consists of the Draft EIR for the Miravale III Subdivision and the Appendices to the Draft EIR prepared for the City of Soledad by Denise Duffy and Associates, dated October 2008; and the Final EIR for the Miravale III Subdivision prepared for the City of Soledad by Denise Duffy and Associates, dated August 10, 2010. The Final EIR analyzes and evaluates approval and development of a similar, but larger project in approximately the same location as the project described above. The final EIR was certified by the City Council at a duly-noticed public hearing September 1, 2010 (City of Soledad City Council Resolution No. 4564).

B. Addendum to the Miravale III Specific Plan EIR:

The Addendum to the Final EIR and Appendices (EIR Addendum), prepared for the City of Soledad by EMC Planning Group Inc., dated April 5, 2018, including Errata to the Addendum to the Miravale III Specific Plan EIR

(Exhibit D of City Council Resolution 5431), analyze and evaluate approval and development of the project as described above.

II

ENVIRONMENTAL EFFECTS OF THE PROJECT MITIGATED TO A LESS-THAN- SIGNIFICANT LEVEL

The following subsections briefly explain the manner in which each of the recommended mitigation measures have been incorporated or will be implemented into the project plans or conditions and supply the rationale for the finding that the following potential significant effects, as identified in the Miravale III Specific Plan EIR for the Miravale III Specific Plan project (Miravale III) and the Addendum to the Final EIR prepared for the Miramonte I Specific Plan and vesting tentative map project (Miramonte), have been reduced to an acceptable level.

The environmental effects of the project identified in the Final Miravale III EIR and clarified in the Addendum to the Miravale III EIR and mitigation measures required in the Miravale III Final EIR and clarified in the Addendum to the Miravale III EIR to mitigate each impact to a less-than-significant level are listed below.

(a) Aesthetics

Project Impact (Significant). Scenic Vistas. Implementation of the Miravale III project would introduce substantial new development, including structures of various heights and densities in visually sensitive areas above the 400-foot contour line of the Gabilan foothills. The project would change the natural visual character of open space hillside vistas to urban development. Increased visibility and intensity of development of the hillsides, in particular, above the 400-foot contour line, impacts the aesthetic value of the scenic vista.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. The proposed project would not result in new significant impacts or substantially increase the severity of previously identified significant impacts. No new information has been identified that indicates the proposed project would have new or more significant impacts than were identified for the original project. Specifically, development consistent with the Miramonte specific plan reduces the size of the formerly proposed project boundary by 273 acres and the development density by 2,081 residential units. Scenic open space areas above the 400-foot contour are designated as Hillside/Open Space and are protected in perpetuity by a recorded conservation easement; thereby, eliminating potential new sources of light and glare from this area. Additionally, the following mitigation measures imposed upon the project mitigate impacts to less-than-significant levels:

Mitigation Measure

4.1-1. Building heights of all new structures shall adhere to the limits set forth in adopted Miramonte Specific Plan. Additionally, all new structures shall adhere to the applicable Development Standards as established in Section 2.4 of the Specific Plan. Prior to the issuance of any building permit for development within the Specific Plan area, the project applicant shall submit detailed plans, including elevations, site plans, and/or other documentation detailing compliance with applicable development standards, subject to the review and approval of the City of Soledad Chief Building Official.

4.1-4. Final design plans for proposed development shall utilize natural landforms and vegetation for screening structures, access roads, building foundations, cut and fill slopes, and exterior lighting. Roads, parking, and utilities shall be designed to minimize visual impacts. Prior to the issuance of any grading and/or building permit, the project applicant shall submit design-level drawings demonstrating compliance with this measure, subject to the review and approval of the City of Soledad Community and Economic Development Director.

4.1-5. The applicant shall provide landscape screening appropriate to the surrounding area in order to integrate the development with the existing natural landscape. Landscaping plans shall be submitted to the City of Soledad for review and approval prior to the issuance of any building or grading permit.

4.1-6. All buildings shall be designed with colors and materials that effectively blend the structures with the surrounding landscape. Building applications for new structures shall include color and material sample photo sheets and shall be approved by the City of Soledad, prior to the issuance of any building permit.

4.1-8. Land alterations within areas above the 400 foot elevation shall be minimized by keeping cuts and fills to a minimum, limiting grading to the smallest practical area of land, limiting land exposure to the shortest practical amount of time, replanting graded areas to insure establishment of plant cover before the next rainy season, and creating grading contours that blend with the natural contours on site or look like contours that would naturally occur. Prior to the issuance of any grading permit, the project applicant shall submitted detailed grading plans consistent with the intent of this mitigation, subject to the review and approval of the City of Soledad.

Evidence. In addition to the reduced scale of the project, Mitigation Measures 4.1-1, 4.1-4 – 4.1-6, and 4.1-8 require adherence to specific design and development standards that minimize impacts to the aesthetic value of scenic vistas in the specific plan area. Design requirements include limits on grading and exposed soils and the use of vegetation screening, use of natural colors and materials, and utilization of natural landforms and vegetation to screen infrastructure improvements. As a condition of project approval the project applicant will be required to submit detailed plans, including elevations, site plans, landscape plans and/or other documentation detailing

compliance with applicable development standards, subject to the review and approval of the City of Soledad. As a condition of project approval, the developer will implement Mitigation Measures 4.1-1, 4.1-4 – 4.1-6, and 4.1-8, which will reduce the impact to a less-than-significant level.

Project Impact (Significant). Light and Glare. The proposed project would increase the intensity of development within an existing undeveloped area, and therefore the amount of artificial light produced by the site. The Highway 101 corridor and surrounding urban uses would be most affected by this increase in light and glare. Artificial lighting within the project site would impact nighttime views by altering the natural landscape and potentially lighting up the nighttime sky and reducing the visibility of astronomical features. The additional lighting within the project site, especially unshielded light, could result in spillover light that could impact surrounding land uses. Further, daytime glare could occur as light reflects off pavement, vehicles, rooftops, and structures.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. The proposed project would not result in new significant impacts or substantially increase the severity of previously identified significant impacts. No new information has been identified that indicates the proposed project would have new or more significant impacts than were identified for the original project. Specifically, the following change in the size and intensity of development that would be allowed by the Miramonte Specific Plan mitigates the impact to a less-than-significant level: Development consistent with the Miramonte specific plan reduces the size of the formerly proposed project boundary by 273 acres and the development density by 2,081 residential units. Scenic open space areas above the 400-foot contour are designated as Hillside/Open Space and are protected in perpetuity by a recorded conservation easement; thereby, eliminating potential new sources of light and glare from this area. Additionally, the following mitigation measure imposed upon the project mitigates impacts to less-than-significant levels:

Mitigation Measures

4.1-14. All buildings shall be designed so that exterior lighting is down-lit and illuminates the intended area only. Building applications for new structures shall include an exterior lighting plan subject to approval of the Soledad Planning Department that includes the following requirements: 1) exterior lighting shall be directional; 2) glare from exterior lighting shall be adequately minimized; 3) the source of directional lighting shall not be directly visible; and 4) vegetative screening shall be considered, where appropriate, as a means of reducing development-related light and glare. The project applicant shall submit an exterior lighting plan to the City of Soledad Planning Department prior to the issuance of any building permit.

4.1-15. Ornamental lighting use for streets, parks, public open spaces, trails, bike paths, parking lots, and walkways shall utilize fixtures consisting of metal

halide with full cut-off luminaries or other form of similar fixtures in order to control light and glare. Prior to the issuance of any building permit, the project applicant shall provide documentation as part of the exterior lighting plan described in Mitigation Measure 4.1- 14 demonstrating that these measures are incorporated into site lighting, subject to the review and approval of the Soledad Planning Department.

4.1-16. Light reduction and screening measures shall be required in order to reduce nighttime ambient light increases in the area. Lighting levels in commercial areas shall be kept as low as feasible and controlled to minimize operating time. Light sources shall be installed, so there is no light radiation above the horizontal plane (i.e., dark sky). Lighting shall be focused downward to prevent the splay of ambient light to other areas. Prior to the issuance of any building permit, the project applicant shall provide documentation as part of the exterior lighting plan described in Mitigation Measure 4.1-12 demonstrating that these measures are incorporated into site lighting, subject to the review and approval of the Soledad Planning Department.

Evidence. Mitigation Measures 4.1-14 through 4.1-16 require the applicant to prepare an exterior lighting plan that includes light minimization measures such as down-lit illumination, screening, and limited operational times that will directly reduce the amount of ambient light produced by the project. The applicant will be required to provide documentation that these measures have been incorporated into the site lighting. As a condition of project approval, the developer will implement Mitigation Measures 4.1-15 through 4.1-16 which will reduce potential lighting impacts to a less-than-significant level.

(b) Agricultural Resources

Project Impact (Significant) Land Use Conflicts-Land Use Compatibility. The proposed specific plan includes areas of single-family residential development that would be sited adjacent to agricultural lands located on the northern, eastern, and western boundary of the project site, which has the potential to cause significant land use compatibility impacts.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. The proposed project would not result in new significant impacts or substantially increase the severity of previously identified significant impacts. No new information has been identified that indicates the proposed project would have new or more significant impacts than were identified for the original project. The following mitigation measures imposed upon the project in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan mitigate the impacts to a less-than-significant level:

Mitigation Measures

4.2-1. Adequate buffer areas between urban and agricultural uses, including a minimum 50-foot buffer along the northern and eastern boundary of the project site and a 200-foot buffer along the western boundary, shall be incorporated into the proposed project. These buffers shall also be supplemented with physical barriers in areas where residential and commercial structures are to be located, as recommended by the Agricultural Resources Report contained in Appendix T-1 of the Miravale EIR. The 200-foot buffer along the project's western boundary may be reduced upon demonstration to the satisfaction of the City Council that other measures, including those recommended in Mitigation Measure 4.2-2, will adequately protect human health and safety and minimize potential conflicts, and provided that any such reduction shall not result in a buffer width of less than 100 feet consistent with the Permanent Agricultural Edge location identified in the 2016 Monterey County/City of Soledad Memorandum of Understanding. The County of Monterey Agricultural Commissioner shall be consulted regarding the adequacy of the proposed buffers and physical barriers and evidence of said consultation and recommendation shall be submitted to the city prior to approval of the tentative map. Prior to the recordation of any final map, the project applicant shall submit evidence in the form of agricultural setbacks delineating buffer locations consistent with the recommendations contained in the Agricultural Resources Report contained in the Miravale III EIR Appendix T-1, subject to the review and approval of the City of Soledad. All agricultural buffers, excluding public right-of-ways, shall be maintained by the Project Proponent and/or his/her successor(s) in interest through easements dedicated to the city or other entity until such time that the adjoining agricultural operation and use no longer exists

4.2-2. In order to ensure the adequacy of the agricultural buffer located along the western boundary of the project site, as required by Mitigation Measure 4.2-1, the project applicant shall submit a detailed landscape plan that includes vegetative screening in addition to physical barriers, such as fences, walls, or similar structures to protect human health and safety. One or more of the following options may also be used in combination with landscaping requirements to create an adequate buffer between the agricultural parcel property line and habitable structures within the Plan area:

a. Public or private road right-of-ways;

b. Landscaped islands and planting areas;

c. Recreational trail corridors; and/or

d. Placing dwellings in the rear portion of lots.

Prior to the recordation of any final map along the western project boundary, the agricultural buffer and any related easement shall be delineated on the final map in each phase, subject to the review and approval of the City of Soledad.

4.2-3. Prior to the issuance of any certificate of occupancy for residences adjacent to or in close proximity to the agricultural buffer along the western project boundary, the project applicant shall provide documentation demonstrating that adequate screening, landscaping and structural improvements have been installed and/or constructed within the buffer, subject to the review and approval of the City of Soledad Community Development Director.

4.2-5. Prior to the recordation of final map(s), the project applicant shall have recorded a right-to-farm notice on parcels adjacent to existing and on-going agricultural uses consistent with the requirements of the City of Soledad General Plan, subject to the review and approval of the City of Soledad City Council.

Evidence. Mitigation Measure 4.2-1 requires the implementation of buffers and physical barriers between urban and agricultural uses ensures adequate separation of residential/commercial and agricultural uses to lessen the likelihood of conflicts. To ensure the adequacy of the buffers and physical barriers, , and prior to the recordation of any final map, the project applicant must submit evidence in the form of agricultural setbacks delineating buffer locations consistent with the recommendations contained in the Agricultural Resources Report consistent with the 2016 Monterey County/City of Soledad Memorandum of Understanding. Additionally, to further ensure the adequacy of the agricultural buffer located along the western boundary of the project site, mitigation measure 4.2-2 and 4.2-3 require the project applicant to submit a detailed landscape plan that includes vegetative screening in addition to physical barriers subject to review and approval by the city. These measures will ensure adequate separation of urban and agricultural uses thereby lessening the potential for land use conflicts. The Miramonte Specific Plan incorporates buffers along the northern and western boundary to implement this measure and prohibits residential development above the 400-foot elevation contour on the east side of the site in perpetuity through recorded conservation easement(s). Mitigation Measure 4.2-5 requires the developer to record right-to-farm notices on parcels adjacent to active agricultural operations. As a condition of project approval, the developer will implement Mitigation Measures 4.2-1 through 4.2-3, and Mitigation Measure 4.2-5, which reduces the potential for land use conflicts to a less-than-significant level.

(c) Air Quality

Project Impact (Significant) Construction Impacts-Construction Dust. Construction activities associated with implementation of the Specific Plan would include clearing, excavation and grading operations, construction vehicles traffic on unpaved ground, and wind blowing over exposed earth that would generate dust and particulate matter that could significantly degrade air quality.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. The proposed project would not result in new significant impacts or substantially increase the severity of previously

identified significant impacts. No new information has been identified that indicates the proposed project would have new or more significant impacts than were identified for the original project. The following mitigation measures imposed upon the project in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan mitigate the impacts to a less-than-significant level:

Mitigation Measures

4.3-1. Grading activity shall be limited to a maximum of 2.5 acres daily, or, if grading cannot be limited to 2.5 acres daily. Prior to start of construction, the project applicant or contractor shall submit to the City of Soledad Public Works Department a construction dust mitigation plan. This plan shall specify the methods of dust control that would be utilized, demonstrate the availability of needed equipment and personnel, use reclaimed water for dust control, and identify a responsible individual who, if needed, can authorize implementation of additional measures. The construction dust mitigation plan shall include the following measures as necessary to control visible dust:

- Water all active construction areas at least twice daily and more often during windy periods.
- Active areas adjacent to existing businesses should be kept damp at all times. If necessary, during windy periods, watering is to occur on all days of the week regardless of onsite activities.
- Cover all trucks hauling dirt, sand, or loose materials.
- Haul trucks shall maintain at least 2’0” of freeboard.
- Plant tree windbreaks on the windward perimeter of construction project if adjacent to open land.
- Install wheel washers at the entrance to construction sites for all exiting trucks.
- Upon completion of mass grading, pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.
- Sweep daily all paved access roads, parking areas and staging areas at construction sites.
- Sweep streets daily if visible soil material is deposited onto the adjacent roads.
- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).

- Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles.
- Limit traffic speeds on unpaved roads to 15 mph.
- Replant vegetation in disturbed areas as quickly as possible.
- Suspend excavation and grading activity when hourly-average winds exceed 15 mph and visible dust clouds cannot be contained within the site.

Evidence. If grading cannot be limited to 2.5 acres daily, Mitigation Measure 4.3-1 requires the project applicant or contractor to submit a construction dust mitigation plan to the City of Soledad Public Works Department which specifies the methods of dust control that would be utilized to ensure a direct reduction in visible dust during construction activities. This will ensure the reduction in dust and particulate matter that could significantly degrade air quality. As a condition of project approval, the applicant or contractor will implement Mitigation Measures 4.3-1 which will reduce the construction dust impacts to a less-than-significant level.

Project Impact. Construction Impacts-Diesel Emissions. Grading of the site would generate diesel particulate emissions from equipment exhaust during the construction period. Diesel particulate matter includes air contaminants that could impact sensitive receptors including residences that border the project site as well as new on-site residences constructed during earlier phases of the project.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. The proposed project would not result in new significant impacts or substantially increase the severity of previously identified significant impacts. No new information has been identified that indicates the proposed project would have new or more significant impacts than were identified for the original project. The following mitigation measures imposed upon the project in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan mitigate the impacts to a less-than-significant level:

Mitigation Measure

4.3-2a. Prior to each final map and use permits, the developer shall have a construction air quality report prepared by a qualified air quality consultant. The report shall be subject to review and approval by the City Planning Department and all recommendations shall be implemented during construction.

4.3-2b. In addition to the construction air quality analysis required in mitigation measure 4.3-2a, during construction the following shall be implemented for all projects to reduce diesel particulate emissions from on-site construction equipment:

- The following equipment may be used without control devices or additional mitigation

  • No engineers greater than 750HP are used; and

  • Engines between 501 HP and 750 HP are model years 2002 and newer; and

  • Engines between 251 HP and 500 HP are model years 1996 or newer; and

  • Engines between 175 HP and 250 HP are model years 1985 or newer.

- The following equipment may be used without causing acute adverse health effects, if retrofitted with a catalyzed diesel particulate filter (CDPF):

  • Engines greater than 750 HP; if model year 2006 and newer; and

  • All engines less than 749 HP, regardless of model year.

- If construction equipment uses B99 biodiesel, no acute adverse health effect would be expected in the following:

  • Engines between 501 HP and 750 HP, if model years 2002 or newer; and

  • Engines between 250 HP and 500 HP, if model years 1996 and newer; and

  • Any engine less than 250 HP.

Evidence. Mitigation Measure 4.3-2a requires the developer to have a construction air quality report prepared by a qualified air quality consultant, subject to review and approval by the City. All recommendations contained within this report will be implemented during construction, which will directly reduce diesel particulate matter emissions. In addition to the construction air quality analysis required in mitigation measure 4.3-2a, Mitigation Measure 4.3-2b adds control measures for the type of equipment that can be utilized during construction to further reduce diesel particulate emissions from on-site construction equipment. Implementation of these measures will be required as a condition of project approval and will reduce impacts to a less-than-significant level.

(d) Biological Resources

Project Impact (Significant) Vegetation. The proposed project would cause temporary and permanent impacts to agricultural fields and to non-cultivated

grassland habitat below the 400-foot elevation contour Temporary impacts to vegetation include grubbing and grading associated with site preparation and permanent impacts include the conversion of open vegetated areas to urban housing through placement of structures, homes, roads, driveways, etc.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. The proposed project would not result in new significant impacts or substantially increase the severity of previously identified significant impacts. No new information has been identified that indicates the proposed project would have new or more significant impacts than were identified for the original project. The following mitigation measures imposed upon the project in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan mitigate the impacts to a less-than-significant level:

Mitigation Measures

4.4-2. Prior to the onset of construction, trees and vegetation not planned for removal shall be protected during construction. This shall include the use of exclusionary fencing of herbaceous and shrubby vegetation, such as hay bales and protective wood barriers for trees. Only certified weed-free straw shall be used to avoid the introduction of non-native, invasive species. A qualified biological monitor retained by the developer shall verify that adequate protective measures are in place prior to construction and remain intact throughout the construction phase.

4.4-3. Following construction, the disturbed areas that are proposed as parks and native landscaping areas shall be restored to pre-project contours and revegetated by the contractor using locally-occurring native species and native erosion control seed mix. Landscape plans for all such areas adjoining natural open space, including landscaped strips within right-of-ways, shall be reviewed by a qualified biologist to ensure that only native and non-invasive species are included in the planting palette and shall include a supplemental note and/or report by said biologist documenting compliance with this requirement. Landscape plans for other disturbed areas or for designated parks shall utilize native species to the extent feasible and avoid the use of all invasive species; such plans shall include a note from the licensed professional who prepared the plan(s) or from a qualified biologist retained by the developer documenting compliance with this requirement. Prior to the issuance of any grading and/or building permit, the project applicant shall submit landscape plans prepared by a licensed landscape architect for review and approval by the City of Soledad.

4.4-4. Prior to the onset of construction, protective fencing shall be placed so as to keep construction vehicles and personnel from impacting vegetation adjacent to the project site outside of work limits. A qualified biological monitor shall verify protection is in place prior to construction and remains intact throughout the construction phase.

4.4-5. Grading, excavating, and other activities that involve substantial soil disturbance shall be planned and carried out in consultation with a qualified hydrologist, engineer, or erosion control specialist retained by the developer, and shall utilize standard erosion control techniques to minimize erosion and sedimentation to native vegetation. Only natural-fiber, biodegradable meshes shall be used in erosion control mats, blankets, and straw or fiber wattles. "Photodegradable" and other plastic mesh products will not be used as these materials are known to persist in the environment, ensnaring and killing a variety of terrestrial wildlife species. A qualified biological monitor retained by the developer shall verify that erosion control measures are implemented and materials used are consistent with this measure and remain intact throughout the construction phase.

4.4-6. No construction equipment shall be serviced or fueled outside of designated staging areas. A qualified biological monitor retained by the developer shall verify that this measure is being implemented throughout the construction phase.

Evidence. Mitigation Measures 4.4-3 through 4.4-6 require the implementation of a variety of vegetation protection and restoration measures to ensure that vegetation is avoided when possible and restored to pre-project contours. The developer would be required to utilize locally-occurring native species and native erosion control seed mix for re-vegetation when impacts cannot be avoided. Prior to the issuance of any grading and/or building permit, the project applicant would be required to submit landscape plans prepared by a licensed landscape architect for review and approval by the City of Soledad. The Miramonte Specific Plan incorporates a portion of this measure into the land use map, by prohibiting residential development above the 400-foot elevation contour and requiring the preservation of hillside areas in perpetuity through recorded conservation easement(s). As a condition of project approval, the developer will implement Mitigation Measures 4.4-3 through 4.4-6 which will reduce potential impacts to vegetation to a less-than-significant level.

Project Impact (Potentially Significant). Special Status Plant Species-Lemmon's Jewelflower. The presence/absence of jewelflower could not be determined during site surveys, but appropriate habitat was present within project boundaries in the grassland areas. This species could be permanently impacted by grading and other activities associated with potential infrastructure improvements in the grassland areas that may result in the permanent loss or disturbance of individual jewelflower plants and/or jewelflower habitat.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. The proposed project would not result in new significant impacts or substantially increase the severity of previously identified significant impacts. No new information has been identified that indicates the proposed project would have new or more significant impacts than were identified for the original project. The following mitigation measures imposed upon the project in addition

to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan mitigate the impacts to a less-than-significant level:

Mitigation Measure

4.4-7. A qualified botanist shall be retained by the developer to conduct preconstruction surveys for Lemmon's jewelflower during the typical flowering season of this species (March-May), to determine the presence/absence of this species. If no Lemmon's jewelflower is present, no additional mitigation is required. If Lemmon's jewelflower is present, a qualified biologist shall prepare a mitigation plan to be approved by CDFW prior to initiation of construction. The mitigation plan shall include a description of the special-status plant population(s), map depicting the location(s), and size of the population(s). If feasible, disturbance of the population(s) of Lemmon's jewelflower shall be avoided and its habitat protected utilizing methods developed in coordination with the CNPS and CDFW. Avoidance shall be confirmed by the City prior to approval of the first final map. If impacts to the Lemmon's jewelflower population(s) cannot be avoided, mitigation shall include preservation on- or off-site at a minimum 1:1 ratio (one plant preserved for each plant impacted), or restoration on- or off-site at a minimum 3:1 ratio (three plants planted for each plant impacted). The CNPS and CDFW shall be consulted to evaluate the suitability for transplanting the impacted species to suitable habitat within the identified and established preserve/restoration area. These details shall be described and included in the mitigation plan. Restoration and preservation strategies shall be developed in coordination with the CNPS and CDFW. The City of Soledad Planning Department shall be provided verification of CDFW concurrence and satisfaction prior to issuance of grading permits.

Evidence: Mitigation Measure 4.4-7 requires that in the event Lemmon's jewelflower is found on the site, a mitigation plan approved by CDFW would be required prior to initiation of construction. This plan would require the avoidance of jewelflower, or, in the event avoidance is infeasible, on or off-site preservation will be required to ensure that impacts to Lemmon's jewelflower are less than significant. The Miramonte Specific Plan incorporates a portion of this measure into the land use map, by prohibiting residential development above the 400-foot elevation contour and requiring the preservation of hillside areas in perpetuity through recorded conservation easement(s). A condition of approval requires implementation of this measure, which reduces the project impact to less than significant.

Project Impact (Significant). Wildlife Corridors, Movement, and Nurseries. An increase in the permanent on-site presence of homes, roads, and infrastructure may fragment habitats surrounding the project site, which would be a significant impact.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. The proposed project would not result in new significant impacts or substantially increase the severity of previously

identified significant impacts. No new information has been identified that indicates the proposed project would have new or more significant impacts than were identified for the original project. The following mitigation measures imposed upon the project in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan mitigate the impacts to a less-than-significant level:

Mitigation Measure

4.4-8. Areas above the 400 foot elevation contour shall be protected from development in perpetuity. Prior to recordation of the first final map, the applicant shall prepare and submit to the city for review and approval a draft conservation easement for all areas above the 400 foot elevation contour. The easement shall include the following:

a) prohibit recreational off-road vehicle use;

b) prohibit illegal discharge of firearms;

The conservation easement shall be reviewed and approved by the City of Soledad City Council prior to approval of the first final map. The developer shall record the conservation easement concurrent with recordation of the first final map or the onset of any other site disturbance.

Evidence. Mitigation Measure 4.4-8 requires recordation of a conservation easement prior to the recordation of the first final map, which limits the type of activities that can take place on the property above the 400 foot contour. The portion above the 400 foot contour is where the most sensitive habitat, wildlife corridors, and nurseries are most likely to occur. Limiting allowable uses and activities in this area will reduce the potential for impacts to wildlife corridors, movement, and nurseries. The Miramonte Specific Plan incorporates a portion of this measure into the land use map, by prohibiting residential development above the 400-foot elevation contour and requiring the preservation of hillside areas in perpetuity through recorded conservation easement(s). As a condition of project approval, the developer will implement Mitigation Measure 4.4-8, which will reduce potential impacts to vegetation to a less-than-significant level.

Project Impact (Significant). Special Status Wildlife Species-San Joaquin Kit Fox. Due to the presence of suitable habitat on and in proximity to the site, there is the possibility for the San Joaquin kit fox to occur on the site. Construction of the proposed project could result in unintended harassment, habitat removal, or direct mortality of this special status species which would be a significant impact.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. The proposed project would not result in new significant impacts or substantially increase the severity of previously identified significant impacts. No new information has been identified that indicates the proposed project would have new or more significant impacts than were identified for the original project. The following mitigation measures imposed upon the project in addition

to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan mitigate the impacts to a less-than-significant level:

Mitigation Measures

4.4-9. The applicants shall enter into consultation with USFWS and CDFWCDFW and shall provide evidence of their compliance with applicable requirements of the federal Endangered Species Act and California Endangered Species Act to the City prior to the issuance of building permits.

4.4-10. Pre-construction surveys for kit fox dens shall be required for all development phases of the future project. The preconstruction surveys shall be conducted per Standardized Recommendations for the Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance (USFWS 1999b), as updated. Potential dens (including man-made structures) and known dens shall be protected by minimum buffers of 50 feet and 100 feet, respectively. If an occupied or unoccupied natal den is detected, no construction shall occur for the Phase until the USFWS and CDFW have been contacted and authorization to proceed has been obtained by the applicant. Pre-construction surveys shall be conducted by a qualified biologist retained by the developer no less than 14 days and no more than 30 days prior to the start of any ground disturbing activities to locate kit fox den sites.

In addition to pre-construction surveys, a qualified biologist retained by the developer, meeting the required qualifications described in the U.S. Fish and Wildlife Service Standardized Recommendations for the Protection of the San Joaquin Kit Fox Prior to Ground Disturbance, June 1999 (USFWS Recommendations for SJKF), shall be on-site to monitor construction activities for the San Joaquin kit fox. In the event that an active kit fox den is found, then the standard mitigation actions outlined in the USFWS Recommendations for SJKF, are recommended to avoid possible take of kit fox during future construction activities. These actions are general in nature; therefore, site specific strategies for the project site shall be based upon consultation with USFWS and CDFW, as stated above in Mitigation Measure 4.4-9. To reduce the risk of impacts during construction, the applicant shall, at a minimum, implement the following measures, unless directed otherwise through consultation with the USFWS and CDFW:

a) Restrict project-related vehicle speed to 20 mph on project roads.

b) Cover all excavated, steep-walled holes or construction trenches more than 2 feet deep at the close of each working day by plywood or similar materials or provide such holes or trenches with one or more escape ramps constructed of earth fill or wooden planks, inspect such holes or trenches for trapped San Joaquin kit fox prior to filling.

c) Inspect all construction pipes, culverts, or similar structures with a diameter of 4 inches or greater that are stored at a construction site

for one or more overnight periods for kit foxes before the pipe is subsequently buried, capped, or otherwise used or moved in any way.

d) Contain all food-related trash items in closed containers and remove food related trash at least once a week from the project site.

e) No firearms shall be allowed on the project site.

f) No pets shall be permitted on the project site.

g) Use of rodenticides and herbicides on the project site shall be restricted to the use of zinc phosphide, in cases where it is necessary to protect public health and safety.

h) A representative shall be appointed by the project proponent who will be the contact source for any employee or contractor who might inadvertently kill or injure a kit fox or who finds a dead, injured or entrapped individual. The representative will be identified during the employee education program. The representative's name and telephone number shall be provided to the Service.

i) An employee education program shall be conducted and shall consist of a brief presentation by persons knowledgeable in kit fox biology and legislative protection to explain endangered species concerns to contractors, their employees, and agency personnel involved in the project. The program shall include the following: a description of the San Joaquin kit fox and its habitat needs; a report of the occurrence of kit fox in the project area; an explanation of the status of the species and its protection under the Endangered Species Act; and a list of measures being taken to reduce impacts to the species during project construction and implementation. A fact sheet conveying this information shall be prepared for distribution to the above-mentioned people and anyone else who may enter the project site.

j) In the case of trapped animals, escape ramps or structures shall be installed immediately to allow the animal(s) to escape, or the Service shall be contacted for advice.

k) To the extent feasible, nighttime construction shall be avoided.

l) Include kit fox mitigation measures on project plans.

If active kit fox den sites are found and/or kit fox individuals are observed during the survey, the applicant will be required to comply with all mitigation actions required by USFWS and CDFW and the City shall monitor implementation of

those actions. Examples of mitigation actions that may be required by the regulatory agencies may include, but are not limited to:

- To the extent feasible, lot placement shall be situated to create wildlife corridors in protected open space to allow for kit fox and other wildlife movement through the site.

- Fencing shall surround the site to restrict kit fox movement into the development area; types of fencing (e.g. exclusionary or kit fox friendly) shall depend on the density of the development area.

- Speed bumps, rolls, or reduced speed limits shall be employed along project roads in or near open space areas to reduced likelihood of kit fox mortality by vehicle strikes.

- Street lighting shall be situated as to not spill into adjacent open space areas. The height and intensity of street lighting shall be designed to minimize indirect impacts to open space. Outdoor lighting for residential uses adjacent to open space and large lots shall also be restricted to CC&Rs to be low wattage (150 watts or less) and directed toward the residences to reduce effects on kit fox nocturnal activities.

Evidence. Mitigation Measure 4.4-9 requires the applicant to provide evidence of compliance with applicable requirements of the federal Endangered Species Act and California Endangered Species Act to the City prior to the issuance of building permits. Further, Mitigation Measure 4.4-10 requires pre-construction surveys for kit fox dens. In the event that an active kit fox den is found the applicant will be required to consult with USFWS and CDFW and will implement site specific strategies determined sufficient based on this consultation. Implementation of these mitigation measures would reduce the likelihood of the harassment or mortality of kit fox in the event it is found to occur on the site, thereby reducing the potential for impacts. The Miramonte Specific Plan incorporates a portion of this measure into the land use map, by prohibiting residential development above the 400-foot elevation contour and requiring the preservation of hillside areas in perpetuity through recorded conservation easement(s). As a condition of project approval, the developer will implement Mitigation Measures 4.4-9 and 4.4-10 which will reduce potential impacts to the San Joaquin kit fox to a less-than-significant level.

Project Impact (Significant). Special Status Wildlife Species - American Badger. Due to the presence of suitable habitat within and in proximity to the site, there is the possibility for the American Badger to occur. Construction of the proposed project could result in unintended harassment, habitat removal, or direct mortality of this special status species which would be a significant impact.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. The proposed project would not result in new significant impacts or substantially increase the severity of previously identified significant impacts. No new information has been identified that indicates the proposed project would have new or more significant impacts than were identified for the original project. The following mitigation measures imposed upon the project in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan that mitigate the impacts to a less-than-significant level:

Mitigation Measure

4.4-11.The applicant shall retain a qualified biologist to conduct focused preconstruction surveys for potential American badger dens. These surveys shall be conducted no sooner than 2 weeks prior to the start of construction. Surveys for badger dens may be conducted at the same time as burrowing owl surveys. The results of the survey shall be submitted to the City prior to issuance of grading permit or initiation of grading for that phase of development on the site. Based on the results of these surveys, one or more of the following additional measures shall be implemented:

- If the qualified biologist determines that potential dens are inactive, the biologist shall excavate these dens by hand with a shovel to prevent badgers from re-using them during construction. If hand excavation is not practical, careful excavation with an excavator may occur provided that the biologist is onsite to monitor these activities.

- If the qualified biologist determines the presence of active dens, the location of these dens shall be documented and reported to CDFW. Avoidance of active dens, particularly natal dens, is the preferred approach; Impacts to active badger dens shall be avoided by establishing a 100-meter exclusion zones around all active badger dens, within which construction related activities shall be prohibited until denning is complete and/or the den is abandoned. A qualified biologist shall monitor each den once per week in order to track the status and inform the project sponsor of when a den area has been abandoned.

- If the qualified biologist determines that avoidance of an active badger den is not feasible, the biologist shall coordinate with CDFW on the appropriate way to evict/exclude badgers from their dens. Please note that special consideration of natal dens is required given the low likelihood that excluded young would survive; a CDFW depredation permit would be required to disrupt a natal den. For non-natal dens, CDFW has permitted badgers to be gradually excluded from their dens by placement of soil, sticks, and debris at den entrances, incrementally increasing the degree of blockage over a

period of three to five days (please note that blockage cannot trap/entomb badgers). After the monitoring biologist determines that badgers have stopped using active dens within the project boundary, the dens shall be hand-excavated with a shovel to prevent re-use during construction. If hand excavation is not practical, careful excavation with an excavator may occur provided that the biologist is onsite to monitor these activities. Please note that eviction of onsite badgers will reduce construction phase impacts to this species, but given the large home ranges and territoriality of this species, emigration to alternative habitats may not be feasible without inter/intra specific competition (energetic stress possibly resulting in mortality). CDFW may require that appropriate onsite or adjacent habitat be conserved to allow relocation of excluded animals within their home range.

Evidence. Mitigation Measure 4.4-11 requires focused preconstruction surveys to determine whether American badger are present on the site and provides for specific avoidance measures in the event badgers or badger dens are found. Implementation of these measures will ensure that the potential for harassment or mortality of badger individuals is reduced. The Miramonte Specific Plan incorporates a portion of this measure into the land use map, by prohibiting residential development above the 400-foot elevation contour and requiring the preservation of hillside areas in perpetuity through recorded conservation easement(s). As a condition of project approval, the developer will implement Mitigation Measure 4.4-11 which will reduce potential impacts to the American Badger to a less-than-significant level.

Project Impact (Significant). Special Status Bat Species. The Townsend's big-eared bat and pallid bat have the potential to occur on the project site. Construction of the proposed project could result in unintended harassment or direct mortality of this special status species which would be a significant impact.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. The proposed project would not result in new significant impacts or substantially increase the severity of previously identified significant impacts. No new information has been identified that indicates the proposed project would have new or more significant impacts than were identified for the original project. The following mitigation measures imposed upon the project in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan that mitigate the impacts to a less-than-significant level:

Mitigation Measure

4.4-12. A qualified bat specialist retained by the developer shall conduct site surveys to characterize bat utilization of the site and species composition present (techniques utilized to be determined by the biologist). The results of the survey shall be

submitted to the City prior to issuance of grading permit or initiation of grading for that phase of development on the site. Based on the results of these surveys, one or more of the following additional measures shall be implemented:

- If it is determined that bats are not present at the site, no additional mitigation is required.
- If it is determined that bats are utilizing the site and would likely be impacted by the proposed project, preconstruction surveys shall be conducted no more than 30 days prior to modification, demolition, or removal of onsite buildings and/or any other occupied habitat.
- If no bat or bat sign are observed in the course of preconstruction surveys, then demolition/removal of buildings and/or construction initiation may proceed. If bat and/or bat sign are observed during the preconstruction surveys, the biologists shall determine if disturbance will jeopardize a maternity roost, or another type of roost (foraging, day, night).
- If a single bat and/or only adult bats are roosting, demolition or removal of the structure can proceed after the bats have been safely excluded from the roost. Exclusion techniques shall be determined by the biologist and depend on the type utilization; the biologist shall prepare a mitigation plan for provision of alternative habitat to be approved by CDFW and the City.
- If an active maternity roost is detected, work in the vicinity of the roost (and/or demolition of the structure) shall be postponed until the qualified biologist monitoring the roost(s) determines that the young have fledged and are no longer dependent on the roost. The monitor shall ensure that all bats have left the building and or area of disturbance prior to initiation of construction and/or demolition activities. If the biologist determines that disruption of a maternity roost cannot be avoided, a depredation permit would be required.

Evidence. Mitigation Measure 4.4-12 requires site surveys for special status bats prior to the issuance of a grading permit. If it is determined that bats are utilizing the site and would likely be impacted by the proposed project, preconstruction surveys will be required no more than 30 days prior to modification, demolition, or removal of onsite buildings and/or any other occupied habitat. Mitigation Measure 4.4-12 requires the implementation of exclusion or protection measures dependent upon what is found during the preconstruction survey. If during an active maternity roost is detected, work in the vicinity of the roost (and/or demolition of the structure) will be postponed until the qualified biologist monitoring the roost(s) determines that the young have fledged and are no longer dependent on the roost. In the event single bats or only adult bats are found to be roosted, Mitigation Measure 4.4-12 requires the implementation of

exclusion techniques. Mitigation Measure 4.4-12 ensures that the likelihood of the harassment or loss of bat individuals is minimized. The Miramonte Specific Plan incorporates portions of this measure into the land use map, by prohibiting residential development above the 400-foot elevation contour and requiring the preservation of hillside areas in perpetuity through recorded conservation easement(s). As a condition of project approval, the developer will implement Mitigation Measure 4.4-12 which will reduce potential impacts to special status bats to a less-than-significant level.

Project Impact (Significant). Special Status Wildlife Species - Salinas Pocket Mouse. The Salinas pocket mouse has the potential to occur on the project site. Construction of the proposed project could result in unintended harassment or direct mortality of this special status species which would be a significant impact.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. The proposed project would not result in new significant impacts or substantially increase the severity of previously identified significant impacts. No new information has been identified that indicates the proposed project would have new or more significant impacts than were identified for the original project. The following mitigation measures imposed upon the project in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan that mitigate the impacts to a less-than-significant level:

Mitigation Measure

4.4-13. The applicant shall contract a qualified biologist to coordinate with CDFW and prepare a mitigation and monitoring plan for the Salinas pocket mouse. The mitigation and monitoring plan shall include a description of the population and locations of known and potential habitat within the project site, mitigation to avoid and reduce impacts to the species, monitoring actions success criteria, and adaptive management measures if success criteria are not met. Verification of CDFW concurrence/approval shall be submitted to the City of Soledad prior to issuance of a grading permit for that phase of development of the site.

Evidence. Mitigation Measure 4.4-13 requires the applicant to contract with a qualified biologist to prepare a mitigation and monitoring plan for the Salinas pocket mouse in coordination with CDFW. This mitigation and monitoring plan must include measures to directly reduce impacts to the species. The applicant will be required to submit verification of CDFW's approval or concurrence of the plan to the City of Soledad prior to the issuance of a grading permit. The Miramonte Specific Plan incorporates a portion of this measure into the land use map, by prohibiting residential development above the 400-foot elevation contour and requiring the preservation of hillside areas in perpetuity through recorded conservation easement(s). As a condition of project approval, the developer will implement Mitigation Measure 4.4-13 which will reduce potential impacts to the Salinas pocket mouse to a less-than-significant level.

Project Impact (Significant). Special Status Bird Species. The following special-status bird species were observed foraging within or in proximity to the project site: Western burrowing owl, Northern harrier, white-tailed kite, loggerhead shrike, and Northern harrier. In addition, golden eagle, merlin, prairie-falcon, and horned lark were identified as having the potential to utilize the site for foraging. Harassment or mortality of these species would be a significant impact.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. The proposed project would not result in new significant impacts or substantially increase the severity of previously identified significant impacts. No new information has been identified that indicates the proposed project would have new or more significant impacts than were identified for the original project. The following mitigation measures imposed upon the project in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan that mitigate the impacts to a less-than-significant level:

Mitigation Measures

4.4-14. Burrowing owls are known to occupy burrows in mixed grassland, active agricultural, and fallow agricultural portions of the Miravale site during the non-breeding season (breeding season utilization not observed in the course of protocol-level surveys). A qualified biologist retained by the developer shall conduct preconstruction surveys to locate active breeding and/or wintering burrowing owls (depending on season) no more than 30 days prior to the start of construction. If ground disturbing activities are delayed or suspended for more than 30 days after the preconstruction survey, the site shall be resurveyed. The survey shall conform to the CDFW 1995 Staff Report protocol. Wherever burrows are identified, impact avoidance and mitigation measures shall be implemented (previously mapped burrow locations may not be occupied and/or new burrows may be occupied). If occupied burrows are found the avoidance and mitigation measures regarding burrowing owl identified in the Preliminary BA (June, 2008) may be implemented based on the results of these surveys..

4.4-15. If project activities will initiate during the typical avian nesting season (February 15– August 1), a qualified biologist retained by the developer shall conduct focused preconstruction surveys no more than 14 days prior to initiation of construction activities for nesting birds, including (but not limited to) white-tailed kite, northern harrier, loggerhead shrike, and horned lark, in all areas that may provide suitable nesting habitat within 300 feet of the construction area. If active nests are found, a suitable construction buffer shall be established by a qualified biologist, and no work shall occur within that buffer until August 1 when young are assumed fledged. Alternatively, a qualified biologist can conduct weekly nest checks to gauge nestling/fledgling status, and construction may proceed once fledglings have dispersed from the nest provided written concurrence from CDFW. No active nest shall be impacted or removed without a depredation permit from CDFW, and a depredation permit will not be issued for impacts to Fully Protected Species such as the white-tailed

kite. For activities that occur outside of the nesting season (generally September 1 through February 14), preconstruction surveys are not required. If construction is initiated outside of the nesting season and continues into the nesting season, preconstruction surveys are required if construction will occur in areas not previously accessed and/or disturbed (>300 feet from previous construction activities).

4.4-16. A preconstruction survey shall be conducted by a qualified biologist retained by the developer no more than 14 days prior to modification, demolition, or removal of onsite buildings. If no owls or other nesting birds are observed, then demolition or removal may proceed. If barn owls (or any other nesting birds) are observed during the preconstruction survey, a determination shall be made on whether birds are roosting or nesting. If a single owl is roosting, demolition or removal of the structure can proceed after the owl has been persuaded to move from the roost area. Non-invasive techniques include light shining into the roost space for one or two nights and days. If barn owls (or other nesting avian species) are found to be actively nesting in the barn, work on or demolition of the structure shall be postponed until one of the following conditions have been met: 1) a qualified biologist monitoring the nest determines that the owls have abandoned the nest without any outside interference or 2) a qualified biologist monitoring the nest has determined that the young have fledged and are capable of relocating and using another roost site. Once the young have fledged, non-invasive techniques may be used to encourage the owls to leave the barn. Under either scenario, the monitor shall ensure that all owls have left the building prior to construction or demolition activities. The barn owl nesting period is typically between February 15 and July 15.

Evidence. Mitigation Measures 4.4-14 and 4.4-16 require a pre-construction survey for burrowing owls and other nesting birds. In the event burrowing owls, barn owls, or other nesting birds, or evidence of burrowing owls, barn owls, or other nesting birds are discovered, avoidance or mitigation in accordance with CDFW requirements must be implemented. Additionally, Mitigation Measure 4.4-15 requires preconstruction surveys if construction activities will initiate during avian nesting season and implementation of buffers, other avoidance measures, or mitigation techniques in accordance with CDFW requirements. Additionally, surveys must be conducted no more than 14 days prior to the modification, demolition, or removal of onsite buildings and appropriate protocol must be implemented in the event any are observed. Implementation of these measures would directly reduce the potential for harassment or mortality of special status birds. The Miramonte Specific Plan incorporates a portion of this measure into the land use map, by prohibiting residential development above the 400-foot elevation contour and requiring the preservation of hillside areas in perpetuity through recorded conservation easement(s). As a condition of project approval, the developer will implement Mitigation Measures 4.4-14 through 4.4-16 which will reduce potential impacts to vegetation to a less-than-significant level.

Project Impact (Significant). Special Status Reptile and Amphibian Species. California Red-Legged Frog, Western Spadefoot Coast Horned Lizard, Black Legless Lizard, and San Joaquin Coachwhip. The California red-legged frog, Western

spadefoot, Coast horned lizard, Black legless lizard, and San Joaquin coachwhip have the potential to occur on the project site, harassment or mortality of which would be a significant impact.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. The proposed project would not result in new significant impacts or substantially increase the severity of previously identified significant impacts. No new information has been identified that indicates the proposed project would have new or more significant impacts than were identified for the original project. The following mitigation measures imposed upon the project in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan that mitigate the impacts to a less-than-significant level:

Mitigation Measures

4.4-17. Protocol-level CRLF surveys (USFWS, August 2005) shall be completed by a qualified biologist retained by the developer at each aquatic resource present within project boundaries. Protocol-level CRLF surveys would likely detect Western spadefoot, if present (Western spadefoot toad surveys are also conducted at night during winter months, preferably January through March, and therefore, overlap CRLF survey protocol requirements). The results of the survey shall be submitted for the review and approval of the City, USFWS, and CDFW. If it is determined that CRLF are present, the applicant shall coordinate with the USFWS to determine the appropriate course of action per the requirements of the federal ESA (e.g., applying for an Incidental Take Permit [Section 10]) and implementing the permit requirements prior to issuance of a grading permit. Any mitigation and avoidance measures required by USFWS for potential impacts to CRLF (if applicable) would likewise reduce impacts to Western spadefoot given their overlapping habitat characteristics. If CRLF is not found on-site and USFWS concurs with a negative finding, no further mitigation is required.

If it is determined that spadefoot are present, but CRLF are not, coordination with CDFW regarding appropriate mitigation to reduce impacts to this species shall be required prior to issuance of a grading permit. If the Western spadefoot toad is not found on-site, no further mitigation is required.

4.4-18. The applicant shall retain a qualified biologist to conduct a construction monitoring program for black legless lizards, coast horned lizards, and San Joaquin coachwhip which shall include procedures for capture and release. The biologist shall remain on-site during initial grading activities to salvage and relocate these species that may be uncovered during earthmoving activities. Recovered individuals shall be placed in appropriate habitat outside of the project site in accordance with the memorandum of understanding with CDFW. The biologist shall walk alongside the grading equipment in each new area of disturbance and shall have the authority to halt construction temporarily if necessary to capture and relocate an individual. Any individual captured in the grading zone shall be relocated as soon as possible to adjacent

suitable habitat outside of the area of impact, pursuant to the memorandum of understanding.

4.4-19. The applicant shall conduct an employee education program for construction crew and City staff prior to construction activities. A biological monitor shall meet with the construction crew at the onset of construction to educate the construction crew on the following: 1) the appropriate access route in and out of the construction area; 2) how biological monitor will examine the area and agree upon a method which will ensure the safety of the monitor during such activities, 3) the special-status species that may be present; 4) the specific mitigation measures that will be incorporated into the construction effort; and 5) the proper procedures if a special-status animal or any other animal is encountered within the project site.

4.4-20. A representative shall be appointed by the City who will be the contact source for any employee or contractor who may inadvertently kill or injure a special-status species or find one dead, injured, or trapped. The representative shall be legally responsible to notify USFWS and CDFW immediately in the event that "take" of any special-status wildlife species occurs. The representative shall be identified during the Employee Education Program and his/her contact information shall be provided to USFWS and CDFW. The representative will be present onsite every day and will be accessible to regulatory agency personnel

4.4-21. All food-related and other trash shall be disposed of in closed containers and removed from the project area at least once a week during the construction period or more often if trash is attracting avian or mammalian predators. Construction personnel shall not feed or otherwise attract wildlife to the area. These instructions to the construction crew shall be reiterated during the employee education program and during update meetings with construction crews. The instructions shall also be posted conspicuously on the site.

Evidence. Mitigation Measure 4.4-17, requires protocol-level surveys for CRLF (these surveys would also identify western spadefoot, if present, given their overlapping habitat characteristics). If it is determined that CRLF or Western spadefoot are present, the applicant must coordinate with the USFWS to determine the appropriate course of action per the requirements of the federal ESA which would reduce the potential for impacts to these species. Mitigation Measure 4.4-18 requires that a qualified biologist conduct a construction monitoring program for black legless lizards, coast horned lizards, and San Joaquin coachwhip which includes procedures for capture and release in accordance with the memorandum of understanding with CDFW which would reduce the potential for impacts to these species. Mitigation Measure 4.4-19 requires the applicant to conduct an employee education program for the construction crew to aid the crew in identifying and avoiding impacts to any special status species. Additionally, Mitigation Measure 4.4-20 requires a City appointed representative to be onsite every day to be the contact source for any employee or contractor who may inadvertently kill or injure a special-status species or find one dead, injured, or trapped. Finally Mitigation Measure 4.4-21 requires the adequate disposal of trash so as to avoid attracting

mammalian or avian predators to the construction site thereby reducing the potential for them to be harmed. The Miramonte Specific Plan incorporates portions of these measures into the land use map, by prohibiting residential development above the 400-foot elevation contour and requiring the preservation of hillside areas in perpetuity through recorded conservation easement(s). As a condition of project approval, the developer will implement Mitigation Measures 4.4-17 through 4.4-21 which will reduce potential impacts to vegetation to a less-than-significant level.

Project Impact (Significant). Special Status Wildlife Species-California Tiger Salamander. No impacts to California tiger salamander were identified in the Miravale III EIR after coordination with USFWS regarding ESA jurisdiction over onsite hybrid/non-native tiger salamanders determined that tiger salamanders present at Miravale Pond 1 (onsite reservoir) are not subject to regulation under ESA and are therefore not within the regulatory jurisdiction of USFWS regulation. However, a CDFW report, A Status Review of the California Tiger Salamander, includes a recommendation that even hybrid populations with small amounts of native genetic material should not lose their protected status. Coordination with the CDFW is required to determine whether the CDFW will take jurisdiction over the on-site tiger salamander population.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. The proposed project would not result in new significant impacts or substantially increase the severity of previously identified significant impacts. No new information has been identified that indicates the proposed project would have new or more significant impacts than were identified for the original project. The following mitigation measures imposed upon the project in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan that mitigate the impacts to a less-than-significant level:

Mitigation Measure

4.4-22. The applicant shall enter into consultation with CDFW to determine the appropriate course of action per the requirements of the state ESA regarding the protection of hybridized California tiger salamander populations and to determine if requirements include applying for an Incidental Take Permit (Section 2081). If an ITP is required, implement all corresponding permit requirements. No approval or issuance of a grading permit shall occur until such time as the consultation process is complete.

Evidence. The Miramonte Specific Plan incorporates much of this measure into the land use map, by prohibiting residential development above the 400-foot elevation contour, including the former agricultural pond, and requiring the preservation of hillside areas in perpetuity through recorded conservation easement(s). Mitigation Measure 4.4-22 requires the applicant to consult with CDFW to determine appropriate measures to be taken for the protection of hybridized California tiger salamander populations in accordance with the ESA. This will ensure protection of the California

tiger salamander in the event CDFW takes jurisdiction over the on-site hybridized populations. As a condition of project approval, the developer will implement Mitigation Measures 4.4-21 which will reduce potential impacts to the California tiger salamander to a less-than-significant level.

(e) Cultural Resources

Project Impact (Significant). Historic Resources. The proposed project requires the removal of the historically significant Morris Lorentzen House in order to accommodate project development, which is a potentially significant impact due to the historical significance of structure.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. Specifically, the following mitigation measure imposed upon the project mitigates impacts to less-than-significant levels:

Mitigation Measure

4.5-1. Relocation of House. The historic Morris Lorentzen House on site shall be relocated in accordance with the relocation plan prior to the issuance of a grading permit for development of the storm water detention basin in the southwest corner of the Specific Plan area. The project proponent shall ensure that the design and implementation of the relocation project is consistent with the Secretary of the Interior's Standards for Rehabilitation and Illustrated Guidelines for Rehabilitating Historic Buildings (U.S. Department of the Interior, National Park Service, 1992), the California Historical Building Code, and the Mitigation Monitoring and Reporting Plan (MMRP) for the project. Prior to recordation of the final map, the project applicant shall submit a relocation plan prepared by a qualified professional in accordance with the general recommendations of Moving Historic Buildings, a publication of the National Park Service, to the City of Soledad for review and approval. The relocation plan shall discusses planning, research, and recording prior to the move. In addition, the relocation plan shall identify siting, foundation construction, building reassembly, and restoration work after a successful move. See John Obed Curtis, Moving Historic Buildings, Heritage Conservation and Recreation Service, Publication No. 9, US Department of Interior (1979) for further details. Prior to the relocation, the applicant shall provide verification of compliance with mitigation measure 4.5-2 to the City of Soledad Community Development Department Director for review and approval. In addition, the structure shall be relocated prior to the issuance of any building and/or grading permit for development within the Specific Plan area.

4.5-2. Protective Measures. The project proponent shall develop and implement measures to protect the character-defining features of the Lorentzen House building from damage by the relocation project. The features include, but are not limited to scale, massing, and layout of the house, as well as siding and wood frame fenestration.

Protective measures shall be prepared by a qualified professional in accordance with the Secretary of the Interior's Standards for Rehabilitation and Illustrated Guidelines for Rehabilitating Historic Buildings (U.S. Department of the Interior, National Park Service, 1992), the California Historical Building Code, Moving Historic Buildings, and the MMRP for the project. Prior to the relocation of the structure, the applicant shall submit evidence from a qualified professional demonstrating that protective measures have been implemented, subject to the review and approval of the City of Soledad.

4.5-3. Repair of Inadvertent Damage. The project proponent shall ensure that any inadvertent damage to the character-defining features of the Morris Lorentzen House resulting from the rehabilitation project is repaired in accordance with the Secretary of the Interior's Standards for Rehabilitation and Illustrated Guidelines for Rehabilitating Historic Buildings (U.S. Department of the Interior, National Park Service, 1992) and California Historical Building Code. A qualified professional shall be consulted prior to any repairs. The condition of the building shall be photographed as part of the proposed recordation document and/or video documentation, prior to the start of the relocation, and this will help to establish the baseline condition for assessing inadvertent damage. The project developer shall submit detailed documentation prepared by a qualified professional demonstrating that all repairs have been completed in accordance with applicable standards prior to the issuance of the first certificate of occupancy.

4.5-4. Professional Standards. All activities regarding historical architectural resources and historic preservation carried out as part of this project shall be carried out by or under the direct supervision of persons meeting, at a minimum, the Secretary of the Interior’s professional qualifications standards (48 FR 44738-9) in these disciplines. Prior to the relocation of the Lorentzen House, the applicant shall submit evidence to the City of Soledad demonstrating compliance with this measure.

4.5-5 Monitoring. The mitigation measures applying to the relocation of the Lorentzen House shall be set forth in a Mitigation Monitoring and Reporting Program (MMRP) for the project. The MMRP will guide project-specific mitigation, monitoring, and/or reporting programs for various aspects of mitigation monitoring, reporting, and enforcement in order to ensure full compliance with the conditions of project approval.

4.5-6. Coordination. The project proponent shall coordinate with and inform interested parties, including, but not limited to the Soledad Historical Society and the Monterey County Historical Society, regarding the status of its compliance with the mitigation measures set forth in the MMRP.

4.5-7. Recordation to Historic American Building Survey standards. Prior to the start of any project work, the project proponent shall ensure that the Lorentzen House property is recorded and documented in accordance with the Level II recordation standards of the Historic American Building Survey/Historic American Engineering Record (HABS/HAER) program. This level of recordation would include:

- Archival reproduction of any existing historic images of the property and grounds;
- Archival reproduction of any existing maps, sketches, or drawings of the house;
- Production of measured architectural plans and drawings;
- Production of large-format photographs of exterior and interior views of the house, and exterior views of the house and current setting, including relationship to non-eligible outbuildings; and
- Narrative history and description of the property (based on the narrative provided in the Seavey (2006) evaluation of the property, and the Monterey County survey(s) of similar properties.

The original archival set of recordation documents and photograph prints will be submitted to the Soledad Historical Society (or its designee), and archival quality photocopies of the documentation set will be provided to the following interested parties and local repositories: the Monterey County Historical Society; the Monterey County Libraries (Soledad and Salinas branches), and the UC Santa Cruz Library Special Collections Department. The project proponent would ensure that this recordation documentation was prepared prior to carrying out any other treatment and would make the content of the document available for other mitigation measures, such as the preparation of interpretive material.

Evidence. Mitigation Measures 4.5-1 through 4.5-3 require the applicant to submit a relocation plan for the Lorentzen House prepared by a qualified professional. The applicant will be required to protect the character-defining features of the building from damage during relocation and ensure that any inadvertent damage to the character-defining features resulting from the relocation is repaired in accordance with the applicable standards. Mitigation Measure 4.5-4 through 4.5-7 require the implementation of professional qualification standards, coordination with interested parties, and recordation and documentation to Historic American Building Survey standards. The relocation, protection from damage, repair of any inadvertent damage, strict adherence to professional standards, and recordation of the Lorentzen house would all serve to reduce impacts to this historic resource. As a condition of project approval, the developer will implement Mitigation Measures 4.5-1 through 4.5-7 which will reduce potential impacts to the historic resource to a less-than-significant level.

Project Impact (Significant) Archeological Resources and Human Remains. A records search and field reconnaissance conducted for the Miravale III EIR found no evidence of archaeological resources or human remains on the project site. However, it was determined that construction of the project could potentially uncover unknown buried archaeological resources or human remains during excavation and clearing activities which is a potentially significant impact.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. The proposed project would not result in new significant impacts or substantially increase the severity of previously identified significant impacts. No new information has been identified that indicates the proposed project would have new or more significant impacts than were identified for the original project. The following mitigation measures imposed upon the project in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan that mitigate the impacts to a less-than-significant level:

Mitigation Measure

4.5-8. In order to ensure that project-impacts to potentially unknown resources are avoided, the project proponent shall be responsible for on-going monitoring of project construction. Prior to the issuance of any grading permit, the project proponent shall provide the City of Soledad with documentation identifying construction personnel that will be responsible for on-site monitoring.

If archaeological resources or human remains are accidentally discovered during construction, work shall be halted within 150 feet (50 meters) of the find until a qualified professional archaeologist can evaluate it. Work shall not recommence until the project archaeologist has submitted documentation to the City indicating that discovered resources have been adequately salvaged and no further resources have been identified within the area of disturbance.

4.5-9 In order to ensure that the proposed project does not impact buried human remains during project construction, the project proponent shall be responsible for on-going monitoring of project construction. Prior to the issuance of any grading permit, the project proponent shall provide the City of Soledad with documentation identifying construction personnel that will be responsible for on-site monitoring. If buried human remains are encountered during construction, work in that area must halt and the archaeologist and the coroner immediately notified. If the remains are determined to be Native American, then the NAHC must be notified within 24 hours as required by Public Resources Code 5097. The NAHC will notify designated Most Likely Descendants who will provide recommendations for the treatment of the remains within 48 hours. The NAHC will mediate any disputes regarding treatment of remains. Work shall not recommence until the project archaeologist, coroner, and NAHC, submit documentation to the City indicating that buried human remains have been adequately salvaged and no further remains have been identified within the area of disturbance.

Evidence. Mitigation Measure 4.5-8 reduces the potential for impacts to previously undiscovered archaeological resources by requiring that all work halt within 150 feet of any archaeological discovery. A qualified archaeologist will be required to evaluate the resource and recommend appropriate actions to adequately salvage the resource before construction can reconvene. Additionally Mitigation Measure 4.5-9 reduces the potential for impacts to human remains by requiring an on-site monitor

during construction and that construction work cease in the area in the event of a discovery. If the remains are determined to be Native American, then the NAHC must be notified and the designated Most Likely Descendants contacted to provide recommendations for the treatment of the remains. Work will not be allowed to recommence until the project archaeologist, coroner, and NAHC, submit documentation to the City indicating that buried human remains have been adequately salvaged and no further remains have been identified within the area of disturbance. This will avoid impacts to previously undiscovered human remains. The Miramonte Specific Plan incorporates a portion of this measure into the land use map, by prohibiting residential development above the 400-foot elevation contour and requiring the preservation of hillside areas in perpetuity through recorded conservation easement(s). As a condition of project approval, the developer will implement Mitigation Measures 4.5-8 and 4.5-9 which will reduce potential impacts to archaeological resources and human remains to a less-than-significant level.

(f) Geology and Soils

Project Impact (Significant) Seismic Hazards. The Reliz-Rinconada fault zone, passes within six miles of the project site and the San Andreas Fault Zone passes within 12 miles of the site. The project could be exposed to potential adverse effects from strong seismic ground shaking that may result in damage to proposed structures which would represent a potentially significant impact.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. The proposed project would not result in new significant impacts or substantially increase the severity of previously identified significant impacts. No new information has been identified that indicates the proposed project would have new or more significant impacts than were identified for the original project. The following mitigation measures imposed upon the project in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan that mitigate the impacts to a less-than-significant level:

Mitigation Measures

4.6-1. To minimize the potential effects from strong seismic ground shaking on project components, a project-specific geotechnical analysis shall be performed by a registered professional engineer with geotechnical expertise, and all recommendations shall be incorporated into final design plans. Prior to the issuance of any building and/or grading permit, the project applicant shall submit a project-specific geotechnical analysis to the City of Soledad Public Works Director for review and approval. The project engineer shall develop project-level plans based upon and in response to the observations and recommendations made in the project specific geotechnical analysis.

4.6-2. In order to minimize potential seismic-related hazards, the project engineer shall incorporate the seismic shaking analysis contained within the Geologic Hazards Investigation Update prepared by Nolan Associates (September 2006) into project design. Prior to the issuance of any building and/or grading permits, the project applicant shall submit design level plans demonstrating that the recommendations of the Geologic Hazards Investigation Update are incorporated into project design, subject to the review and approval of the City of Soledad Public Works Director. In addition, all structures shall be designed to the most current standards of the California Building Code, at a minimum.

4.6-3. In order to minimize seismic-related hazards to new public facilities, a site-specific probabilistic seismic hazards assessment shall be incorporated into the design of any schools, hospitals, fire or police stations, or any other critical facilities planned for the project site. An individual assessment shall be performed for each site by an engineering geologist. Prior to the issuance of any grading and/or building permit for new public facilities, including but not limited to new schools, hospitals, and fire or police stations, a probabilistic seismic hazards assessments shall be prepared and submitted to the Soledad Unified School District and City of Soledad Building Officials for review and approval.

Evidence. Mitigation Measures 4.6-1 and 4.6-2 minimize the potential impacts from strong seismic ground shaking on the project by requiring adherence to the most current standards of the California Building Code and incorporation of recommendations in the project-specific geotechnical analysis into final design plans. The applicant will be required to submit design level plans demonstrating incorporation of these recommendations. Additionally, Mitigation Measure 4.6-3 requires site-specific probabilistic seismic hazards assessments for public facilities for review and approval by the city. Development consistent with the Miramonte Specific Plan would reduce the size of the project boundary by 273 acres and the development density by 2,081 residential units; thereby reducing exposures to seismic risks, but not to a less than significant level. As a condition of project approval, the developer will implement Mitigation Measures 4.6-1 through 4.6-3, which will reduce potential impacts related to seismic ground shaking to a less-than-significant level.

Project Impact (Significant). Erosion. Site preparation and construction activities would disturb soil and increase its susceptibility to erosion. Removal of soils by wind or water can undermine buildings, roads, and other developments, as well as contribute siltation of local streams or water bodies. Moreover, removal of existing mature eucalyptus and other tree species along San Vicente Road could result in additional erosion-related impacts. Implementation of the project could result in substantial soil erosion or loss of topsoil which is a potentially significant impact.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. The proposed project would not result in new significant impacts or substantially increase the severity of previously

identified significant impacts. No new information has been identified that indicates the proposed project would have new or more significant impacts than were identified for the original project. The following mitigation measures imposed upon the project in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan that mitigate the impacts to a less-than-significant level:

Mitigation Measures

4.1-7. A site-specific geotechnical report shall be prepared for new development on hillsides in order to ensure that the development will not cause or worsen natural hazards, such as erosion and sedimentation, and will minimize risk to life and property from slope failure, landslides, and flooding. The report shall include erosion and sediment control measures, such as temporary vegetation sufficient to stabilize disturbed areas. Prior to the issuance of any grading and/or building permit for new development within the hillside portions of the project site, the project applicant shall submit a geotechnical report prepared by a qualified professional to the City of Soledad Department of Public Works for review and approval. The site-specific geotechnical report shall identify feasible recommendations and avoidance measures to minimize potential impacts.

4.6-4. In order to reduce wind and water erosion on the project site, an erosion control plan and Storm Water Pollution Prevention Plan (SWPPP) shall be prepared for the site preparation, construction, and post-construction periods. The erosion control plan shall incorporate best management practices consistent with the requirements of the National Pollution Discharge Elimination System (NPDES). The erosion component of the plan must at least meet the requirements of SWPPP required by the California State Water Resources Control Board. If earth disturbing activities are proposed between October 15 and April 15, these activities shall be restricted per the requirements of Soledad Municipal Code Chapter 15.08. Prior to the issuance of any permit, the project proponent shall submit detailed plans to the satisfaction of the City of Soledad Public Works Director. The components of the erosion control plan and SWPPP shall be monitored for effectiveness by City of Soledad Public Works. The following measures shall be implemented where deemed appropriate by the Director of Public Works to control erosion:

1. Keep construction machinery off of established vegetation as much as possible, especially the vegetation on the upwind side of the construction site;

2. Establish specific access routes at the planning phase of the project, and limits of grading prior to development, which should be strictly observed;

3. Utilize mechanical measures (i.e. walls from sand bags and/or wooden slat or fabric fences) to reduce sand movement;

4. Immediate revegetation (plus the use of temporary stabilizing sprays), to keep sand movement to a minimum; and

5. For larger-scale construction, fabric or wooden slat fences should be placed around the construction location to reduce sand movement.

4.6-5. Areas disturbed by grading shall be stabilized with adequate landscaping vegetative cover. A revegetation and landscaping plan shall be prepared by a landscape architect with experience in working with the type of soils that are characteristic of the site, subject to the review and approval of the City of Soledad. Prior to the issuance of any certificate of occupancy and concurrent with project construction, disturbed areas shall be re-vegetated consistent with the City approved landscaping plan. All project replanting shall be continually monitored by the landscape architect for a duration of three years. The landscape architect shall submit annual monitoring reports to the City of Soledad after each successive year detailing the success of landscaping. Success shall be based on an 80% survival rate. If it is determined that the replanting has not been successful, additional replanting shall be required by the City of Soledad.

4.6-6. All drainage from improved surfaces shall be captured by closed pipe or lined ditches and carried to neighborhood storm sewers or natural drainages. At no time shall any concentrated discharge be allowed to spill directly onto the ground adjacent to structures or to fall directly onto steep slopes. The control of runoff is essential for erosion control and prevention of water ponding against foundations and other improvements. The project shall implement Low Impact Development (LID) strategies, as determined appropriate by the City of Soledad consistent with the requirements of Mitigation Measure 4.8-4. LID strategies shall be implemented in connection with the proposed project to the satisfaction of the City of Soledad. Prior to the issuance of any grading and/or building permit for each new structure, the project applicant shall submit an erosion control plan consistent with this measure, subject to the review and approval of the City of Soledad Public Works Director.

Evidence. Mitigation Measure 4.1-7 requires a site-specific geotechnical report for any development of infrastructure in the hillside portion of the project site which will include erosion and sediment control measures, such as temporary vegetation sufficient to stabilize disturbed areas, to decrease susceptibility to erosion. Mitigation Measure 4.6-4 requires preparation of an erosion control plan and Storm Water Pollution Prevention Plan that incorporate Best Management Practices consistent with National Pollution Discharge Elimination Requirements to minimize wind and water erosion during site preparation, construction, and post-construction periods. Additionally, Mitigation Measure 4.6-5 requires preparation and implementation of a revegetation and landscaping plan that will ensure stabilization of disturbed areas to minimize the erosion potential. Mitigation Measure 4.6-6 requires that all drainage is captured and carried to neighborhood storm sewers or natural drainages to control runoff which effectively minimizes the potential for erosion. Development consistent with the Miramonte specific plan would reduce the size of the project boundary by 273 acres and the development density by 2,081 residential units. The Miramonte Specific Plan incorporates portions of

these measures into the land use map, and reduces risks of erosion by prohibiting residential development above the 400-foot elevation contour and requiring the preservation of hillside areas in perpetuity through recorded conservation easement(s), but not to a less-than-significant level. As a condition of project approval, the developer will implement Mitigation Measures 4.5-8 and 4.5-9 which will reduce potential erosional impacts to a less-than-significant level.

Project Impact (Significant). Liquefaction. The project will increase risks of seismically-induced liquefaction that could lead to human harm and property damage, which is a potentially significant impact.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. The proposed project would not result in new significant impacts or substantially increase the severity of previously identified significant impacts. No new information has been identified that indicates the proposed project would have new or more significant impacts than were identified for the original project. The following mitigation measures imposed upon the project in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan that mitigate the impacts to a less-than-significant level:

Mitigation Measure

4.6-7. In order to reduce the risk of localized liquefaction and collapse, and allow for adequate foundation and structural fill support, grading plans shall be consistent with a project-specific geotechnical analysis. The project geotechnical engineer shall prepare a quantitative assessment of liquefaction and seismically-induced settlement potential for the project as part of a comprehensive site geotechnical evaluation, prior to the recordation of each final map. Measures to ensure adequate reduction of risk to standard acceptable levels in accordance with standard geotechnical practice shall be incorporated into project design and specifications, subject to the review and approval of the City of Soledad Public Works Director.

Evidence. Mitigation Measure 4.6-7 requires preparation of project specific geotechnical analyses. The project geotechnical engineer will prepare a quantitative assessment of liquefaction and seismically-induced settlement potential for the project as part of a comprehensive site geotechnical evaluation, prior to the recordation of each final map. The analyses will include recommendations to reduce the risk of localized liquefaction and collapse, and allow for adequate foundation and structural fill support that must be incorporated into project design and specifications and will be subject to review by the City. Development consistent with the Miramonte Specific Plan would reduce the size of the project boundary by 273 acres and the development density by 2,081 residential units; thereby reducing impacts related to seismicity, but not to a less than significant level. As a condition of project approval, the developer will implement Mitigation Measures 4.6-7, which will reduce potential seismically-induced liquefaction impacts to a less-than-significant level.

Project Impact (Significant). Landslide, Debris Flow, Lateral Spreading. Development within certain areas of the project site could be exposed to potential adverse effects from on- or off-site landslides and lateral spreading, or debris flow from hillside areas that may result in human harm or property damage, which is a potentially significant impact.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. The proposed project would not result in new significant impacts or substantially increase the severity of previously identified significant impacts. No new information has been identified that indicates the proposed project would have new or more significant impacts than were identified for the original project. The following mitigation measures imposed upon the project in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan that mitigate the impacts to a less-than-significant level:

Mitigation Measure

4.6-8. Portions of the project located within debris flow hazard areas as described in the Geological Hazards Investigation Update prepared by Nolan Associates (September 2006, see pg. 14) shall incorporate design measures to mitigate this hazard to acceptable levels in accordance with standard engineering practices. Suitable measures include: 1) Restricting development to outside these areas; 2) Constructing artificial channels or diversion walls, designed to divert fluidized debris away from habitable structures; or 3) Constructing impact walls, designed to withstand anticipated debris flow volumes and velocities. An engineering geologist shall be retained by the developer to provide site-specific geologic design criteria for debris flow hazard areas once the final project plans are available. Diversion or retaining structures shall be designed based on recommendations by a geotechnical engineer, subject to review and approval of the City of Soledad Public Works Director. Prior to the recordation of each final map, the project applicant shall submit evidence demonstrating that adequate design measures are incorporated to mitigate potential hazards to acceptable engineering standards, subject to the review and approval of the City of Soledad Public Works Director.

Evidence. Mitigation Measure 4.6-8 requires development within portions of the project site in the debris flow hazard area to incorporate design measures, such as impact or diversion walls, that minimize the landslide, debris flow, and lateral spreading impacts to acceptable levels in accordance with standard engineering practices. Prior to the recordation of each final map, the project applicant must submit evidence demonstrating that adequate design measures have been incorporated consistent with engineering standards. Development consistent with the Miramonte specific plan would reduce the size of the project boundary by 273 acres and the development density by 2,081 residential units. Scenic open space areas above the 400-foot contour are designated as Hillside/Open Space and are protected in perpetuity by a recorded conservation easement; thereby reducing risks of debris flow from development in this area. The Miramonte Specific Plan incorporates a portion of this measure into the land

use map, by prohibiting residential development above the 400-foot elevation contour and requiring the preservation of hillside areas in perpetuity through recorded conservation easement(s).As a condition of project approval, the developer will implement Mitigation Measures 4.6-8, which will reduce the impacts of human harm and property damage resulting from potential landslide, debris flow, and lateral spreading to a less-than-significant level.

Project Impact (Significant). Expansive Soils. The project could be exposed to localized soil expansion, which would result in increased risks of property damage, and is a potentially significant impact.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. The proposed project would not result in new significant soils impacts or substantially increase the severity of previously identified significant impacts. No new information has been identified that indicates the proposed project would have new or more significant impacts than were identified for the original project. The following mitigation measures imposed upon the project, in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan mitigate the impacts to a less-than-significant level: Mitigation Measure

4.6-9. In order to minimize potential hazards associated with expansive soils, the expansion potential of site soils shall be evaluated as part of a site-specific geotechnical study to ensure hazards are reduced to an acceptable level of geotechnical and Uniform Building Code practices. The recommendations of a geotechnical engineer for mitigating soil shrink-swell hazards shall be incorporated into project design. These measures may include replacement of soil with engineered backfill or treatment of expansive soil with lime. Prior to the recordation of each final map, the project applicant shall submit evidence demonstrating that adequate measures are incorporated to mitigate potential hazards to acceptable engineering standards, subject to the review and approval of the City of Soledad Building Official.

Evidence. Mitigation Measure 4.6-9 requires the evaluation of project site soils for expansion potential as part of a site specific geotechnical study. The recommendations of the geotechnical engineer for mitigating soil shrink-swell hazards shall be incorporated into project design to ensure hazards are reduced to an acceptable level of geotechnical and Uniform Building Code practices. The applicant will be required to submit evidence that these recommendation shave been incorporated prior to the recordation of each final map. Development consistent with the Miramonte Specific Plan would reduce the size of the project boundary by 273 acres and the development density by 2,081 residential units; thereby reducing the risks of damage from development on unstable soils, but not to a less-than-significant level. As a condition of project approval, the developer will implement Mitigation Measure 4.6-9, which will reduce potential impacts related to expansive soils to a less-than-significant level.

(g) Hazards and Hazardous Materials

Project Impact (Significant). Hazardous Materials/Waste Sites. According to a Phase 1 Assessment, portions of the project site may be contaminated with hazardous materials from agricultural use and within existing buildings that may contain lead paint and asbestos, the release of which could pose a health risk to construction workers and future uses on the site.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. The proposed project would not result in new significant hazards or hazardous materials effects or substantially increase the severity of previously identified significant effects. Changes in hazards or hazardous materials related circumstances have occurred that would lessen certain impacts, and no new information has been identified that indicates the proposed project would have new or more significant hazards or hazardous materials impacts than were identified for the original project. The following mitigation measures imposed upon the project, in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan mitigate the impacts to a less-than-significant level:

Mitigation Measure

4.7-1. Prior to the recordation of any final map, the applicant shall arrange for a Phase II Environmental Site Assessment to be prepared which assesses the localized environmental conditions described in the Phase I Environmental Site Assessment prepared by D&M Consulting Engineers, Inc. (September 2006) and identifies any required remedial actions for the safe handling, removal and special needs for any identified materials. The Phase II Assessment shall include site-specific soil sampling in order to assess the presence of potential soil contamination and to identify special needs for soil handling during construction/grading activities and possible health risks to construction workers and future users consistent with the recommendations contained in the Phase 1 Environmental Site Assessment prepared by D&M Consulting Engineers, Inc. If results indicate the presence of such materials in excess of screening levels for residential, educational, or commercial uses, a Remediation Plan shall be prepared and implemented to reduce contamination to acceptable levels, maintain the safety of construction workers and future site users, and assure proper management of contaminated materials in accordance with state and local regulatory requirements. This plan shall be subject to review and approval by the Monterey County Division of Environmental Health. Prior to the issuance of any building and/or grading permit, the project applicant shall submit evidence to the City of Soledad for review and approval demonstrating compliance with this measure.

4.7-2. Prior to commencement of new development, the applicant shall obtain approval of a Soil Management Plan from the Monterey County Division of

Environmental Health, which establishes management practices for handling potentially contaminated soil, if encountered, during construction/grading activities.

4.7-3. In order to reduce human health risks to construction personnel and future site occupants, the project proponent shall retain a qualified consultant to survey all buildings to be demolished for asbestos under the National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines prior to demolition activities. If asbestos containing material is documented within existing on-site structures, all potentially friable asbestos shall be removed prior to building demolition in accordance with NESHAP guidelines. Prior to the issuance of a grading permit, the project proponent shall submit written evidence to the City of Soledad Director of Public Work from a qualified consultant demonstrating that all asbestos containing material, if present, has been properly removed and demolition activities may proceed without exposing construction personnel to asbestos related-hazards.

4.7-4. In order to reduce human health risks to construction personnel and future site occupants, the project proponent shall retain a qualified consultant to conduct a lead-based paint survey to evaluate the presence of lead-based paint residues in site soils adjacent to existing structures. If lead contamination is documented on-site, all peeling and flaking lead-based paint shall be removed and properly disposed of separately from building debris, in accordance with current Department of Toxic Substances Control policies. In addition, all existing structures within the Specific Plan area that were constructed prior to 1978 shall be surveyed for lead-based paint prior to any demolition activities. Prior to the issuance of any permit for each phase of development, the project proponent shall submit written evidence from a qualified consultant documenting that all lead-based paint hazards have been appropriately removed and disposed of in accordance with industry standards, subject to the review and approval of the City of Soledad.

Evidence. Mitigation Measure 4.7-1 requires the preparation of a Phase II Environmental Site Assessment which will identify any required remedial actions for the safe handling, removal and special needs for hazardous materials. If results indicate the presence of hazardous materials in excess of screening levels for residential, educational, or commercial uses, a Remediation Plan will be prepared and implemented to reduce contamination to acceptable levels, maintain the safety of construction workers and future site users, and assure proper management of contaminated materials in accordance with state and local regulatory requirements. Mitigation Measure 4.7-2 requires the applicant to obtain approval of a Soil Management Plan from the Monterey County Division of Environmental Health, which establishes management practices for handling potentially contaminated soil to prevent exposure to hazardous contaminates. Mitigation Measure 4.7-3 and 4.7-4 require surveys for lead paint and asbestos and adherence to applicable standards and guidelines in the event a qualified consultant determines lead or asbestos is present. This would ensure construction personnel are not exposed to asbestos or lead related-hazards. As a condition of project approval, the developer will implement Mitigation Measures 4.7-1 through 4.7-4, which will reduce potential impacts related to hazardous materials sites to a less-than-significant level.

Project Impact (Significant). Hazardous Materials Use. The proposed specific plan includes areas of residential development that would be sited adjacent to agricultural lands located on the northern, eastern, and western boundaries of the project site, which has the potential to result exposure of residents to hazardous chemicals.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. The proposed project would not result in new significant hazards or hazardous materials effects or substantially increase the severity of previously identified significant effects. Changes in hazards or hazardous materials related circumstances have occurred that would lessen certain impacts, and no new information has been identified that indicates the proposed project would have new or more significant hazards or hazardous materials impacts than were identified for the original project. Specifically, Mitigation Measures 4.2-1 and 4.2-3, previously discussed, imposed upon the project, in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan mitigate the impacts to a less-than-significant level:

Evidence. Mitigation Measure 4.2-1 requires the implementation of buffers and physical barriers between urban and agricultural uses ensures adequate separation of residential/commercial and agricultural uses which effectively lessens the likelihood of urban exposure to hazardous chemicals. To ensure the adequacy of the buffers and physical barriers, the applicant will be required to consult with the County of Monterey Agricultural Commissioner, and prior to the recordation of any final map, the project applicant must submit evidence in the form of agricultural setbacks delineating buffer locations consistent with the recommendations contained in the Agricultural Resources Report. Additionally, to further ensure the adequacy of the agricultural buffer located along the western boundary of the project site, mitigation measure 4.2-2 requires the project applicant to submit a detailed landscape plan that includes vegetative screening in addition to physical barriers subject to review and approval by the city. These measures will ensure adequate separation of urban and agricultural uses thereby lessening the potential for the exposure of urban uses to hazardous chemicals. As a condition of project approval, the developer will implement Mitigation Measures 4.2-1 and 4.2-2 which will reduce the impacts related to hazardous materials use to a less-than-significant level.

Project Impact (Significant). Surface Water/Water Quality. Construction and operation of the project could impact water quality through soil erosion during grading activities, loss of topsoil, and surface runoff from the proposed development. This is a potentially significant impact.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. Changes in circumstances have occurred that would lessen certain impacts, and no new information has been identified that indicates the proposed project would have new or more significant impacts than were

identified for the original project. Therefore, the proposed project would not result in new significant effects or substantially increase the severity of previously identified significant effects. Specifically, Mitigation Measure 4.6-4 through 4.6-6 previously discussed in Geology and Soils, and the following mitigation measures imposed upon the project, in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan mitigate the impacts to a less-than-significant level:

Mitigation Measure

4.8-1. In order to ensure that impacts are minimized to the greatest extent feasible, the project shall be designed to meet the BMP standards for operational phase storm water runoff and to maintain the onsite BMPs. The project shall implement BMPs to manage water quality by providing onsite runoff treatment in line with the onsite infiltration system. Prior to the issuance of any grading and/or building permit, the project applicant shall prepare a Construction Management Plan that identifies a designated construction supervisor responsible for the continued implementation of all construction BMPs throughout the duration of project construction. Moreover, the Construction Management Plan shall also identify BMPs to be implemented as part of the project and associated monitoring activities. The Construction Management Plan shall be reviewed by the City of Soledad Public Works Director prior to the issuance of any permit.

4.8-2. In order to prevent excess sediment buildup and ensure that all percolation basins are functioning in accordance with project-level plans, the project applicant and/or his/her successor in interest, shall be responsible for the long-term maintenance of all percolation basins and related private on-site drainage improvements and shall enter into a maintenance agreement with the city to provide for such. Bi-annually a basin maintenance report shall be submitted to the City of Soledad, subject to the review and approval of the Public Works Director, demonstrating that the basins have been properly maintained and cleaned in accordance with City standards. Prior to the issuance of any building and/or grading permit, the project applicant shall enter into a maintenance agreement with the City of Soledad.

Evidence. Mitigation Measure 4.8-1 requires a project design that incorporates BMP standards to minimize impacts to water quality through onsite runoff treatment. A Construction Management Plan will be required that identifies a designated construction supervisor who will be responsible for the continued implementation of BMPs. Further, Mitigation Measure 4.8-2 requires a bi-annual maintenance report to be submitted to the City that demonstrates that basins have been properly maintained and cleaned in accordance with City standards to prevent excess sediment buildup and ensure that all percolation basins are functioning to prevent degradation to water quality. As a condition of project approval, the developer will implement Mitigation Measures 4.8-1 and 4.8-2 which will reduce the potential for water quality impacts to a less-than-significant level.

Project Impact (Significant). Surface Drainage/Flooding. While the proposed project site is not located within a flood hazard area as delineated by the Federal Emergency Management Agency (FEMA), localized flooding had been known to occur within the project area and surrounding vicinity. Development of the proposed project, which would result in substantial grading, changes in topography, and increased impervious surface area, has the potential to result in on- and off-site flooding due to changes in existing drainage patterns.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. Changes in circumstances have occurred that would lessen certain impacts, and no new information has been identified that indicates the proposed project would have new or more significant impacts than were identified for the original project. Therefore, the proposed project would not result in new significant effects or substantially increase the severity of previously identified significant effects. Specifically, the following mitigation measures imposed upon the project, in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan mitigate the impacts to a less-than-significant level:

Mitigation Measure 4.8-3. In order to ensure that project-induced impacts related to changes in the existing drainage patterns on the project site are minimized, the project applicant shall submit design-level improvement plans for the project's storm drainage collection and retention system. Final design-level plans shall be supported with appropriate soils and hydrologic data in accordance with City standards.

All conveyance system and retention basins shall be sized and designed in accordance with applicable City design standards and shall be appropriately sized to accommodate stormwater runoff from a 100-year storm event. Prior to the recordation of any final map, the project applicant shall submit all design-level plans and supporting details to the City of Soledad Director of Public Works for review and approval prior to approval of the first final map.

4.8-4. In order to reduce the extent of impervious surface coverage and potential drainage/flooding impacts, Low Impact Development (LID) strategies shall be implementedin connection with all new development within the Specific Plan area. Prior to the approval of any final map or approval of any permit for all new residential and commercial developments, the project applicant shall submit design-level site and improvement plans to the City of Soledad for review and approval that incorporate the latest approved LID strategies and best practices as applicable, and the City shall ensure that all such measures are included in the final design plans, Examples of various LID strategies and best practices are identified as follows:

- Where possible, landscaped or grassy areas shall be substituted for impervious surfaces such as building entrances, traffic medians, etc.

- Permeable pavements such as crushed aggregate, turf lock or unit pavers shall be used in place of sidewalks, walkways or overflow parking areas wherever design allows.

- Bioretention cells, planter boxes, vegetated swales, and greenbelt buffer zones shall be implemented in landscaped areas, along streets and sidewalks wherever feasible.

- Final roadway design and street layout shall convey surface water runoff and storm flows into bioretention cells and swales.

- All commercial development shall integrate bioretention into parking lot islands or filter strips distributed throughout the parking area(s) to infiltrate, store and/or convey stormwater flows. In addition, permeable paving materials shall be used in spillover parking that is used only for peak demand periods.

- Alternative types of LID strategies and measures may also be approved provided evidence is submitted to the City of Soledad by a qualified engineer at the developer's expense demonstrating that said strategies will achieve the intended result of this mitigation measure. Alternative strategies must be reviewed and approved by the Public Works Director.

Evidence. Mitigation Measure 4.8-3 requires the applicant to submit design-level improvement plans for the project's storm drainage collection and retention system sized and designed in accordance with applicable City design standards to ensure that project-induced impacts related to changes in the existing drainage patterns on the project site are minimized. Additionally, Mitigation Measure 4.8-4 requires the project applicant to submit design-level site and improvement plans to the City that incorporate the latest approved LID strategies and best practices prior to the approval of any final map or approval of any permit. As a condition of project approval, the developer will implement Mitigation Measures 4.8-3 and 4.8-4 which will reduce the potential for surface drainage and flooding impacts to a less-than-significant level.

(h) Noise

Project Impact (Significant). Future residential uses developed at the project site would be exposed to exterior noise levels greater than 65 dBA CNEL and interior noise exceeding 45 dBA, which exceed the exterior and interior noise and land use compatibility standards presented in the city's general plan. This is a significant impact.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. Changes in circumstances have occurred that would lessen certain impacts, and no new information has been identified

that indicates the proposed project would have new or more significant impacts than were identified for the original project. Therefore, the proposed project would not result in new significant effects or substantially increase the severity of previously identified significant effects. Specifically, the following mitigation measures imposed upon the project, in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan mitigate the impacts to a less-than-significant level:

Mitigation Measure 4.10-1. Maintain a sufficient buffer distance between transportation noise sources and future sensitive land uses, or alternatively, construct noise barriers or create acoustically shielded outdoor use areas utilizing buildings to achieve noise exposures of 65 dBA CNEL or less. The specific determination of necessary mitigation measures will be included in the detailed acoustical analyses (see mitigation 4.10-2) and design of future development projects within the specific plan area. Results of the analysis shall be subject to review and approval by the City Planning Department and all recommendations shall be incorporated into the project prior to each final map and issuance of a building permit.

4.10-2. Retain a qualified Acoustical Specialist to prepare for City review and approval a detailed acoustical analysis of interior noise reduction requirements and specifications for all projects proposed within the 60 dBA CNEL contours of area roadways, in accordance with State and City standards. Interior noise levels must be maintained at or below 45 dBA CNEL. Building sound insulation requirements will include forced air mechanical ventilation in noise environments exceeding 60 dBA CNEL. Special building construction techniques (e.g., sound-rated windows and building facade treatments) may be required where exterior noise levels exceed 65 dBA CNEL. These treatments include, but are not limited to, sound rated windows and doors, sound rated exterior wall assemblies, and acoustical caulking. The specific determination of required treatments will be made on a unit-by-unit basis during project design. Results of the analysis, including the description of the necessary noise control treatments, will be submitted to the City along with the building plans prior to issuance of a building permit. Feasible construction techniques such as these would adequately reduce interior noise levels to 45 Ldn or lower.

4.10-3. Non-residential development will comply with the noise standards established in the Zoning Code at existing or planned residential properties in the vicinity. Further, efforts will be made to reduce noise impacts through the following planning and equipment requirements:

- Development site planning will be utilized in a fashion that reduces noise impacts for nearby sensitive receptors, such as by not locating loading docks near residences.

- Equipment screens, fan silencers, and engine mufflers will be used to mitigate noise from mechanical equipment.

- Noise barriers will be used to control noise from parking and vehicle circulation.

- For recreational uses, proposed development must consider impacts upon the adjacent residential development in terms of the location of active sports areas, their orientation on the site, whether or not lights are included, and speech amplification systems.

Evidence. Mitigation Measures 4.10-1 and 4.10-2 require the preparation of a detailed acoustical analysis and implementation of recommendations therein that would reduce the interior and exterior noise levels for residential development to acceptable levels. Mitigation Measure 4.10-3 requires non-residential development to adhere to noise standards established in the Zoning Code and through adherence to planning and equipment requirements. Implementation of these measures into project design would ensure that exterior and interior noise levels are below city standards. As a condition of project approval, the developer will implement Mitigation Measures 4.10 -1 through 4.10-3 which will reduce the interior and exterior noise levels below city noise thresholds and would reduce impacts to a less-than-significant level.

(i) Population and Housing

Project Impact (Potentially Significant). Inclusionary Housing. Future development of the site as described in the specific plan may be inconsistent with the Housing Element, which requires affordable housing to be fully integrated with market rate housing.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR and clarified in the EIR Addendum. Changes in circumstances have occurred that would lessen certain impacts, and no new information has been identified that indicates the proposed project would have new or more significant impacts than were identified for the original project. The specific plan includes policies that require integration of affordable housing consistent with the City's Housing Element. Therefore, the proposed project would not result in new significant effects or substantially increase the severity of previously identified significant effects. Additionally, the following mitigation measure imposed upon the project ensures that the final map(s) is consistent with these policies.

Mitigation Measure

4.11-3 The applicant's approved Development Agreement shall include a Housing Agreement per Program 4.3 of the City's Housing Element with the City that prescribes the parameters of the development of affordable housing consistent with the City's Housing Element, Inclusionary Housing Ordinance, and the revised Specific Plan. The Development Agreement shall be reviewed and approved by the City of Soledad City Council prior to or concurrent with recording of the first final map.

Evidence. The Miramonte Specific Plan includes policies and design standards that require integration of housing for very low, low and moderate income households throughout the site either by minimum densities of 20 units per acre or deed restricted units, or multifamily development. Because development of the site is anticipated to occur over a 30-year timeframe Mitigation Measure 4.11-3 requires the developer to enter into a housing agreement with the City prior to recordation or concurrent with the first final map to ensure consistency with the affordable and inclusionary housing requirements of the City's Housing Element, Inclusionary Housing Ordinance, and the Miramonte Specific Plan. Implementation of Mitigation Measure 4.11-3 is a required condition of approval, which will reduce potential impact to a less-than-significant level.

(j) Public Services

Project Impact (Significant). Police and Fire. The proposed project would increase the demand for police and fire services to the extent that new facilities would be required.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. Changes in circumstances have occurred that would lessen certain impacts, and no new information has been identified that indicates the proposed project would have new or more significant impacts than were identified for the original project. Therefore, the proposed project would not result in new significant effects or substantially increase the severity of previously identified significant effects. The following mitigation measures imposed upon the project, in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan mitigate the impacts to a less-than-significant level:

Mitigation Measure

4.12-1. Prior to the occupancy of medium density residential north of the linear park or occupancy of low density residential north of both Orchard Lane and the linear park, the proposed fire and police facilities located on Orchard Lane shall be constructed and operational. The project applicant shall also be responsible for providing the necessary funding to the City of Soledad or establishing the appropriate funding mechanism to ensure the provision of adequate police and fire staffing to meet the demands of the proposed project, as determined by the City of Soledad. Prior to the issuance of any building permit for new medium density residential development north of linear park or low density residential north of both Orchard Lane and the linear park, the project applicant shall obtain written documentation from the Soledad Fire and Police Departments indicating that the fire and police substations are operational and adequately staffed to meet the needs of the proposed project, subject to the review and approval of the City of Soledad. This mitigation measure shall not be construed as prohibiting the implementation of infrastructure necessary to serve the proposed facilities.

Evidence. The Miramonte Specific Plan provides a site for potential police and fire substations. This location is included on the Specific Plan land use map and the specific plan requires the dedication of this land to the City prior to approval of the first final map. Mitigation Measure 4.12-1 requires construction and verification of facility operations as needed by the respective Soledad Police and Fire Department Chiefs prior to issuance of building permits for new medium density residential development. Implementation of Mitigation Measure 4.12-1 is a required condition of approval, which will reduce potential impacts from an increase in service demand to a less-than-significant level.

Project Impact (Significant). Schools. The plan area is served by Soledad Unified School District for grades K-12. Buildout of the proposed specific plan is expected to generate 875 students for grades K-6, 261 students for grades 7-8, and 378 students for grades 9-12 (a total of 1,514 students).

Findings. Changes in circumstances have occurred that would lessen certain impacts, and no new information has been identified that indicates the proposed project would have new or more significant impacts than were identified for the original project. Therefore, the proposed project would not result in new significant impacts or substantially increase the severity of previously identified significant effects. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. The Miramonte Specific Plan provides two school sites that will be offered for dedication to the Soledad Unified School District to serve the students generated by the reduced size and scale of development allowed by the Miramonte Specific plan in addition to the following mitigation measures imposed upon the project mitigate the impacts to a less-than-significant level:

Mitigation Measures

4.12-4. Prior to recording of the first final map, the project developer shall submit an agreement with evidence demonstrating that two school sites of sufficient size will be dedicated within the project boundaries, subject to the review and approval of the City of Soledad and the Soledad Unified School District. The agreement shall be established between the developer and/or successors in interest and the Soledad Unified School District that establishes the sites to be dedicated.

4.12-5. In addition to the dedication of land, the developer(s) will pay school impact fees as prescribed by the law in effect at the time of payment. The applicant/developer shall pay a school impact fee for each type of development pursuant to the criteria set forth within California Government Code Section 65995. Prior to the issuance of building permits, the applicant shall pay required school mitigation fees and provide evidence of payment to the city. As indicated above, the fees set forth in Government Code Section 65996 constitute the exclusive means of both "considering" and "mitigating" school facilities impacts of projects [Government Code Section

65996(a)]. They are "deemed to provide full and complete school facilities mitigation" [Government Code Section 65996(b)].

Evidence. The proposed project would provide two school sites. The applicant and/or developer(s) will provide an offer to dedicate the school sites (i.e. turn over fee simple title to the land to the school district). In addition to the dedication of land, the developer(s) will pay school impact fees as prescribed by the law in effect at the time of payment, unless otherwise dictated by a development agreement or permit conditions. The proposed specific plan includes a policy that requires that an agreement be established between the developer and/or successors in interest and the Soledad Unified School District that establishes the timing of the school construction or improvements and financing obligations. The Miramonte Specific Plan incorporates a portion of these measures into the land use map. Implementation of Mitigation Measures 4.12-4 and 4.12-5 are required condition of approval, which will reduce potential impacts from an increase in service demand to a less-than-significant level.

Project Impact (Significant). Parks and Recreation. Anticipated population growth associated with the project would create additional demands on existing park and recreational facilities throughout the city such that physical deterioration of these facilities may occur, which is a potentially significant impact.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. Changes in circumstances have occurred that would lessen certain impacts, and no new information has been identified that indicates the proposed project would have new or more significant impacts than were identified for the original project. Therefore, the proposed project would not result in new significant impacts or substantially increase the severity of previously identified significant effects. Specifically, the following mitigation measures imposed upon the project, in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan mitigate the impacts to a less-than-significant level:

Mitigation Measure

4.12-6. Prior to the recordation of the first final map, the project applicant shall submit a comprehensive Park Master Plan to the City of Soledad for review and approval. This plan shall address park design and development consistent with the City's adopted Parks and Recreation Master Plan, along with maintenance, operation and financing components. t This plan shall also identify the appropriate types of improvements within each park parcel to meet the recreational needs of all age groups The Park Master Plan will identify timing for concurrent park improvements for each phase of development. The Parks Master Plan is subject to review and recommendation by the Parks and Recreation Commission and approval by the City Council.

4.12-7. Prior to the issuance of any building permit, the applicant/developer shall submit payment of a Park Facilities Impact Fee in accordance

with the adjusted impact fee in effect at the time of building permit issuance, if determined to be applicable. All fees shall be subject to the review and approval of the City of Soledad Community Development Director.

Evidence. The Miramonte Specific Plan calls for the provision of five acres of parkland for every 1,000 persons, consistent with the general plan goals and supplements the current city deficit by more than 140 acres of public open space and approximately 56 acres of improved parks. Mitigation Measure 4.12-6 requires the preparation of a Parks Master Plan that will guide required park improvements on the site and ensure that parks are provided with each phase of development. Mitigation Measure 4.12-7 requires payment of park facility impact fees in effect at the time of building permit issuance. Implementation of Mitigation Measures 4.12-6 and 4.12-7 are required condition of approval, which will reduce potential impacts from an increase in service demand to a less-than-significant level.

(k) Traffic and Circulation

Project Impact (Potentially Less than Significant) Unacceptable Level of Service at Moranda Road/Front Street and U.S. Highway 101 NB Ramps. Traffic generated by the proposed project would cause LOS F operations on the U.S. Highway 101 northbound on-ramp from Moranda Road at the Moranda Road Interchange. This is a significant impact.

Finding. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. Specifically, the following mitigation measures imposed upon the project, in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan mitigate the impact to a less-than-significant level:

Mitigation Measure

4.13-10 Moranda Road and U.S. Highway 101 Northbound Ramps: Signalize the intersection and widen the Northbound US 101 on ramp to add a second NB left-turn lane. This improvement requires coordination and approval by Caltrans.

The project developer is responsible for a fair share contribution of costs towards the construction of this improvement. Prior to the issuance of any building permit for each phase of development, the project developer shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance for the project's proportionate share of costs to construct this improvement and shall also pay the TAMC Regional Development Transportation Impact Fees.

The payment of fees is considered mitigation for project impacts to freeway highway and regional facilities. All required traffic impact fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works.

Subject to the review and approval by the Director of Public Works, the City Council may exercise its discretion and instead use the project's payment of city fees for the project's proportionate share of costs for construction of the Market Street Extension to Moranda Road and/or an extension of Gabilan Drive to U.S. Highway 101.

All required traffic impact fees shall be subject to review by the Director of Public Works and approval by the City Council.

Improvements to this interchange are within the jurisdiction of Caltrans and not under the control of the city. Should the improvement of the interchange not be implemented by Caltrans the impact would be considered significant and unavoidable.

Evidence. Development consistent with the Miramonte Specific Plan would generate approximately 40 percent fewer vehicle trips than the originally proposed project. Mitigation Measure 4.13-10 requires the project developer to contribute fair share of required city traffic impact fees and TAMC Regional Development Impact Fees to mitigate this regional impact. The payment of these fees mitigates the project contribution to the impact at this intersection. However, because the improvements to this interchange are within the jurisdiction of Caltrans and not under the control of the City. Should the improvement of the interchange not be implemented by Caltrans the impact would be considered significant and unavoidable.

Project Impact (Significant): U.S. Highway 101 Freeway Segments. Traffic generated by development of the project would cause unacceptable LOS D operations on the following U.S. Highway 101 freeway segments:

- Northbound U.S. Highway 101 north of Gonzales-5th Street (AM peak hour).
- Northbound U.S. Highway 101 between Gonzales-5th Street to Gloria Road (AM peak hour).
- Northbound U.S. Highway 101 between Camphora Road and North Soledad (AM Peak Hour).
- Southbound U.S. Highway 101between North Soledad and Camphora Road (PM Peak Hour).

Finding. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. Specifically the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan mitigate the impacts to a less-than-significant level:

Mitigation Measure

4.13-12 Prior to the issuance of any building permit for each phase of development, the project developer shall submit payment of the TAMC Regional Development Transportation Impact Fee in effect at the time of building permit issuance in order to mitigate the project's impacts to the identified freeway segments. The payment of fees is considered mitigation for project impacts to highway and regional facilities. All fees shall be subject to the approval of the Director of Public Works.

Evidence. Development consistent with the Miramonte Specific Plan would generate approximately 40 percent fewer vehicle trips than the originally proposed project. The payment of Regional Traffic impact fees mitigate the project's impact to the affected segments. As a condition of approval the developer will implement Mitigation Measure 4.13-12 which mitigates the project's contribution to the impact.

Project Impact (Significant) Unacceptable Level of Service at Moranda Road and Front Street: Although traffic volumes would be reduced by approximately 17 percent at this intersection, traffic generated by the proposed project would cause operations to degrade from acceptable LOS C to unacceptable LOS F. This is a significant impact.

Finding. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. Specifically, the reduced size and intensity of development allowed by the Miramonte Specific Plan in addition to implementation of Mitigation Measures 4.13-2, 4.13-15 and potentially mitigation measures 4.13-16 and 4.13-17 mitigate the impact to a less-than-significant level:

Mitigation Measure

4.13-2. Intersection of Moranda Road and Front Street. Signalize and add a second northbound through lane, and eastbound free-right-turn lane. This improvement is necessary with or without the project. The intersection of Moranda Road and Front Street would operate at LOS A with construction of this improvement or with construction of an extension of Market Street extension between San Vicente Road and the intersection of Moranda Road / Front Street (see Mitigation Measure 4.13-16) or an extension of Gabilan Drive from San Vicente Road to the U.S. Highway 101 northbound ramps (Mitigation Measure 4.13-17).

The project developer is responsible for the project's fair share contribution of costs to mitigate the project's impact to this intersection. Prior to the issuance of any building permit for each phase of development, the project developer shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance for the project's fair share costs of construction of the improvements described in this measure. These fees may be used, at the discretion of the

City Council, to instead acquire land and construct either or both extensions of Market Street and Gabilan Drive identified above.

If the extension of Market Street and/or Gabilan Drive is undertaken either by the City or by the developer (see Mitigation Measure 4.13-16 and Mitigation Measure 4.13-17), the intersection improvements listed in this measure would not be required unless the monitoring results (Mitigation Measure 4.13-15) indicate they are necessary to maintain acceptable levels of service at the intersection of Moranda Road and Front Street until the roadway extensions are complete.

No certificate of occupancy shall be issued if the monitoring demonstrates that levels of service at this intersection degrade to an unacceptable level of service, determined by the Director of Public Works, until either the intersection improvements listed in this measure or an extension of Market Street or Gabilan Drive is complete.

4.13-15. Traffic Level of Service Monitoring Program. The following intersections shall be monitored by the city at the developer's expense to ensure that acceptable levels of service are maintained in accordance with the City of Soledad's adopted standards throughout development of the specific plan area.

- Moranda Road / Front Street;
- U.S. Highway 101 Northbound Ramps and Moranda Road / Front Street;
- San Vicente Road / Front Street;
- San Vicente Road / Gabilan Drive; and
- Main Street / Gabilan Drive.

Monitoring shall be conducted by a qualified transportation engineer retained by the applicant and shall commence at issuance of the first residential building permit and routinely thereafter in increments of 200 residential building permits until the intersection improvements identified in Mitigation Measures 4.13-2, 4.13-3, 4.13-4, 4.13-6, and 4.13-10, or the Market Street and/or Gabilan Drive extensions are complete.

The Monitoring Program shall include the following:

a. Conduct analyses of all applicable traffic operations based on field-measured data;

b. Study prevailing traffic and roadway conditions;

c. Report the results to the City of Soledad Director of Public Works, who shall determine if and when the improvement is identified above is necessary.

No building permit shall be issued for any phase of the project unless intersection levels of service are operating at the City's adopted acceptable threshold LOS D.

4.13-16 Market Street Extension Alternative Mitigation. Payment of the project's proportionate share of fees to mitigate project contributions to cumulative impacts to the three intersections identified in Mitigation Measures 4.13-2, 4.13-3, and 4.13-10, may be used, at the discretion of the City Council, to instead acquire land and construct an extension of Market Street between San Vicente Road and the intersection of Moranda Road / Front Street. This improvement would mitigate the project's impacts to the following intersections:

- Moranda Road / Front Street;
- U.S. Highway 101 Northbound Ramps and Moranda Road / Front Street; and
- San Vicente Road / Front Street.

The project developer may choose to design and construct the Market Street Extension in exchange for a potential credit in traffic impact fees for future development within the specific plan area, and would be eligible for entering into a reimbursement agreement with the City. The developer's costs associated with this improvement may be subject to partial reimbursement subject to a reimbursement agreement with the City.

If the developer chooses to construct this improvement, the developer shall retain a qualified engineer to design the improvement in conformance with the City's performance thresholds and design criteria. The engineered plans shall be submitted to the Director of Public Works prior to issuance of the 200th residential building permit, and shall be constructed prior to issuance of the 400th residential building permit. This timeframe may be modified by the Director of Public Works if the results of traffic monitoring (Mitigation Measure 4.13-15) indicate that a shorter or lengthier time frame is warranted. All traffic facility improvement plans or traffic impact fees shall be subject to the review and approval by the Director of Public Works.

If the Market Street Extension is constructed, the improvements identified in mitigation measures 4.13-2, 4.13-3, and 4.13-10 would not be required.

4.13-17 Gabilan Drive Extension Alternative Mitigation. Payment of the project's proportionate share of fees to mitigate project contributions to cumulative impacts to the five intersections identified in Mitigation Measures 4.13-2, 4.13-3, 4.13-4, 4.13-6, and 4.13-10, may be used, at the discretion of the City Council, to instead acquire land and construct an extension of Gabilan Drive between San Vicente Road and the U.S. Highway 101 Northbound ramps. This improvement requires coordination with Caltrans for modification of the northbound ramps.

This improvement, if constructed in lieu of the Market Street extension or the intersection improvements identified in mitigation measures 4.13-2, 4.13-3, and 4.13-10, would mitigate the project's impacts to the following intersections:

- Moranda Road / Front Street;
- U.S. Highway 101 Northbound Ramps and Moranda Road / Front Street;
- San Vicente Road / Front Street;
- San Vicente Road / Gabilan Drive; and
- Main Street / Gabilan Drive.

The project developer may choose to design and construct the Gabilan Drive Extension in exchange for a potential credit in traffic impact fees for future development within the specific plan area, and would be eligible for entering into a reimbursement agreement with the City. The developer's costs associated with this improvement may be subject to partial reimbursement subject to a reimbursement agreement with the City..

If the developer chooses to construct this improvement the developer shall retain a qualified engineer to design the improvement in conformance with the City's performance thresholds and design criteria. The engineered plans shall be submitted to the Director of Public Works prior to issuance of the 200th residential building permit, and shall be constructed prior to issuance of the 400th residential building permit. This timeframe may be modified by the Director of Public Works if the Market Street extension is operational and the results of traffic monitoring (Mitigation Measure 4.13-15) indicate that a shorter or lengthier time frame is warranted. All traffic facility improvement plans and traffic impact fees shall be subject to the review and approval by the Director of Public Works.

If the Market Street Extension and the Gabilan Drive Extension are constructed, the improvements identified in Mitigation Measures 4.13-4, 4.13-6, and 4.13-10 are not required. If only the Gabilan Drive Extension is constructed, the improvements identified in Mitigation Measures 4.13-2, 4.13-3, 4.13-4, 4.13-6and 4.13-10 are not required.

Evidence. This intersection meets signal warrants with or without the proposed project, and also requires the addition of a second northbound through lane and eastbound free-right-turn lane to mitigate the cumulative impacts to which the project contributes. Mitigation Measure 4.13-2 requires the project developer to pay the project's fair share contribution of costs to mitigate the project's impact to this intersection prior to issuance of any building permit for each phase of development. The measure also allows the fees collected to be used instead, at the discretion of the City Council, to acquire land and construct extensions of either or both Market Street (Mitigation Measure 4.13-16)

and/or Gabilan Drive (Mitigation Measure 4.13-17) identified in above. The project developer may also choose to implement the roadway extension options. Mitigation Measure 4.13-15 requires routine monitoring of intersection operations to ensure that acceptable levels of service are maintained until the intersection improvements or Market Street extension and/or the Gabilan Drive extension are complete. The measure further requires all required traffic impact fees in effect at the time of building permit issuance to be paid prior to the issuance of any building permit for each phase of development. No building permit shall be issued for any phase of the project unless intersection levels of service are operating at the City's adopted acceptable threshold LOS D. .

Mitigation Measure4.13-2 and 4.13-15 are required conditions of approval, which will reduce impacts to this traffic facility to a less-than-significant level.

Project Impact (Significant) Unacceptable Level of Service. Although traffic volume would be reduced in comparison to the Miravale III project, traffic generated by the proposed project would cause operations to degrade from acceptable LOS B to unacceptable LOS F at the intersection of San Vicente Road and Front Street during at least one of the peak hours analyzed. This is a significant impact.

Findings: Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. Specifically, the following mitigation measure imposed upon the project, in addition to Mitigation Measures 4.13-15, and potentially 4.13-16, and 4.13-17 listed above, and in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan mitigate the impact to a less-than-significant level:

Mitigation Measures

4.13-3 Intersection of San Vicente Road and Front Street. Widen northbound San Vicente Road to three lanes, add two eastbound left-turn lanes and one southbound free-right turn lane. The intersection of San Vicente Road and Front Street would operate at LOS B with the construction of these improvements or with construction of a Market Street extension between San Vicente Road and the intersection of Moranda Road / Front Street (see Mitigation Measure 4.13-16) or an extension of Gabilan Drive from San Vicente Road to the U.S. Highway 101 northbound ramps (Mitigation Measure 4.13-17).

The project developer is responsible for the project's fair share contribution of costs to mitigate the project's impact to this intersection. Prior to the issuance of any building permit for each phase of development, the project developer shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance for the project's fair share costs of construction of the improvements described in this measure. These fees may be used by the city, at the discretion of the City Council, to instead acquire land and construct an extension of Market Street or Gabilan Drive as described above.

If the extension of Market Street or Gabilan Drive are implemented (see Mitigation Measure 4.13-16 and Mitigation Measure 4.13-17), the intersection improvements listed in this measure would not be required unless the monitoring results (Mitigation Measure 4.13-15) indicate they are necessary to maintain acceptable levels of service at the intersection of San Vicente Road and Front Street until the roadway extensions are complete. No certificate of occupancy shall be issued if the monitoring demonstrates that levels of service at this intersection degrade to an unacceptable level of service, determined by the Director of Public Works, until either the intersection improvements listed in this measure or an extension of Market Street or Gabilan Drive is complete.

Evidence. Mitigation Measure 4.13-3 requires the project developer to pay the project's fair share contribution of costs to mitigate the project's impact to this intersection prior to issuance of any building permit for each phase of development. The measure also allows the fees collected to be used instead, at the discretion of the City Council, to acquire land and construct extensions of either or both Market Street (Mitigation Measure 4.13-16) and/or Gabilan Drive (Mitigation Measure 4.13-17) identified in above. The project developer may also choose to implement the roadway extension options. Mitigation Measure 4.13-15 requires routine monitoring of intersection operations by the City at the developers expense to ensure that acceptable levels of service are maintained until the intersection improvements or Market Street extension and/or the Gabilan Drive extension are complete. The measure further requires all required traffic impact fees in effect at the time of building permit issuance to be paid prior to the issuance of any building permit for each phase of development. No building permit shall be issued for any phase of the project unless intersection levels of service are operating at the City's adopted acceptable threshold LOS D.

Mitigation Measure 4.13-3 and 4.13-15 are required conditions of approval, which will reduce impacts to this traffic facility to a less-than-significant level.

Project Impact (Significant): San Vicente Road and Gabilan Drive: Although traffic volumes would be reduced in comparison to the Miravale III project, traffic generated by the proposed project would still cause signal warrants to be met and cause operations to degrade from acceptable LOS B to unacceptable LOS F during at least one peak hour at the intersection of San Vicente Road and Gabilan Drive. This is a significant impact.

Findings: Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. Specifically, the following mitigation measure imposed upon the project, in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan mitigate the impact to a less-than-significant level:

Mitigation Measure

4.13-4 Intersection of San Vicente Road and Gabilan Drive. Signalize and add a second westbound left turn lane, and widen southbound San Vicente Road to accommodate the two left-turn lanes. The intersection would operate at an acceptable LOS A with the construction of these improvements or with construction of the Gabilan Drive extension from San Vicente Road to the U.S. Highway 101 northbound ramps (Mitigation Measure 4.13-17).

The project developer is responsible for the project's fair share contribution of costs to mitigate the project's impact to this intersection. Prior to the issuance of any building permit for each phase of development, the project developer shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance for the project's fair share costs of construction of the improvements described in this measure. These fees may be used by the city, at the discretion of the City Council, to instead acquire land and construct an extension of Gabilan Drive as described above.

If the extension of Gabilan Drive is implemented (see Mitigation Measure 4.13-17), the intersection improvements listed in this measure would not be required unless the monitoring results (Mitigation Measure 4.13-15) indicate they are necessary to maintain acceptable levels of service at the intersection of San Vicente Road and Gabilan Drive until the roadway extension improvement is complete. No certificate of occupancy shall be issued if the monitoring demonstrates that levels of service at this intersection degrade to an unacceptable level of service, determined by the Director of Public Works, until either the intersection improvements listed in this measure or an extension of Gabilan Drive is complete.

Evidence: The traffic impact analysis for the EIR Addendum found that the intersection of San Vicente Road and Gabilan Drive would operate at LOS A with the construction of the Gabilan Drive Extension. Mitigation Measure 4.13-4 requires the project developer to pay the project's fair share contribution of costs to mitigate the project's impact to this intersection prior to issuance of any building permit for each phase of development. The measure also allows the fees collected to be used instead, at the discretion of the City Council, to acquire land and construct an extension of Gabilan Drive (Mitigation Measure 4.13-17) identified above. The project developer may also choose to construct the Gabilan Drive extension option. Mitigation Measure 4.13-15 requires routine monitoring of intersection operations by the City at the developers expense to ensure that acceptable levels of service are maintained until either the intersection improvements or the Gabilan Drive extension are complete. No building permit shall be issued for any phase of the project unless intersection levels of service are operating at the City's adopted acceptable threshold LOS D.

Mitigation Measure 4.13-4 and 4.13-15 are required conditions of approval, which will reduce impacts to this traffic facility to a less-than-significant level.

Project Impact (Significant): Main Street and Gabilan Drive. Although traffic volumes would be reduced, traffic generated by development associated with the proposed project would cause signal warrants to be met during at least one peak hour at the intersection of Main Street and Gabilan Drive. This is a significant impact.

Findings: Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. Specifically, the following mitigation measure imposed upon the project, in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan mitigate the impacts to a less-than-significant level:

Mitigation Measure

4.13-6. Intersection of Main Street and Gabilan Drive. The intersection of Main Street and Gabilan Drive will operate at LOS A with signalization and protected left-turn phasing along Gabilan Drive. With the construction of the Gabilan Drive extension to U.S. Highway 101, signalization of this intersection would not be necessary.

The project developer is responsible for the project's fair share contribution of costs to mitigate the project's impact to this intersection. Prior to the issuance of any building permit for each phase of development, the project developer shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance for the project's fair share costs of construction of the improvements described in this measure. These fees may be used by the city, at the discretion of the City Council, to instead acquire land and construct an extension of Gabilan Drive as described above.

If the extension of Gabilan Drive is implemented (see Mitigation Measure 4.13-17), the intersection improvements listed in this measure would not be required unless the monitoring results (Mitigation Measure 4.13-15) indicate they are necessary to maintain acceptable levels of service at the intersection of Main Street and Gabilan Drive until the roadway extension improvement is complete. No certificate of occupancy shall be issued if the monitoring demonstrates that levels of service at this intersection degrade to an unacceptable level of service, determined by the Director of Public Works, until either the intersection improvements listed in this measure or an extension of Gabilan Drive is complete..

Evidence: Mitigation Measure 4.13-6 mitigates project impacts to the Main Street and Gabilan Drive intersection by either requiring the developer to pay the fair share contribution of costs to fund this improvement or by constructing the Gabilan Drive Extension as set forth in Mitigation Measure 4.13-17. Mitigation Measure 4.13-6 requires the project developer to pay the project's fair share contribution of costs to mitigate the project's impact to this intersection prior to issuance of any building permit for each phase of development. The measure also allows the fees collected to be used instead, at the discretion of the City Council, to acquire land and construct an extension

of Gabilan Drive (Mitigation Measure 4.13-17) identified above. The project developer may also choose to construct the Gabilan Drive extension option. Mitigation Measure 4.13-15 requires routine monitoring of intersection operations by the City at the developers expense to ensure that acceptable levels of service are maintained until either the intersection improvements or the Gabilan Drive extension are complete. No building permit shall be issued for any phase of the project unless intersection levels of service are operating at the City's adopted acceptable threshold LOS D.

Mitigation Measure 4.13-6 and 4.13-15 are required conditions of approval, which will reduce impacts to this traffic facility to a less-than-significant level. If the extension of Gabilan Drive is implemented (see Mitigation Measure 4.13-17), the intersection improvements listed in this measure would not be required unless the monitoring results (Mitigation Measure 4.13-15) indicate they are necessary to maintain acceptable levels of service at the intersection of Main Street and Gabilan Drive or until the roadway extension improvement is complete. No certificate of occupancy shall be issued if the monitoring demonstrates that levels of service at this intersection degrade to an unacceptable level of service, determined by the Director of Public Works, until either the intersection improvements listed in this measure or an extension of Gabilan Drive is complete. Implementation of Mitigation Measures 4.13-6 and Mitigation Measure 4.13-15 are required conditions of approval, which will reduce impacts to this traffic facility to a less-than-significant level. Implementation of Mitigation Measure 4.13-17 and Mitigation Measure 4.13-15 would also reduce impacts to this traffic facility to a less-than-significant level.

Project Impact (Significant): Signal Warrant Met at Andalucia Drive and Gabilan Drive. Although traffic volumes would be reduced at this intersection in comparison to the Miravale III project, traffic generated by the proposed project would cause signal warrants to be met during at least one peak hour at the intersection of Andalucia Drive and Gabilan Drive. This is a significant impact.

Findings: Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. Specifically, the following mitigation measure imposed upon the project, in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan mitigate the impacts to a less-than-significant level:

Mitigation Measure

4.13-7 The intersection of Andalucia Drive and Gabilan Drive will operate at an acceptable level of service, determined by the Director of Public Works, with protected left-turn phasing along Gabilan Drive. The project developer is responsible for the construction of this improvement. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of Director of Public Works.

Evidence: Mitigation Measure 4.13-7 would mitigate project impacts to the Andalucia Drive and Gabilan Drive intersection by requiring that the developer construct the left-turn phasing along Gabilan Drive prior to the issuance of a certificate of occupancy. This improvement ensures that the intersection operates at an acceptable level of service with the addition of project vehicles at the intersection. Implementation of Mitigation Measures 4.13-7 is a required condition of approval, which will reduce impacts to this traffic facility to a less-than-significant level.

Project Impact (Significant): Signal Warrant Met at Orchard Lane and Metz Road. Although traffic volumes would be reduced at this intersection in comparison to the Miravale III project, traffic generated by the proposed project would still cause signal warrants to be met and cause operations to degrade from acceptable LOS C to unacceptable LOS E or worse during at least one peak hour at the intersection of Orchard Street and Metz Road.

Findings: Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. Specifically, the following mitigation measure imposed upon the project, in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan mitigate the impacts to a less-than-significant level.

Mitigation Measure

4.13-8. The intersection of Orchard Lane and Metz Road will operate at an acceptable level of service, determined by the Director of Public Works, with signalization and protected left-turn phasing on Metz Road and split phasing on Orchard Lane. The project developer is responsible for the construction of the improvement. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the Director of Public Works.

Evidence: Mitigation Measure 4.13-8 would mitigate project impacts to the Orchard Lane and Metz Road intersection by requiring that the developer construct the signalization and left-turn phasing along Gabilan Drive prior to the issuance of a certificate of occupancy. This improvement will ensure that the intersection operates at an acceptable level of service and will mitigate traffic impacts at the intersection. Implementation of Mitigation Measures 4.13-8 is a required condition of approval, which will reduce impacts to this traffic facility to a less-than-significant level.

Project Impact (Significant): Unacceptable levels of service at Oak Street and Front Street and Front Street and Nestles Road. Although traffic volumes would be reduced at this intersection when compared to the Miravale III project, traffic generated by proposed project would still cause intersection operations to decline from acceptable LOS C to unacceptable LOS E. This is a significant impact.

Findings: Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. Specifically, the following mitigation measure imposed upon the project, in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan mitigate the impacts to a less-than-significant level.

Mitigation Measure

4.13-9 Intersections of Oak Street and Front Street and Front Street and Nestles Road. Widen Front Street between Nestles Road and Oak Street and add a second eastbound left-turn lane at the intersection of Nestles Road and Front Street. The project developer is responsible for the project's fair share contribution of costs to mitigate the impact to this intersection; however, construction of the Pinnacles Parkway project, funded by Measure X revenues, would improve intersection operations to an acceptable level of service.

If the development of the project precedes completion of the Pinnacles Parkway, the project developer shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance. All necessary fees shall be paid prior to the issuance of any building permits for each phase of development and shall be subject to review bythe approval of the Director of Public Works and approval of the City Council.

Evidence: Mitigation Measure 4.13-9 requires the project developer to submit payment of the City of Soledad traffic impact fee to make a fair share contribution to the improvements that would mitigate impacts at the intersections of Oak Street and Front Street and Front Street and Nestles Road, if the Pinnacles Parkway is not completed by the time the first building permit is issued for the project. Payment of the impact fee would mitigate project impacts to a less-than-significant level. Implementation of Mitigation Measure 4.13-9 is a required condition of approval, which will reduce impacts to this traffic facility to a less-than-significant level.

Impact (potentially significant). Traffic generated by the project would contribute to cumulative operational deficiencies at the intersection of Moranda Road and Front Street and the intersection of San Vicente Road and Gabilan Drive.

Finding. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. Specifically, the following mitigation measure imposed upon the project, in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan mitigate the impacts to a less-than-significant level.

Mitigation Measures

4.13-13. Moranda Road and Front Street: Addition of an east leg to the intersection to serve the Soledad Plaza project site. In order to mitigate potential impacts at this intersection, the project applicant shall submit payment of the City's adopted traffic impact fee in effect at the time of building permit issuance for each phase of development, subject to the review and approval of the City of Soledad Director of Public Works. All fees shall be paid prior to the issuance of any building permit for each phase of development. The fees collected for this improvement may instead be used by the City, at the discretion of the City Council, for the project's proportionate share of costs associated with the construction of an extension of Market Street from San Vicente Road to the Moranda Road/Front Street intersection. Construction of the Market Street extension would mitigate the project's cumulative impact at the intersection of Moranda Road and Front Street.

4.13-14. San Vicente Road and Gabilan Drive: Addition of a west leg to the intersection to serve the Soledad Plaza project site. In order to mitigate potential impacts at this intersection, the project applicant shall submit payment of the City's adopted traffic impact fee in effect at the time of building permit issuance for each phase of development, subject to the review and approval of the City of Soledad Director of Public Works. All fees shall be paid prior to the issuance of any building permit for each phase of development. The fees collected for this improvement may instead be used by the City, at the discretion of the City Council, for the project's proportionate share of costs associated with the construction of an extension of Gabilan Drive from San Vicente Road to the northbound U.S. Highway 101 northbound ramps. Construction of the Gabilan Drive extension would mitigate the project's cumulative impact at the intersection of San Vicente Road and Gabilan Drive.

Evidence. Mitigation Measure 4.13-13 and Mitigation 4.13-14 require the project developer to submit payment of the City of Soledad traffic impact fees to make a fair share contribution to the improvements necessary to mitigate the impact at the intersection of Moranda Road and Front Street and the intersection of San Vicente Road and Gabilan Drive. Implementation of Mitigation Measures 4.13-13 and 4.13-14 are required conditions of approval, which will reduce impacts to this traffic facility to a less-than-significant level.

(l) Utilities and Service Systems

Project Impact: (Significant) Construction of New Water Supply System Infrastructure. To serve the plan area, new water supply infrastructure such as domestic wells and additional storage will be needed to meet the project's water demands. Required infrastructure may include supplemental pumps to provide service to the development on the northeastern side of the plan area that is above the 340-foot contour line. Significant impacts could result from construction of the facilities if not planned and constructed consistent with City-wide infrastructure improvement plans.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. Specifically, the following mitigation measure imposed upon the project, in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan mitigate the impacts to a less-than-significant level:

Mitigation Measure

4.14-1. The developer shall retain an engineer to design and construct the water supply and distribution system for the project integrated with the City's water distribution system consistent with the Urban Water Management Plan and the City's Water Master Plan. Review and approval of the City of Soledad Director of Public Works is required prior to recordation of the first final map. . Prior to the issuance of any building permit in any phase, the developer shall construct the water supply and distribution system for the project based upon the performance standards in the Water Master Plan and with city design criteria in accordance with the approved design-level infrastructure plans, subject to the review and approval of the City of Soledad Director of Public Works.

4.14-2. All water facilities and infrastructure shall be designed with sufficient capacity to accommodate the project and be required to adhere to all applicable City standards in terms of infrastructure sizing, design and construction. Prior to the issuance of any building permit, the project applicant shall submit detailed design-level infrastructure plans in accordance with this measure, subject to the approval of the Director of Public Works.

4.14-3. All water pipelines shall be placed underground and in the utilities right-of-way and constructed to comply with all applicable state and local standards. Prior to the issuance of any building permit, the project applicant shall submit detailed design-level infrastructure plans in accordance with this measure, subject to the review and approval of the City of Soledad Director of Public Works.

4.14-8. Prior to the issuance of any building permit, the applicant/developer shall submit payment of the current City Development Impact Fee for each type of land use in accordance with the adjusted impact fee in effect at the time of building permit issuance subject to the review and approval of the Director of Public Works.

Evidence: Mitigation Measures 4.14-1 - 4.14-3 require the applicant to submit a detailed design-level water infrastructure plan prepared by an engineer that are consistent with City-wide infrastructure improvement plans all local and state standards for construction, design, and sizing subject to the review and approval by the Director of Public Works prior to recordation of the first final map. This will ensure that impacts related to construction of new infrastructure are less than significant. Implementation of Mitigation Measures 4.14-1 through 4.14-3 and 4.13-8 are required conditions of

approval, which will reduce impacts to water supply and distribution infrastructure to a less-than-significant level.

Project Impact (Significant): Construction of New Sewer Infrastructure. New wastewater infrastructure (i.e. distribution lines, treatment facility, etc.) would need to be constructed in order to provide services to the project area. The city is currently developing a wastewater collection system master plan that will identify existing and necessary line sizes and capacity upgrades for future development including the project site. Construction of the identified new infrastructure could result in significant impacts.

Findings: Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. Specifically, the following mitigation measures imposed upon the project, in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan mitigate the impacts to a less-than-significant level:

Mitigation Measures

4.14-8. Prior to the issuance of any building permit, the applicant/developer shall submit payment of the current City Development Impact Fee for each type of land use in accordance with the adjusted impact fee in effect at the time of building permit issuance subject to the review and approval of the Director of Public Works.

4.14-9 All wastewater infrastructure shall be designed with sufficient capacity to accommodate the project and be required to adhere to all applicable City standards in terms of infrastructure sizing, design and construction. Prior to the issuance of any building and/or grading plan, the project applicant shall submit detailed evidence, including but not limited todesign-level infrastructure plans, consistent with the requirements of this mitigation, subject to the approval of the Director of Public Works.

Evidence: The Miramonte Specific Plan includes policies and standards for the provision of adequate wastewater collection and conveyance systems. The plan also requires the construction of wastewater collection infrastructure that will be integrated with the city's existing sanitary sewer system, and requires that the new sewer system within the plan area will be designed, funded, and constructed by the developer, with plans subject to the review and approval of the City Engineer. All development impact fees applicable at the time of issuance of a building permit are required, but may be offset by developer designed, funded, and constructed wastewater system improvements. Mitigation Measure 4.14-9 requires the developer to submit and receive approval for design-level engineered wastewater infrastructure plans consistent with City design criteria and performance standards. In addition, Mitigation measure 4.14-8 requires the developer to pay any applicable development impact fees prior the issuance of building permits, which will mitigate project impacts related to construction of new sewer infrastructure. Implementation of Mitigation Measures 4.14-8 and 4.14-9

arerequired conditions of approval, which will reduce impacts related to wastewater collection and conveyance infrastructure to a less-than-significant level.

Project Impact (Significant) Landfill with Adequate Capacity: The project could generate 3,367.6 tons per year of solid waste from the plan area. Considering the maximum amount of 185,000 tons of solid waste received annually at the Johnson Canyon Landfill, the landfill would have adequate capacity to serve the project, but could impacts could result from construction-generated solid waste disposed at the landfill.

Findings: Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. Specifically, the following mitigation measure imposed upon the project, in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan mitigate the impacts to a less-than-significant level:

Mitigation Measure

4.14-12 Prior to the commencement of construction related activities, the applicant/developer shall prepare and submit a Construction and Demolition Diversion Plan consistent with the requirements of the City's adopted Diversion Plan Ordinance, subject to the review and approval of the Salinas Valley Solid Waste Authority and the City of Soledad. This plan shall identify ongoing implementation measures for the diversion and separation of construction waste to ensure that all construction-generated solid waste is recycled to the greatest extent possible.

Evidence. Mitigation Measure 4.14-12 requires the preparation and implementation of a Construction and Demolition Diversion consistent with city standards that will ensure the greatest rate of recycling of construction-generated solid waste. Implementation of Mitigation Measure 4.14-12 is a required condition of approval, which will reduce impacts related to wastewater collection and conveyance infrastructure to a less-than-significant level.

III.

SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

The Addendum to the Miravale III EIR identifies certain unavoidable or potentially unavoidable adverse impacts of the project, i.e., environmental effects that cannot be reduced to an insignificant level if development in accordance with the project description is implemented. These impacts were also identified as significant and unavoidable in the Miravale III EIR. These impacts are as follows::

(a) Aesthetics

Project Impact (Significant) Permanent Alteration of Visual Character. Implementation of the Miramonte project introduces substantial new development,

including structures of various heights and densities and will permanently change the visual character of 647 acres from rural agriculture fields and open spaces below the 400-foot contour to urban development.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. The proposed project would not result in new significant impacts or substantially increase the severity of previously identified significant impacts. No new information has been identified that indicates the proposed project would have new or more significant impacts than were identified for the original project. Specifically, development consistent with the Miramonte specific plan reduces the size of the formerly proposed project boundary by 273 acres and the development density by 2,081 residential units. Scenic open space areas above the 400-foot contour are designated as Hillside/Open Space and are protected in perpetuity by a recorded conservation easement; thereby, eliminating potential new sources of light and glare from this area. The imposition of mitigation measures 4.1-1, and 4.1-4 – 4.1-6 and 4.1- listed in Section II in addition to the following mitigation measures will reduce the impacts, but not to a less-than-significant level:

Mitigation Measures

4.1-9. In order to minimize tree removal and associated visual impacts, final design-level improvements plans shall retain existing mature eucalyptus and other tree species to the greatest extent possible. Final design-level plans shall be prepared in consultation with a registered arborist/forester to minimize tree removal and ensure the health of remaining trees. Prior to the issuance of any grading and/or building permits, final plans shall be subject to the review and approval of the City of Soledad Director of Public Works. If the removal of existing mature eucalyptus is required the applicant shall submit evidence demonstrating that there are no feasible design alternatives to avoid tree removal. In the event that tree removal is required, the project proponent shall prepare a tree removal and replacement plan for each phase of construction, subject to the review and approval of the City of Soledad Community Development Director. The tree removal and replacement plan shall identify specific grading limits that minimize tree removal, as well as appropriate tree replacement ratios and replanting locations.

4.1-10. Final design plans for the proposed gateways shall include elements, such as signage, landscaping and landscaped center medians, and appropriate architectural detailing consistent with the Miravale III Specific Plan. Prior to issuance of any permit for the construction of any of the four gateways, the project applicant shall submit detailed plans that include the above referenced elements, subject to the review and approval of the City of Soledad.

4.1-11. Final design plans for proposed residential development shall include form, scale, and character elements which emulate the best characteristics of the existing residential neighborhoods, such as single and two-story dwellings with adequate off-street parking, landscaped front yards with trees, and sidewalks. Prior to the issuance

of any building permit for residential development within the Specific Plan area, the project applicant shall submit design-level drawings consistent with the intent of this measure, subject to the review and approval of the City of Soledad. All residential development within the Specific Plan area shall be subject to a conditional use or design-review process as administered by the City of Soledad.

4.1-12. Final design plans for proposed multi-family development shall include useable open space for each dwelling and shall be designed to be integrated with the surrounding neighborhood. Prior to the issuance of any building permit for multi-family development within the Specific Plan area, the project applicant shall submit design-level drawings consistent with the intent of this measure, subject to the review and approval of the City of Soledad.

4.1-13. Final design plans for proposed development shall include a tree planting plan in order to increase the number and density of tree cover within new development areas. Prior to the issuance of any grading and/or building permit, the project applicant shall submit a detailed tree planting plan, subject to the review and approval of the City of Soledad.

Evidence. The site is located in several general plan expansion areas, within which, development of the project site and subsequent changes to the visual character are anticipated by the City of Soledad 2005 General Plan. Mitigation Measures 4.1-1, and 4.1-4 through 4.1-6, and 4.1-9 through 4.1-13 require adherence to specific design and development standards that minimize impacts to the aesthetic value of the visual character of the specific plan area. The Miramonte Specific Plan provides design requirements for all land use designations that include limits on building heights, use of natural colors and materials, and utilization of natural landforms and vegetation to screen development within the specific plan area. As a condition of project approval the project applicant would be required to submit detailed plans, including elevations, site plans, and/or other documentation detailing compliance with applicable development standards, subject to the review and approval of the City of Soledad As a condition of project approval, the developer will implement Mitigation Measures 4.1-1, and 4.1-4 through 4.1-6, and 4.1-9 through 4.1-13, which will reduce potential impacts from permanent alterations to visual character, but not to a less-than-significant level. Therefore, the impacts to the visual character of the site remain significant and unavoidable.

(b) Agricultural Resources

Project Impact (Significant and Unavoidable) Conversion of Important Farmland. The Miravale III EIR determined that the project would convert 760 acres of Prime Farmland to a non-agricultural use. This impact to conversion of agricultural lands due to proposed development was considered to be significant and unavoidable.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. Changes in circumstances have

occurred that would lessen certain impacts, and no new information has been identified that indicates the proposed project would have new or more significant impacts than were identified for the original project. Mitigation Measure 4.2-6, listed below, has been incorporated into the specific plan policies consistent with the 2016 Memorandum of Understanding between the County of Monterey and the City of Soledad, Compensation for conversion of Prime Farmland or Farmland of Statewide Importance to urban uses is required by the memorandum of understanding, using one of four methods, at the discretion of the City Council prior to or concurrent with recordation of the first final subdivision map. The specific plan policies are consistent with the memorandum of understanding requirements. Therefore, the proposed project would not result in new significant impacts or substantially increase the severity of previously identified significant effects. Specifically, the following mitigation measure imposed upon the project lessens the impact, but not to a less-than-significant level:

Mitigation Measure

4.2-6. Concurrent with recordation of a final subdivision map, developers shall provide compensation for conversion of Prime Farmland or Farmland of Statewide Importance to urban uses using one of four methods, at the discretion of the city:

a) provide the in-kind direct purchase/acquisition of an agricultural mitigation easement at a 1:1 ratio and dedicate the easement to an agricultural land trust or other qualifying entity; and/or

b) if available, purchase agricultural banked mitigation credits at a 1:1 ratio from a qualifying entity; and/or

c) pay an in-lieu mitigation fee, which amount shall be determined by the city prior to project approval. The amount of the fee should reasonably be expected to lead to the preservation of agricultural land. Said fee shall be kept by the city in a fund established specifically for agricultural land mitigation purposes; and/or

d) implement other innovative approaches as approved by the city that results in the preservation of agricultural land within areas targeted by the city.

Evidence. The city entered into a memorandum of understanding with Monterey County on March 15, 2016. Compensation for conversion of Prime Farmland or Farmland of Statewide Importance to urban uses is required by the memorandum of understanding, using one of four methods, at the discretion of city to coincide with the time of the recordation of a final subdivision map. The specific plan includes policies that are consistent with the memorandum of understanding requirements, and implement Mitigation Measure 4.2-6. The proposed project would not result in new or greater impacts than those identified in the Miravale III EIR. However, mitigation measure 4.2-6 will ensure compensation for the conversion of Prime Farmland or Statewide Importance to urban uses is provided as required by the 2016 memorandum of understanding. While implementation of 4.2-6 will ensure compliance with the memorandum of understanding

requirements for compensation for conversion of Prime Farmland or Farmland of Statewide Importance to urban uses, the project would still result in the conversion of important farmland which remains a significant and unavoidable impact.

(c) Air Quality

Project Impact (Significant and Unavoidable) Development of the uses consistent with the Miramonte Specific Plan would generate significant operational greenhouse gas (GHG) and criteria air pollutant emissions volumes.

Finding. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. The proposed project would not result in new significant impacts or substantially increase the severity of previously identified significant impacts. No new information has been identified that indicates the proposed project would have new or more significant impacts than were identified for the original project. The following mitigation measures imposed upon the project in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan that mitigate the impacts, but not to a less-than-significant level:

Mitigation Measure

4.3-3 In order to reduce operational greenhouse gas (GHG) and regional criteria air pollutants and ozone precursor emissions to the extent feasible, the applicant/project proponent shall prepare and submit for Planning Director approval a GHG and CAP Reduction Plan (Emissions Reduction Plan) prior to recordation of the first final map. The Emissions Reduction Plan shall include a description of the measures that are proposed to be implemented, including one or more of the measures contained in Appendix (F-1) of the Miravale III Specific Plan Final EIR. The Emissions Reduction Plan shall be approved by the city prior to construction of structures and site improvements, including but not limited to, determination of substantial conformance, building permits, and grading permits. For each of the measures not included, the applicant shall describe why the measure was not included. The Plan shall present estimated reductions in GHGs and criteria air pollutants emissions based on best available information sources.

No certificate of occupancy for any phase, or portion thereof, of the project shall be granted until all of the feasible, applicable measures have been implemented by the applicant/project proponent. The proponent shall demonstrate that measures that must be implemented throughout the life of the project are included in all applicable CC&Rs, property deeds, commercial center rules and regulations, and draft tenant lease agreements.

4.3-4. Fireplaces and stoves shall be gas-fired and meet U.S. Environmental Protection Agency certification requirements. The installation or operation of a wood-burning fireplace or a wood-burning stove shall be prohibited in

perpetuity on all residential properties in the Miramonte I Specific Plan Development. This restrictive covenant shall be recorded on the title of all parcels in the Miramonte I Specific Plan area and shall run with the land.

Evidence. Development associated with the Miravale III specific plan would have resulted in significant GHG emissions volumes and long-term operational emissions of ozone precursor pollutants in exceedance of Monterey Bay Air Resources District thresholds. Criteria air pollutant emissions for the former project were estimated at 193 lbs per day VOC (exceeding the 137 lb threshold) and 226 lbs per day PM_{10} (exceeding the 82 lb threshold). In addition to the requirements of Mitigation Measure 4.3-2a, Mitigation Measure 4.3-3 requires the preparation of an emissions reduction plan to identify measures that will be undertaken to reduce operational criteria air pollutant and GHG emissions volumes. Examples of reduction measures applicable to the proposed project are included in the Miravale III Final EIR Appendix F-1, incorporated herein by reference that will reduce on-site project-related emissions. Additionally, Mitigation Measure 4.3-4 prohibits the installation of wood-burning stoves and appliances in residential development to reduce criteria pollutant emissions of particulate matter and other criteria air pollutants during operations. The plan is required to be submitted prior to any changes made to the first final map. Emissions are reduced by implementation of these measures, but not to a less-than-significant level. The currently proposed project is smaller and would generate fewer GHG emissions than the original project although emissions volumes would still be large enough to warrant preparation of an emissions reduction plan as identified in Mitigation Measures 4.3-3 and 4.3-4. Implementation of each of these measures is required as a condition of project approval, which will reduce project-related operational GHG and criteria air pollutant emissions, but not to a less-than-significant level. Therefore, impacts would remain significant and unavoidable.

(d) Noise

Project Impact (Significant and Unavoidable). Project Generated Traffic Noise. Traffic volume increases from the project would increase traffic noise along the existing local roadway network. In some locations, there would be a substantial, permanent increase in noise levels at sensitive receptors.

Findings. Changes or alterations have been made or required in the project that avoid or lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. Development consistent with the Miramonte specific plan would reduce the size of the project boundary by 273 acres and the development density by 2,081 residential units. The current project would not result in new significant noise effects or substantially increase the severity of previously identified significant effects, no significant changes in noise related circumstances have occurred that would increased noise generation, and no new information has been identified that indicates the proposed project would have new or more significant noise impacts than were identified in the Miravale III EIR. Specifically, the following mitigation measures imposed upon the project lessen impacts, but not to a less-than-significant level:

Mitigation Measure

4.10-4 The project shall incorporate noise reduction methods into all improvement plans to reduce transportation noise subject to the review and approval of the City of Soledad Director of Public Works or Building Official as applicable. Methods to reduce noise on the project site may include the following measures:

- Pave and re-pave streets with "quieter" pavement types, such as Open-Grade Rubberized Asphaltic Concrete, that would reduce noise levels by 2 to 3 dBA depending on the existing pavement type, traffic speed, traffic volumes, and other factors. All new and improved streets within the project area shall use quieter pavement types.
- Implement new or larger noise barriers that may reduce noise levels by 5 dBA CNEL in areas that would not impair access requirements. Final design of such barriers, including an assessment of their feasibility and reasonableness, must be approved by the City during project-specific development applications. An increase in barrier height per foot equates to approximately 1 dBA noise reduction. However, noise barriers must be considered as a last resort to alternative noise reduction methods per the City of Soledad General Plan.
- Install traffic calming measures to slow traffic and provide qualitative improvement by smoothing out the rise and fall in noise levels caused by speeding vehicles. For each 5 mph reduction in average speed, noise generation is reduced by approximately 1 dBA.Provide affected residences with building sound insulation, such as sound rated windows and doors to reduce interior noise levels to below the 45 dBA CNEL noise standard.

Evidence. A noise report was prepared for the Miravale III EIR which concluded measures such as repaving of area roadways, the replacement or construction of noise barriers, traffic calming, and sound insulation, noise barriers and sound insulation treatments would be required to be installed on private property necessitating agreements with each property owner on affected local streets. Therefore, it may not be reasonable or feasible to reduce project-generated traffic noise at all affected receivers. If the City determines that the mitigation measures would not be feasible, the impact will be considered significant and unavoidable. The noise report concluded that with mitigation noise levels might still be substantially and permanently increased in nearby residential areas. Development consistent with the Miramonte specific plan would reduce the size of the project boundary by 273 acres and the development density by 2,081 residential units, and also reduce project-related traffic volumes. The identified measures to reduce the project traffic-related noise levels would still apply. Some noise reduction levels require individual homeowner cooperation; therefore, they cannot be guaranteed. Implementation of Mitigation Measure 4.10-4 is required as a condition of project approval, which will reduce project-related mobile-source noise levels, but potentially not to a less-than-significant level. Therefore, the impact would remain significant and unavoidable.

Project Impact (Significant and Unavoidable). Construction Noise. Existing and proposed noise-sensitive land uses would be exposed to construction noise levels in excess of the significance thresholds for a period of more than one construction season (one year). The city considers construction noise lasting more than one year to be significant.

Findings. Changes or alterations have been made or required in the project that avoid or substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. Changes in circumstances have occurred that would lessen certain impacts (reduced project size and scale), and no new information has been identified that indicates the proposed project would have new or more significant impacts than were identified for the original project. Therefore, the proposed project would not result in new significant impacts or substantially increase the severity of previously identified significant effects. However, the duration of construction would extend beyond one construction season. The following mitigation measures imposed upon the project, in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan mitigate the impacts, but not to a less than significant level:

Mitigation Measure 4.10-5. Noise-generating activities at the construction site or in areas adjacent to the construction site associated with the project in any way should be restricted to the hours of 7:00 a.m. to 7:00 p.m., Monday through Friday, and 8:00 a.m. to 6:00 p.m. on Saturdays, unless otherwise approved by the City. No construction activities should occur on Sundays or holidays, including New Years and 4th of July.

4.10-6. Equip all internal combustion engine driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment. 4.10-7 Locate stationary noise generating equipment (e.g., portable concrete crusher) as far as possible from sensitive receptors. Construct temporary noise barriers to screen stationary noise generating equipment when located near adjoining sensitive land uses.

4.10-8. Utilize "quiet" air compressors and other stationery noise sources where technology exists.

4.10-9. Route all construction traffic to and from the project site via designated truck routes where possible. Prohibit construction related heavy truck traffic in residential areas where feasible.

4.10-10. Control noise from construction workers' radios to a point that they are not audible at existing residences bordering the project site.

4.10-11. Consider the use of multiple-pile drivers to expedite construction where pile driving is required. (Although noise levels generated by multiple pile drivers would be higher than the noise generated by a single pile driver, the total duration of pile driving activities would be reduced.)

4.10-12. Use temporary noise control blanket barriers to shroud pile drivers or erect in a manner to shield the adjacent land uses. Such noise control blanket barriers can be rented and quickly erected.

4.10-13. Pre-drill foundation pile holes to minimize the number of impacts required to seat the pile. Predrilling reduces the number of blows required to seat the pile and is a standard construction noise control technique.

4.10-14. The contractor shall prepare a detailed construction management plan identifying the schedule for major noise-generating construction activities. The construction management plan shall identify a procedure for coordination with the adjacent noise sensitive facilities so that construction activities can be scheduled to minimize noise disturbance. Prior to the issuance of any grading and/or building permit, the project applicant shall submit a detailed construction management plan to the City of Soledad for review and approval.

4.10-15. The project applicant shall designate a "disturbance coordinator" who shall be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall require that reasonable measures warranted to correct the problem are implemented. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule. Prior to the issuance of any grading and/or building permit, the project proponent shall provide the City of Soledad with the contact information for the designated “disturbance coordinator.”

Evidence. Although Mitigation Measures 4.10-6 through 4.10-15 would reduce noise generated by construction, the impact would remain significant and unavoidable as a result of the extended period of time that adjacent receivers would be exposed to construction noise.

(e) Population and Housing

Project Impact (Significant and Unavoidable). Population Growth/Growth Inducing effects. The proposed specific plan could result in a population addition of 9,712 people at build-out. The project also includes commercial uses that would generate 218 jobs with additional employment at the schools and other public facilities. Growth in population would increase demands on existing community facilities, requiring construction of new facilities that could cause significant environmental effects.

Findings. Changes or alterations have been made or required in the project that lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. Changes in circumstances have occurred that would lessen certain impacts (reduced project size and scale), and no new information has been identified that indicates the proposed project would have new or more significant impacts than were identified for the original project. Therefore, the proposed project would not

result in new significant impacts or substantially increase the severity of previously identified significant effects. Development consistent with the Miramonte Specific Plan would reduce the size of the project boundary by 273 acres and the development density by 2,081 residential units. The reduced scale of the project would still result in significant increased demands for community facilities and infrastructure, although to a lesser extent than the Miravale III EIR.

Evidence. Although the project site is located in an area that has been identified for future population growth in city's general plan and would result in 36.1 percent less growth than the Miravale III project, the project would still result in a significant growth-inducing impacts through the introduction of new sources of employment and a significant portion of the city's projected population growth. Consequently, additional demand would be placed on existing facilities. This remains a significant and unavoidable impact that cannot be reduced to less-than-significant level with mitigation.

(f) Traffic and Circulation

Impact (Potentially Significant and Unavoidable). Unacceptable LOS at Front Street and U.S. Highway 101 SB Ramps: Traffic generated by the proposed project would cause LOS F operations on the U.S. Highway 101 southbound off-ramp to Moranda Road and Front Street at the Moranda Road Interchange during at least one peak hour. Improvements to the interchange and Front Street would be required to accommodate greater than 42 percent of trips generated by development consistent with the Miramonte specific plan uses.

Finding. Changes or alterations have been made or required in the project that substantially lessen the significant environmental effect as identified in the Miravale III EIR or as clarified in the EIR Addendum. Specifically, the following mitigation measure imposed upon the project, in addition to the reduced size and intensity of development allowed by the adopted Miramonte Specific Plan reduce the impact to this intersection to a less-than-significant level; however, this intersection is under the jurisdiction of Caltrans and not under the control of the City. If Caltrans does not implement improvements, the impact would be significant and unavoidable.

Mitigation Measure

4.13-11 U.S. Highway 101 Interchange at Moranda Road/Front Street. Prior to the issuance of any building permit the project developer shall pay the project's fair share of TAMC Regional Development Transportation Impact fees. These fees may be used by TAMC for the construction of interchange improvements that may include signalizing the intersection and adding a second lane on the off-ramp and/or reconfiguration and/or reconstruction of the U.S. Highway 101 interchange at Moranda Road/Front Street.

However, improvements to the interchange are within the jurisdiction of Caltrans and not under the control of the city. Should the improvement of the interchange not be implemented by Caltrans the impact would be considered significant and unavoidable.

All required traffic impact fees shall be subject to review by the Director of Public Works and approval of the City Council.

Evidence. Development consistent with the Miramonte Specific Plan would generate approximately 40 percent fewer vehicle trips than the originally proposed project. The payment of Regional Traffic impact fees mitigates the project's contribution to impacts to the interchange. These fees may be used by TAMC toward construction of interchange improvements that may include signalizing the intersection and adding a second lane on the off-ramp and/or reconfiguration and/or reconstruction of the U.S. Highway 101 interchange at Moranda Road/Front Street. As a condition of approval the developer will implement Mitigation Measure 4.13-11, which will reduce the project's impact to this Caltrans facility to less than significant. However, improvements to the interchange are within the jurisdiction of Caltrans and not under the control of the City. Should the improvement of the interchange not be implemented by Caltrans the impact would be significant and unavoidable.

IV

CUMULATIVE IMPACTS

The proposed project would contribute to cumulative impacts identified in the Miravale III EIR including significant and unavoidable cumulative impacts related to aesthetics, agriculture, air quality, GHG emissions, noise, and traffic. With the exceptions of these resource areas, the cumulative impacts and project contributions to them will either be less than cumulatively considerable or reduced to a less-than-cumulatively-considerable level with implementation of standard conditions of project approval and implementation of the mitigation measures identified in the EIR Addendum. Due to the lengthy implementation timeline of the project and the potential for the project to contribute to unacceptable levels of service at Front Street intersections and roadway segment levels of service indicates the need for intersection improvements or construction of either or both of the Market Street extension identified in Mitigation Measure 4.13-16 and/or the Gabilan Drive extension identified in Mitigation Measure 4.13-17, and/or the U.S. Highway 101/State Route 146 Bypass (Pinnacles Parkway) identified in Mitigation Measure 4.13-9 to reduce the impacts to less than significant. Routine monitoring conducted by the City at the developers' expense and overseen by the Director of Public Works is required by Mitigation Measure 4.13-15, and ensures that no building permit shall be issued for any phase of the project unless intersection levels of service are operating at the City's adopted acceptable threshold LOS D.

The EIR Addendum does not change the conclusions regarding the project's contribution to cumulative roadway impacts. The proposed project would not result in new or greater

cumulatively considerable contributions to cumulative impacts that were not already identified and addressed in the certified Miravale III EIR.

V.
STATEMENT OF OVERRIDING CONSIDERATIONS

The California Environmental Quality Act and the State CEQA Guidelines provide that:

> "CEQA requires the decision-maker to balance the benefits of a proposed project against its unavoidable adverse risks in determining whether to approve the project. If the benefits of the proposed project outweigh the unavoidable adverse environmental effects, the adverse impacts may be considered acceptable.
>
> Where the decision of the public agency allows the occurrence of significant effects which are identified in the final EIR but are not at least substantially mitigated, the agency shall state in writing the specific reasons to support its action based on the final EIR and/or other information in the record. This statement may be necessary if the agency also makes a finding under Section 15091(a)(2) or (a)(3).
>
> If any agency makes a statement of overriding considerations, the statement should be included in the record of the project approval and should be mentioned in the Notice of Determination." (Section 15093 of the State CEQA Guidelines).

Project benefits are defined as those improvements or gains to the community that will not occur without the project.

Project Impacts

As previously discussed, development of the project site will result in significant and unavoidable individual and cumulative impacts related to aesthetics, agriculture, air quality, GHG emissions, noise, and traffic and circulation.

Project Benefits

The City of Soledad finds that the following substantial benefits will occur as a result of approval of the project:

- Provision of a mixed-use development of housing, parks, schools, fire and/or police sub-station, and neighborhood commercial uses guided by a specific plan to serve the local area and provide a balance of uses, consistent with the general plan;

- Preservation of the scenic hills above the 400-foot elevation contour as open space for passive recreational use, with directed public access, space

for infrastructure to serve the plan area, alternative energy, a community room or clubhouse, and grazing; and

- Provision of a mix of housing types to serve the housing needs of the city consistent with the general plan housing element through policy requirements for the development of a range of low, very low, affordable and inclusionary housing in an amount greater than current regional housing needs, and housing opportunities for senior citizens by providing a range of moderate-income housing types on a variety of lots for the existing and future residents of Soledad; and

- Reserving land for two public schools and new police and fire department substations; and

- Reserving land for commercial development to allow for future economic growth within the city and assist in maintaining a local jobs/housing balance and reducing vehicle trips; and

- Provision of integrated water, wastewater, and storm drainage infrastructure improvements on and off the site; and,

- Provision of storm water drainage system that retains post-development runoff within the plan area, aiding in recharging the groundwater basin, and minimizing or avoiding impacts to downstream facilities; and

- Provision of complete streets to serve the plan area and connect to the surrounding road network, directing most trips by way of San Vicente Road, in addition to improving San Vicente Road and facilitating construction of the Gabilan Drive Extension identified in the general plan; and

- Provision of interconnected public parklands to serve the recreational needs of the development and surrounding community by dedicating land sufficient to provide public park and recreational facilities at a minimum ratio of five acres per 1,000 persons; and

- Provision of 150 acres of open space and an opportunity to extend the Golden Stairway trail system identified in the general plan; and

- Supports the local economy by increasing income within the plan area through permits, fees, property taxes, and job creation.

The City of Soledad City Council has considered each of the significant and unavoidable adverse environmental impacts identified above in deciding whether to approve the project. Pursuant to Public Resources Code 21081 (CEQA) the City of Soledad City

Council makes the following findings in adopting this statement of overriding conditions for each significant impact:

(1) Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment.

(2) Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.

(3) Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the environmental impact report.

Although substantial evidence demonstrates that the unavoidable impacts identified in the Final EIR and EIR Addendum and its Errata will be substantially lessened by the mitigation measures incorporated into the project, the City recognizes that approval of the project will nonetheless result in certain unavoidable effects.

After balancing the project's environmental risks with its benefits described above, the City specifically finds that, despite the reduced scale of the Miramonte Specific Plan project, and to the extent that adverse or potentially adverse impacts set forth above have not been mitigated to a level of insignificance, that specific economic and social benefits, namely, the provision of affordable housing stock that exceeds regional housing need requirements, preservation of the scenic hillsides above the 400-foot contour, an increase in public parks and recreational facilities, utility and roadway infrastructure improvements on San Vicente Road, new school sites and a police and fire substation site, outweigh the significant effects on the environment. Furthermore, the City specifically finds that any one and each of the foregoing benefits constitutes a significant consideration sufficient to approve the project despite the unavoidable impacts identified herein. Therefore, each of the foregoing benefits is adopted as an overriding consideration with respect to each of the significant unavoidable impacts individually.

Additionally, for the potentially significant and unavoidable impacts to Caltrans facilities, the City specifically finds that the potentially adverse impacts set forth above have not been mitigated to a level of insignificance, that the necessary changes identified herein are not under the control of the City but are within the responsibility and jurisdiction of another public agency (Caltrans) and can and should be, adopted by that other agency.

Each overriding consideration is severable from any other consideration should one or more consideration be shown to be legally insufficient for any reason. The Statement of Overriding Considerations for the project is thus adopted.

EXHIBIT D
City of Soledad City Council Resolution 5431

ERRATA FOR THE ADDENDUM TO THE MIRAVALE III SPECIFIC PLAN EIR (MIRAMONTE SPECIFIC PLAN AND VTM PROJECT)

This Exhibit presents revisions to the EIR Addendum (Dated April 5, 2018) analysis and mitigation measures made in response to concerns raised and issues discussed by the Planning Commission and City Council during their consideration of the proposed Miramonte Specific Plan and Vesting Tentative Map project. Additions and deletions are presented in underline and strikethrough text.

AESTHETICS, SECTION 3.2

Mitigation Measure 4.1-4 is revised as follows:

4.1-4. Final design plans for proposed development shall utilize natural landforms and vegetation for screening structures, access roads, building foundations, cut and fill slopes, and exterior lighting. Roads, parking, and utilities shall be designed to minimize visual impacts. Prior to the issuance of any grading and/or building permit, the project applicant shall submit design-level drawings demonstrating compliance with this measure, subject to the review and approval of the City of Soledad Community and Economic Development Director. ~~If an alternative design would minimize impacts, the applicant shall submit evidence demonstrating that the alternative design is infeasible.~~

AGRICULTURAL RESOURCES, SECTION 3.3

Mitigation Measure 4.2-1 text is modified as follows:

4.2-1 Adequate buffer areas between urban and agricultural uses, including a minimum 50-foot buffer along the northern and eastern boundary of the project site and a 200-foot buffer along the western boundary, shall be incorporated into the proposed project. These buffers shall also be supplemented with physical barriers in areas where residential and commercial structures are to be located, as recommended by the Agricultural Resources Report contained Appendix T-1. The 200-foot buffer along the project's western boundary may be reduced upon demonstration to the satisfaction of the ~~city~~City Council that other measures, including those recommended in Mitigation Measure 4.2-2, will adequately protect human health and safety and minimize potential conflicts, and provided that any such reduction shall not result in a buffer width of less than 100 feet. The County of Monterey Agricultural Commissioner shall be consulted regarding the adequacy of the proposed buffers and physical barriers and evidence of said consultation and recommendation shall be submitted to the city prior to approval of the tentative map. Prior to the recordation of any final map, the project applicant shall submit evidence in the form of agricultural setbacks delineating buffer locations consistent with the recommendations contained in the Agricultural Resources Report contained in the Miravale III EIR Appendix T-1, subject to the review and approval of the City of Soledad. All agricultural buffers, excluding public right-of-ways, shall be maintained by the Project Proponent and/or his/her successor(s) in interest through easements dedicated to the city or other entity until such time that the adjoining agricultural operation and use no longer exists.

Mitigation Measure 4.2-5 is modified as follows:

4.2-5 Prior to the recordation of final map(s)~~issuance of any permit~~, the project applicant shall have recorded a right-to-farm notice on parcels adjacent to existing and ongoing agricultural uses consistent with the requirements of the City of Soledad General Plan, subject to the review and approval of the City of Soledad City Council.

AIR QUALITY, SECTION 3.4

Mitigation measure 4.3-3 is modified as follows:

4.3-3 No certificate of occupancy for any phase, or portion thereof, of the project shall be granted until all of the ~~feasible, applicable~~ measures included in the approved Emissions Reduction Plan have been implemented by the applicant/project proponent. The proponent shall demonstrate that measures that must be implemented throughout the life of the project are included in all applicable CC&Rs, property deeds, commercial center rules and regulations, and draft tenant lease agreements.

BIOLOGICAL RESOURCES, SECTION 3.5

All references to the California Department of Fish and Game are updated to California Department of Fish and Wildlife (CDFW).

The first sentence of Mitigation Measure 4.4-2 is revised as follows:

~~Prior to the onset of~~During construction, trees and vegetation not planned for removal as identified on the improvement plans shall be protected during construction to the maximum extent feasible.

Mitigation Measure 4.4-3 is revised as follows:

4.4-3 Following construction, the disturbed areas that are proposed as parks and landscaping areas shall be restored to pre-project contours and revegetated by the contractor using locally-occurring native species and native erosion control seed mix~~ to the maximum extent feasible~~. Landscape plans for all such areas adjoining natural open space, including landscaped strips within right-of-ways, shall be reviewed by a qualified biologist to ensure that only native and non-invasive species are included in the planting palette and shall include a supplemental note and/or report by said biologist documenting compliance with this requirement. Landscape plans for other disturbed areas or for designated parks shall utilize native species ~~to the extent feasible~~and avoid the use of all invasive species; such plans shall include a note from the licensed professional who prepared the plan(s) or from a qualified biologist retained by the developer documenting Applicant compliance with this requirement. Prior to the issuance of any grading and/or building permit, the project applicant shall submit landscape plans prepared by a licensed landscape architect for review and approval by the City of Soledad Community Development Director.

The first sentence of Mitigation Measure 4.4-7 is revised as follows:

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4.4-7 A qualified botanist shall be retained by the developer to conduct preconstruction surveys for Lemmon's jewelflower during the typical flowering season of this species (March-May), to determine the presence/absence of this species.

The last paragraph of Mitigation Measure 4.4-7 is revised as follows:

Avoidance shall be confirmed by the City prior to ~~the time~~approval of the first final~~tentative~~ map ~~approval for this phase of the project~~. If impacts to the Lemmon's jewelflower population(s) cannot be avoided, mitigation shall include preservation on- or off-site at a minimum 1:1 ratio (one plant preserved for each plant impacted), or restoration on- or off-site at a minimum 3:1 ratio (three plants planted for each plant impacted).

Mitigation Measure 4.4-8 is revised as follows:

4.4-8 The developer shall record the conservation easement for all areas above the 400 foot elevation contour ~~prior to~~ concurrent with recordation of the first final map or the onset of any other site disturbance

The first and second paragraphs of Mitigation Measure 4.4-10 are revised as follows:

4.4-10 Pre-construction surveys for kit fox dens shall be required for all development phases of the future project. The preconstruction surveys shall be conducted per Standardized Recommendations for the Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance (USFWS 1999b), as updated. Potential dens (including man-made structures) and known dens shall be protected by minimum buffers of 50 feet and 100 feet, respectively. If an occupied or unoccupied natal den is detected, no construction shall occur for the Phase until the USFWS and CDFG have been contacted and authorization to proceed has been obtained by the applicant. Pre-construction surveys shall be conducted by a qualified biologist retained by the developer no less than 14 days and no more than 30 days prior to the start of any ground disturbing activities to locate kit fox den sites.

In addition to pre-construction surveys, a qualified biologist retained by the developer, meeting the required qualifications described in the U.S. Fish and Wildlife Service Standardized Recommendations for the Protection of the San Joaquin Kit Fox Prior to Ground Disturbance, June 1999 (USFWS Recommendations for SJKF), shall be on-site to monitor construction activities for the San Joaquin kit fox.

The first sentence of the third bullet point of Mitigation Measure 4.4-11 is revised as follows:

If the biologist determines that avoidance of an active badger den is not feasible, the biologist shall coordinate with CDFGCDFW on the appropriate way to evict/exclude badgers from their dens.

The first sentence of Mitigation Measure 4.4-12 is modified as follows:

A qualified bat specialist retained by the developer shall conduct site surveys to characterize bat utilization of the site and species composition present (techniques utilized to be determined by the biologist).

The last sentence of the fourth bullet point of Mitigation Measure 4.4-12 is modified as follows:

If the biologist determines that disruption of a maternity roost cannot be avoided, a depredation permit would be required

Mitigation Measure 4.4-14 is modified as follows:

4.4-14 Burrowing owls are known to occupy burrows in mixed grassland, active agricultural, and fallow agricultural portions of the Miramonte site during the non-breeding season (breeding season utilization not observed in the course of protocol-level surveys). A qualified biologist retained by the developer shall conduct preconstruction surveys to locate active breeding and/or wintering burrowing owls (depending on season) no more than 30 days prior to the start of construction. If ground disturbing activities are delayed or suspended for more than 30 days after the preconstruction survey, the site shall be resurveyed. The survey shall conform to the CDFG 1995 Staff Report protocol. Wherever burrows are identified, impact avoidance and mitigation measures shall be implemented (previously mapped burrow locations may not be occupied and/or new burrows may be occupied). If occupied burrows are found the avoidance and mitigation measures~~Please refer to the mitigation measures~~ regarding burrowing owl identified in the Preliminary BA (June, 2008) ~~for avoidance and mitigation measures that~~may be implemented based on the results of these surveys.

The first sentence of Mitigation Measure 4.4-15 is modified as follows:

If project activities will initiate during the typical avian nesting season (February 15– August 1), a qualified biologist retained by the developer shall conduct focused preconstruction surveys no more than 14 days prior to initiation of construction activities for nesting birds, including (but not limited to) white-tailed kite, northern harrier, loggerhead shrike, and horned lark, in all areas that may provide suitable nesting habitat within 300 feet of the construction area.

The first sentence of Mitigation Measure 4.4-15 is modified as follows:

If project activities will initiate during the typical avian nesting season (February 15– August 1), a qualified biologist retained by the developer shall conduct focused preconstruction surveys no more than 14 days prior to initiation of construction activities for nesting birds, including (but not limited to) white-tailed kite, northern harrier, loggerhead shrike, and horned lark, in all areas that may provide suitable nesting habitat within 300 feet of the construction area.

The first sentence of Mitigation Measure 4.4-17 is modified as follows:

Protocol-level CRLF surveys (USFWS, August 2005) shall be completed by a qualified biologist retained by the developer at each aquatic resource present within project boundaries.

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Mitigation Measure 4.4-20 is revised as follows:

A representative shall be appointed by the City who will be the contact source for any employee or contractor who may inadvertently kill or injure a special-status species or find one dead, injured, or trapped. The representative shall be legally responsible to notify USFWS and CDFW immediately in the event that "take" of any special-status wildlife species occurs. The representative shall be identified during the Employee Education Program and his/her contact information shall be provided to USFWS and CDFW. The representative will be present onsite every day and will be accessible to regulatory agency personnel.

CULTURAL RESOURCES, SECTION 3.5

Mitigation Measure 4.5-1 is revised as follows:

Relocation of House. The historic Morris Lorentzen House on site shall be relocated in accordance with the relocation plan prior to the issuance of a grading permit for development of the storm water detention basin in the southwest corner of the Specific Plan area. The project proponent shall ensure that the design and implementation of the relocation project is consistent with the Secretary of the Interior's Standards for Rehabilitation and Illustrated Guidelines for Rehabilitating Historic Buildings (U.S. Department of the Interior, National Park Service, 1992), the California Historical Building Code, and the Mitigation Monitoring and Reporting Plan (MMRP) for the project. Prior to recordation of the final map, the project applicant shall submit a relocation plan prepared by a qualified professional in accordance with the general recommendations of Moving Historic Buildings, a publication of the National Park Service, to the City of Soledad for review and approval. The relocation plan shall discusses planning, research, and recording prior to the move. In addition, the relocation plan shall identify siting, foundation construction, building reassembly, and restoration work after a successful move. See John Obed Curtis, Moving Historic Buildings, Heritage Conservation and Recreation Service, Publication No. 9, US Department of Interior (1979) for further details. Prior to the relocation, the applicant shall provide verification of compliance with ~~related mitigations~~mitigation measure 4.5-2 to the City of Soledad Community Development Department Director for review and approval. In addition, the structure shall be relocated prior to the issuance of any building and/or grading permit for development within the Specific Plan area.

The second paragraph of Mitigation Measure 4.5-2 is amended as follows:

~~Prior to the recordation of the final map, the project applicant shall submit a relocation plan, consistent with Mitigation Measure 4.5-1, which incorporates protective measures consistent with the intent of this measure.~~ Prior to the relocation of the structure, the applicant shall submit evidence from a qualified professional demonstrating that protective measures have been implemented, subject to the review and approval of the City of Soledad.

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The last sentence of Mitigation Measure 4.5-3 is revised as follows:

The project ~~applicant~~developer shall submit detailed documentation prepared by a qualified professional demonstrating that all repairs have been completed in accordance with applicable standards prior to the issuance of ~~any building permit~~the first certificate of occupancy.

Mitigation Measure 4.5-6 is revised as follows:

Coordination. The project proponent shall coordinate with and inform interested parties, including, but not limited to the Soledad Historical Society and the Monterey County Historical Society, regarding the status of its compliance with the mitigation measures set forth in the MMRP~~, as necessary~~.

HYDROLOGY AND WATER QUALITY, SECTION 3.6

The last sentence of Mitigation Measure 4.6-3 is revised as follows:

Prior to the issuance of any grading and/or building permit for new public facilities, including but not limited to new schools, hospitals, and fire or police stations, a probabilistic seismic hazards assessments shall be prepared and submitted to the Soledad Unified School District and City of Soledad ~~Director of Public Works~~Building Official for review and approval.

The first sentence of Mitigation Measure 4.6-4 is revised as follows:

4.6-4 Per the approved SWPPP, the following measures shall be implemented, where deemed appropriate by the Director of Public Works, to control erosion:

GEOLOGY, SOILS, AND MINERAL RESOURCES, SECTION 3.7

The text of Mitigation Measure 4.6-8, is revised as follows:

An engineering geologist shall be retained by the developer to provide site-specific geologic design criteria for debris flow hazard areas once the final project plans are available. Diversion or retaining structures shall be designed based on recommendations by a geotechnical engineer, subject to review and approval of the City of Soledad Public Works Director. Prior to the recordation of each final map, the project applicant shall submit evidence demonstrating that adequate design measures are incorporated to mitigate potential hazards to acceptable engineering standards, subject to the review and approval of the City of Soledad Public Works Director.

The last line of Mitigation Measure 4.6-9 is revised as follows:

Prior to the recordation of each final map, the project applicant shall submit evidence demonstrating that adequate measures are incorporated to mitigate potential hazards to acceptable engineering standards, subject to the review and approval of the City of Soledad ~~Director of Public Works~~Building Official.

HAZARDS AND HAZARDOUS MATERIALS, SECTION 3.8

The text of Mitigation Measure 4.8-3 is revised as follows:

All design-level plans and supporting details shall be submitted to the City of Soledad Director of Public Works for review and approval prior to recording the first final map. ~~The VTM and Specific Plan shall be revised as necessary to reflect final locations of drainage facilities, subject to the review and approval of the Director of Public Works.~~

The last paragraph of Mitigation Measure 4.8-4 is revised as follows:

Alternative types of LID strategies and measures may also be approved provided evidence is submitted to the City of Soledad by a qualified engineer at the developer's expense, demonstrating that said strategies will achieve the intended result of this mitigation measure. Alternative strategies must be reviewed and approved Public Works Director.

LAND USE AND PLANNING, SECTION 3.10

The first paragraph and last bullet item of Mitigation Measure 4.10-4 is revised as follows:

4.10-4 The project shall incorporate noise reduction methods into all improvement plans to reduce transportation noise, subject to the review and approval of the City of Soledad Director of Public Works or Building Official as applicable. Methods to reduce noise on the project site may include the following measures:

- Provide affected residences with building sound insulation, such as sound rated windows and doors~~, on a case-by-case basis~~ to reduce interior noise levels to below the 45 dBA CNEL noise standard.

POPULATION AND HOUSING, SECTION 3.12

The following changes are made to the text, page 3-88:

The specific plan is consistent with the housing element's integrated affordable housing requirementsHowever, to ensure final plan consistency mitigation measure 4.11-3 identified in the Miravale III EIR remains applicable to this project and is modified as follows.

Mitigation Measure 4.11-3 is amended as follows:

4.11.3 The applicant's approved ~~shall enter into a~~ Development Agreement shall include a Housing Agreement per Program 4.3 of the City's Housing Element with the City that prescribes

the parameters of the development of affordable housing consistent with the City's Housing Element, Inclusionary Housing Ordinance, and the revised Specific Plan. The Development Agreement shall be reviewed and approved by the City of Soledad City Council prior to or concurrent with ~~project approval~~recording of the first final map.

PUBLIC SERVICES AND RECREATION, SECTION 3.13

Police and Fire

The last sentence of Mitigation Measure 4.12-1 is revised as follows:

This mitigation measure shall not be construed as prohibiting the implementation of infrastructure necessary to serve the proposed facility or facilities~~or the need of the proposed project~~.

Schools

Based on information provided by the Soledad Unified School District (letter dated August 28, 2018) the following change is made to Mitigation Measure 4.12-4, pp 3-93 – 3-94:

4.12-4 Prior to ~~project approval~~ recording of first final map, the project Developer shall submit an agreement with evidence demonstrating that ~~an additional~~two school sites of sufficient size will be dedicated within the project boundaries~~ to meet project demands~~, subject to the review and approval of the City of Soledad and the Soledad Unified School District. ~~An agreement shall be established between the developer and/or successors in interest and the Soledad Unified School District that establishes the timing of the school construction or improvements and financing obligations. In addition to the dedication of land, the developer(s) will pay school impact fees as prescribed by the law in effect at the time of payment, unless otherwise dictated by a development agreement or permit conditions.~~ The agreement shall be established between the developer and/or successors in interest and the Soledad Unified School District that establishes the sites to be dedicated.

Based on information provided by the Soledad Unified School District (letter dated August 28, 2018) the following change is made to Mitigation Measure 4.12-5, page 3-94:

4.12-5 In addition to the dedication of land, the developer(s) will pay school impact fees as prescribed by the law in effect at the time of payment. The applicant/developer shall pay a school impact fee for each type of development pursuant to the criteria set forth within California Government Code Section 65995. Prior to the issuance of building permits, the applicant shall pay required school mitigation fees and provide evidence of payment to the city.

Parks and Recreation

The following change is made to Mitigation Measure 4.12-6, page 3-92:

4.12-6 Prior to the recordation of the first final map, the project Developer shall submit a comprehensive Park Master Plan to the City of Soledad for review and approval. This plan shall address park design and development consistent with the City's adopted Parks and Recreation Master Plan, along with maintenance, operation and financing components. ~~for each dedicated~~

~~recreation parcel in that phase of development~~ This plan shall also identify the appropriate types of improvements within each park parcel to meet the recreational needs of all age groups ~~within that phase of the project~~. The Park Master Plan will identify timing for concurrent park improvements for each phase of development. The Parks Master Plan is subject to review and recommendation by the Parks and Recreation Commission and approval by the City Council.

TRAFFIC AND CIRCULATION, SECTION 3.14

The mitigation measures listed in this section (pp 3-117 – 3-136) are modified and three new mitigation measures are added in response to concerns raised by the Planning Commission and City Council during their review and consideration of the project's effects to traffic and circulation.

Since the original traffic report was prepared, Front Street has been widened to four lanes between San Vicente Road and the Moranda Road/Front Street intersection.

In response to concerns voiced by Planning Commissioners and City Council members, the traffic mitigation measures have been revised to eliminate repetitive language regarding alternative roadway extensions and monitoring. Three additional mitigation measures, 4.13-15, 4.13-16, and 4.13-17 are added to address these issues and are described in the following paragraph.

Mitigation Measure 4.13-15, Level of Service Monitoring Program, is added to the addendum to eliminate repetitive language in multiple mitigation measures describing the required monitoring program. The new measure identifies the affected intersections and performance thresholds including minimum frequency, duration, and reporting for the monitoring that shall be conducted by the City at the applicant's expense. Correspondingly the details of required monitoring have been deleted from the individual mitigation measures. Mitigation measures identifying improvement alternatives of an extension of Market Street from San Vicente Road to the intersection of Moranda Road / Front Street (Mitigation Measure 4.13-16) and an extension of Gabilan Drive from San Vicente Road to Moranda Road / U.S. Highway 101 northbound ramps (Mitigation Measure 4.13-17) are added to the EIR Addendum and mitigation. An extension of Gabilan Drive was identified in many of the mitigation measures as an alternative improvement that will mitigate cumulative impacts to several affected intersections and the project's contribution to them. The new mitigation measure 4.13-17 describes the extension and the intersection impacts it will mitigate if constructed. Additionally an extension of Market Street from San Vicente Road to the intersection of Moranda Road / Front Street was also identified during City Council consideration of the proposed project. The extension of Market Street is identified in the general plan and the environmental impacts were analyzed in the general plan EIR. This improvement is included in the 2007 traffic impact fee study. The new mitigation measure 4.13-16 describes the extension and the intersection impacts it will mitigate if constructed. The remaining mitigation measures are modified accordingly as described below.

Mitigation Measure 4.13-15 (NEW)

4.13-15 Traffic Level of Service Monitoring Program. The following intersections shall be monitored by the city at the developer's expense to ensure that acceptable levels of service are maintained in accordance with the City of Soledad's adopted standards throughout development of the specific plan area.

- Moranda Road / Front Street;
- U.S. Highway 101 Northbound Ramps and Moranda Road / Front Street;
- San Vicente Road / Front Street;
- San Vicente Road / Gabilan Drive; and
- Main Street / Gabilan Drive.

Monitoring shall be conducted by a qualified transportation engineer retained by the applicant and shall commence at issuance of the first residential building permit and routinely thereafter in increments of 200 residential building permits until the intersection improvements identified in Mitigation Measures 4.13-2, 4.13-3, 4.13-4, 4.13-6, and 4.13-10, or the Market Street and Gabilan Drive extensions are complete.

The Monitoring Program shall include the following:

a. Conduct analyses of all applicable traffic operations based on field-measured data;
b. Study prevailing traffic and roadway conditions;
c. Report the results to the City of Soledad Director of Public Works, who shall determine if and when the improvement is identified above is necessary.

No building permit shall be issued for any phase of the project unless intersection levels of service are operating at the City's adopted acceptable threshold LOS D.

Mitigation Measure 4.13-16 (NEW)

4.13-16 Market Street Extension Alternative Mitigation. Payment of the project's proportionate share of fees to mitigate project contributions to cumulative impacts to the three intersections identified in Mitigation Measures 4.13-2, 4.13-3, and 4.13-10, may be used, at the discretion of the City Council, to instead acquire land and construct an extension of Market Street between San Vicente Road and the intersection of Moranda Road / Front Street. This improvement would mitigate the project's impacts to the following intersections:

- Moranda Road / Front Street;
- U.S. Highway 101 Northbound Ramps and Moranda Road / Front Street; and
- San Vicente Road / Front Street.

The project developer may choose to design and construct the Market Street Extension in exchange for a potential credit in traffic impact fees for future development within the specific plan area, and would be eligible for entering into a reimbursement agreement with the City. The developer's costs associated with this improvement may be subject to partial reimbursement subject to a reimbursement agreement with the City.

If the developer chooses to construct this improvement, the developer shall retain a qualified engineer to design the improvement in conformance with the City's performance thresholds and design criteria. The engineered plans shall be submitted to the Director of Public Works prior to

issuance of the 200th residential building permit, and shall be constructed prior to issuance of the 400th residential building permit. This timeframe may be modified by the Director of Public Works if the results of traffic monitoring (Mitigation Measure 4.13-15) indicate that a shorter or lengthier time frame is warranted. All traffic facility improvement plans or traffic impact fees shall be subject to the review and approval by the Director of Public Works.

If the Market Street Extension is constructed, the improvements identified in mitigation measures 4.13-2, 4.13-3, and 4.13-10 would not be required.

Mitigation Measure 4.13-17 (NEW)

4.13-17 Gabilan Drive Extension Alternative Mitigation. Payment of the project's proportionate share of fees to mitigate project contributions to cumulative impacts to the five intersections identified in Mitigation Measures 4.13-2, 4.13-3, 4.13-4, 4.13-6, and 4.13-10, may be used, at the discretion of the City Council, to instead acquire land and construct an extension of Gabilan Drive between San Vicente Road and the U.S. Highway 101 Northbound ramps. This improvement requires coordination with Caltrans for modification of the northbound ramps.

This improvement, if constructed in lieu of the Market Street extension or the intersection improvements identified in mitigation measures 4.13-2, 4.13-3, and 4.13-10, would mitigate the project's impacts to the following intersections:

- Moranda Road / Front Street;
- U.S. Highway 101 Northbound Ramps and Moranda Road / Front Street;
- San Vicente Road / Front Street;
- San Vicente Road / Gabilan Drive; and
- Main Street / Gabilan Drive.

The project developer may choose to design and construct the Gabilan Drive Extension in exchange for a potential credit in traffic impact fees for future development within the specific plan area, and would be eligible for entering into a reimbursement agreement with the City. The developer's costs associated with this improvement may be subject to partial reimbursement subject to a reimbursement agreement with the City..

If the developer chooses to construct this improvement the developer shall retain a qualified engineer to design the improvement in conformance with the City's performance thresholds and design criteria. The engineered plans shall be submitted to the Director of Public Works prior to issuance of the 200th residential building permit, and shall be constructed prior to issuance of the 400th residential building permit. This timeframe may be modified by the Director of Public Works if the Market Street extension is operational and the results of traffic monitoring (Mitigation Measure 4.13-15) indicate that a shorter or lengthier time frame is warranted. All traffic facility improvement plans and traffic impact fees shall be subject to the review and approval by the Director of Public Works.

If the Market Street Extension and the Gabilan Drive Extension are constructed, the improvements identified in Mitigation Measures 4.13-4, 4.13-6, and 4.13-10 are not required. If only the Gabilan Drive Extension is constructed, the improvements identified in Mitigation Measures 4.13-2, 4.13-3, 4.13-4, 4.13-6and 4.13-10 are not required.

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The following change is made to the discussion of impacts to the intersection of Moranda Road and Front Street p 3-124 of the EIR Addendum:

This impact was identified in the Miravale III EIR as less than significant with mitigation. The necessary improvements to mitigate project impacts are identified in mitigation measure 4.13-2 of the Miravale III EIR, and include widening of northbound Front Street to two lanes, which has already occurred. No additional mitigation is required; however, the language of mitigation measure 4.13-2 has been revised for clarification based on the roadway improvements called for in the proposed specific plan, the reduced project size, the configuration of allowable uses under the specific plan, and the analysis of traffic "triggers" discussed earlier in this section.

The following change is made to the discussion of impacts to the intersection of Moranda Road and Front Street p 3-125 of the Addendum:

Implementation of the following revised Mitigation Measure 4.13-2 ~~in addition to implementation of revised Mitigation Measure 4.13-10 and revised Mitigation Measures 4.13-11~~ would reduce the project's impact to this intersection to less than significant.

The following change is made to Mitigation Measure 4.13-2 (Moranda Road and Front Street Intersection), pp 3-125 – 3-127 of the Addendum:

4.13-2 Intersection of Moranda Road and Front Street. Signalize and add a second northbound through lane, and eastbound free-right-turn lane. This improvement is necessary with or without the project. The intersection of Moranda Road and Front Street would operate at LOS A with construction of this improvement or with construction of an extension of Market Street extension between San Vicente Road and the intersection of Moranda Road / Front Street (see Mitigation Measure 4.13-16) or an extension of Gabilan Drive from San Vicente Road to the U.S. Highway 101 northbound ramps (Mitigation Measure 4.13-17).

The project developer is responsible for the project's fair share contribution of costs to mitigate the project's impact to this intersection. Prior to the issuance of any building permit for each phase of development, the project developer shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance for the project's fair share costs of construction of the improvements described in this measure. These fees may be used, at the discretion of the City Council, to instead acquire land and construct either or both extensions of Market Street and Gabilan Drive identified above.

If the extension of Market Street and/or Gabilan Drive is undertaken either by the City or by the developer (see Mitigation Measure 4.13-16 and Mitigation Measure 4.13-17), the intersection improvements listed in this measure would not be required unless the monitoring results (Mitigation Measure 4.13-15) indicate they are necessary to maintain acceptable levels of service at the intersection of Moranda Road and Front Street until the roadway extensions are complete.

No certificate of occupancy shall be issued if the monitoring demonstrates that levels of service at this intersection degrade to an unacceptable level of service, determined by the Director of

Public Works, until either the intersection improvements listed in this measure or an extension of Market Street or Gabilan Drive is complete.

~~4.13-2 Widen northbound Front Street to two lanes, add a second northbound through lane, eastbound free right-turn lane and widen Front Street between Moranda Road and San Vicente Road or. construct the Gabilan Drive Extension. This improvement is necessary with or without the project. The intersection of Moranda Road and Front Street would operate at LOS B with construction of the Gabilan Drive Extension.~~

~~The project developer is responsible for the project's fair share contribution of costs to mitigate the project's impact to this intersection. The developer shall mitigate the project impacts to this intersection in one of the following ways:~~

~~Prior to the issuance of any building permit for each phase of development, the project developer shall either submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance for the construction of the Gabilan Drive Extension in order to mitigate the project's share of impacts at this location or construct the Gabilan Drive Extension.~~

~~The project developer shall also be responsible for monitoring the intersection of Moranda Road/Front Street. Local roadways shall be monitored by the city at the developer's expense to ensure that acceptable levels of service are maintained in accordance with the City of Soledad's adopted standards until the intersection improvements or extension of Gabilan Drive is complete. At minimum, monitoring shall commence upon issuance of the first residential building permit, and shall be conducted prior to issuance of the 600th, 900th, and 1,800th residential building permit (excluding secondary units). Monitoring shall include the following:~~

- ~~a. Conduct analyses of all applicable traffic operations based on field-measured data;~~
- ~~b. Study prevailing traffic and roadway conditions;~~
- ~~c. Report the results to the City of Soledad Director of Public Works, who shall determine if and when the improvement is necessary to maintain acceptable levels of service at this intersection.~~

~~The project developer shall install the required improvements at the intersection if directed in writing to do so by the City of Soledad Director of Public Works and so long as the city issues any required permits. The developer's costs associated with the required improvements may be subject to partial reimbursement; however, the developer's obligation to install the improvements shall not be dependent on receipt of any reimbursement.~~

~~The developer shall be obligated to install the identified improvements promptly upon notification from the city of the need to do so.~~

~~All required traffic impact fees shall be paid prior to the issuance of any building permit for each phase of development. No certificates of occupancy shall be issued for any development warranting the improvement until the Gabilan Drive extension is installed, subject to the review and approval of the City of Soledad Director of Public Works.~~

~~In the alternative, if the City of Soledad Director of Public Works determines that the Gabilan Drive extension is not needed at the time of issuance of the building permit for the project's 1,800th residential unit, the project developer shall comply with the following.~~

~~If the Gabilan Drive Extension is expressly covered in the city's then-current traffic impact program, then the developer's payment of the applicable traffic impact fee shall constitute a fair share contribution toward the improvement of Gabilan Drive. If the Gabilan Drive Extension is not expressly covered in the then-current traffic impact fee program, the developer shall pay its fair share contribution (based on its pro rata contribution of trips) of costs to the City of Soledad for the construction of the Gabilan Drive extension. The developer may choose to construct the improvement and may be subject to partial reimbursement at the discretion of the City of Soledad.~~

~~Traffic facility improvement plans or traffic impact fees shall be subject to the review and approval by the Director of Public Works.~~

The following change is made to Mitigation Measure 4.13-3 (San Vicente Road and Front Street Intersection), pp 3-127 – 3-129 of the Addendum:

4.13-3 Intersection of San Vicente Road and Front Street. Widen northbound San Vicente Road to three lanes, add two eastbound left-turn lanes and one southbound free-right turn lane. The intersection of San Vicente Road and Front Street would operate at LOS B with the construction of these improvements or with construction of a Market Street extension between San Vicente Road and the intersection of Moranda Road / Front Street (see Mitigation Measure 4.13-16) or an extension of Gabilan Drive from San Vicente Road to the U.S. Highway 101 northbound ramps (Mitigation Measure 4.13-17).

The project developer is responsible for the project's fair share contribution of costs to mitigate the project's impact to this intersection. Prior to the issuance of any building permit for each phase of development, the project developer shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance for the project's fair share costs of construction of the improvements described in this measure. These fees may be used by the city, at the discretion of the City Council, to instead acquire land and construct an extension of Market Street or Gabilan Drive as described above.

If the extension of Market Street or Gabilan Drive are implemented (see Mitigation Measure 4.13-16 and Mitigation Measure 4.13-17), the intersection improvements listed in this measure would not be required unless the monitoring results (Mitigation Measure 4.13-15) indicate they are necessary to maintain acceptable levels of service at the intersection of San Vicente Road and Front Street until the roadway extensions are complete. No certificate of occupancy shall be issued if the monitoring demonstrates that levels of service at this intersection degrade to an unacceptable level of service, determined by the Director of Public Works, until either the intersection improvements listed in this measure or an extension of Market Street or Gabilan Drive is complete.

~~4.13-3 Intersection of San Vicente Road and Front Street. The intersection of San Vicente Road and Front Street would operate at LOS B with the construction of the Gabilan Drive extension or~~

~~by widening northbound Front Street to two lanes, northbound San Vicente Road to three lanes, adding two eastbound left-turn lanes and a southbound free-right turn lane.~~

~~The project developer is responsible for the project's fair-share contribution of costs to mitigate the project's impact to this intersection. The developer shall mitigate the project impacts to this intersection in one of the following ways:~~

~~Prior to the issuance of any building permit for each phase of development, the project developer shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance for the construction of the intersection improvements or Gabilan Drive Extension in order to mitigate the project's share of impacts at this location. Alternatively the developer may construct the Gabilan Drive Extension.~~

~~The project developer shall also be responsible for monitoring the intersection of San Vicente Road and Front Street. Local roadways shall be monitored by the city at the developer's expense to ensure that acceptable levels of service are maintained in accordance with the City of Soledad's adopted standards until buildout occurs or the extension of Gabilan Drive is complete.~~

~~At minimum, monitoring shall commence upon issuance of the first residential building permit, and shall be conducted prior to issuance of the 600th, 900th, and 1,800th residential building permit (excluding secondary units). residential building permit (excluding secondary units) or until improvement is complete. Monitoring shall include the following:~~

- ~~a. Conduct analyses of all applicable traffic operations based on field-measured data;~~
- ~~b. Study prevailing traffic and roadway conditions;~~
- ~~c. Report the results to the City of Soledad Director of Public Works, who shall determine if and when the improvement is necessary to maintain acceptable levels of service at this intersection.~~

~~The project developer shall commence to construct the Gabilan Drive Extension if directed in writing to do so by the City of Soledad Director of Public Works and so long as the city issues any required permits. The developer's costs associated with the required improvements may be subject to partial reimbursement; however, the developer's obligation to install the improvements shall not be dependent on receipt of any reimbursement. The developer shall be obligated to install the identified improvements promptly upon notification from the city of the need to do so.~~

~~All required traffic impact fees shall be paid prior to the issuance of any building permit for each phase of development. No certificates of occupancy shall be issued for any development warranting the improvement until the Gabilan Drive extension improvement is installed, subject to the review and approval of the City of Soledad Director of Public Works.~~

~~In the alternative, if the City of Soledad Director of Public Works determines that the Gabilan Drive extension is not needed at the time of issuance of the building permit for the project's 1,800th residential unit, the project developer shall comply with the following.~~

~~If the Gabilan Drive Extension is expressly covered in the city's then-current traffic impact program, then the developer's payment of the applicable traffic impact fee shall constitute a fair share contribution toward the improvement of Gabilan Drive. The developer may choose to~~

~~construct the improvement and may be subject to partial reimbursement at the discretion of the City of Soledad. If the Gabilan Drive Extension is not expressly covered in the then-current traffic impact fee program, the developer shall pay its fair share contribution (based on its pro rata contribution of trips) of costs to the City of Soledad for the construction of the Gabilan Drive extension.~~

~~Traffic facility improvement plans or traffic impact fees shall be subject to review and approval by the Director of Public Works.~~

The following change is made to Mitigation Measure 4.13-4 (San Vicente Road and Gabilan Drive) on pp 3-130 – 3-131 of the Addendum:

4.13-4 Intersection of San Vicente Road and Gabilan Drive. Signalize and add a second westbound left turn lane, and widen southbound San Vicente Road to accommodate the two left-turn lanes. The intersection would operate at an acceptable LOS A with the construction of these improvements or with construction of the Gabilan Drive extension from San Vicente Road to the U.S. Highway 101 northbound ramps (Mitigation Measure 4.13-17).

The project developer is responsible for the project's fair share contribution of costs to mitigate the project's impact to this intersection. Prior to the issuance of any building permit for each phase of development, the project developer shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance for the project's fair share costs of construction of the improvements described in this measure. These fees may be used by the city, at the discretion of the City Council, to instead acquire land and construct an extension of Gabilan Drive as described above.

If the extension of Gabilan Drive is implemented (see Mitigation Measure 4.13-17), the intersection improvements listed in this measure would not be required unless the monitoring results (Mitigation Measure 4.13-15) indicate they are necessary to maintain acceptable levels of service at the intersection of San Vicente Road and Gabilan Drive until the roadway extension improvement is complete. No certificate of occupancy shall be issued if the monitoring demonstrates that levels of service at this intersection degrade to an unacceptable level of service, determined by the Director of Public Works, until either the intersection improvements listed in this measure or an extension of Gabilan Drive is complete.

~~4.13-4 Intersection of San Vicente Road and Gabilan Drive. The intersection of San Vicente Road and Gabilan Drive would operate at an acceptable level of service with the construction of the Gabilan Drive extension, or with signalization and addition of a second westbound left turn lane. The latter improvement requires southbound San Vicente Road to be widened to accommodate the two left-turn lanes.~~

~~The project developer is responsible for the project's fair share contribution of costs to mitigate the project's impact to this intersection. The developer shall mitigate the project impacts to this intersection in one of the following ways:~~

~~Prior to the issuance of any building permit for each phase of development, the project developer shall submit payment of the City of Soledad traffic impact fee in effect at the time of building~~

~~permit issuance for the construction of the Gabilan Drive Extension in order to mitigate the project's share of impacts at this location, construct the improvement, or construct the Gabilan Drive Extension.~~

~~The project developer shall also be responsible for monitoring the intersection of San Vicente Road and Gabilan Drive. Local roadways shall be monitored annually by the city at the developer's expense to ensure that acceptable levels of service are maintained in accordance with the City of Soledad's adopted standards until the extension is complete. Monitoring shall commence at issuance of the first building permit and shall be conducted in at least four stages: upon issuance of the first residential building permit, and prior to issuance of the 600th, 900th, and 1,800th residential building permit (excluding secondary units) or until the intersection improvements are complete. Monitoring shall include the following:~~

~~a. Conduct analyses of all applicable traffic operations based on field-measured data;~~
~~b. Study prevailing traffic and roadway conditions;~~
~~c. Report the results to the City of Soledad Director of Public Works, who shall determine if and when the improvement is necessary to maintain acceptable levels of service at this intersection.~~
~~d. The project developer shall commence to construct the Gabilan Drive Extension if directed in writing to do so by the City of Soledad Director of Public Works and so long as the city issues any required permits. The developer's costs associated with the required improvements may be subject to partial reimbursement; however, the developer's obligation to install the improvements shall not be dependent on receipt of any reimbursement. The developer shall be obligated to install the identified improvements promptly upon notification from the city of the need to do so.~~

~~All required traffic impact fees shall be paid prior to the issuance of any building permit for each phase of development. No certificates of occupancy shall be issued for any development warranting the improvement until the Gabilan Drive extension is installed, subject to the review and approval of the City of Soledad Director of Public Works.~~

~~In the alternative, if the City of Soledad Director of Public Works determines that the Gabilan Drive extension is not needed at the time of issuance of the building permit for the project's 1,800th residential unit, the project developer shall comply with the following.~~

~~If the Gabilan Drive Extension is expressly covered in the city's then-current traffic impact program, then the developer's payment of the applicable traffic impact fee shall constitute a fair share contribution toward the improvement of Gabilan Drive. The developer may choose to construct the improvement and may be subject to partial reimbursement at the discretion of the City of Soledad. If the Gabilan Drive Extension is not expressly covered in the then-current traffic impact fee program, the developer shall pay its fair share contribution (based on its pro rata contribution of trips) of costs to the City of Soledad for the construction of the Gabilan Drive extension.~~

~~Traffic facility improvement plans or traffic impact fees shall be subject to review and approval by the Director of Public Works.~~

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The following change is made to Mitigation Measure 4.13-6 (Main Street and Gabilan Drive), Pages 3-132 - 3-133:

4.13-6 Intersection of Main Street and Gabilan Drive. The intersection of Main Street and Gabilan Drive will operate at LOS A with signalization and protected left-turn phasing along Gabilan Drive. With the construction of the Gabilan Drive extension to U.S. Highway 101, signalization of this intersection would not be necessary.

The project developer is responsible for the project's fair share contribution of costs to mitigate the project's impact to this intersection. Prior to the issuance of any building permit for each phase of development, the project developer shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance for the project's fair share costs of construction of the improvements described in this measure. These fees may be used by the city, at the discretion of the City Council, to instead acquire land and construct an extension of Gabilan Drive as described above.

If the extension of Gabilan Drive is implemented (see Mitigation Measure 4.13-17), the intersection improvements listed in this measure would not be required unless the monitoring results (Mitigation Measure 4.13-15) indicate they are necessary to maintain acceptable levels of service at the intersection of Main Street and Gabilan Drive until the roadway extension improvement is complete. No certificate of occupancy shall be issued if the monitoring demonstrates that levels of service at this intersection degrade to an unacceptable level of service, determined by the Director of Public Works, until either the intersection improvements listed in this measure or an extension of Gabilan Drive is complete.

~~4.13-6 Intersection of Main Street and Gabilan Drive. The intersection of Main Street and Gabilan Drive will operate at LOS A with signalization and protected left-turn phasing along Gabilan Drive. With the construction of the Gabilan Drive extension to U.S. Highway 101, signalization of this intersection would not be necessary.~~

~~The project developer is responsible for the project's fair share contribution of costs to mitigate the project's impact to this intersection. The developer shall mitigate the project impacts to this intersection in one of the following ways:~~

~~Prior to the issuance of any building permit for each phase of development, the project developer shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance for the construction of the Gabilan Drive Extension in order to mitigate the project's share of impacts at this location or construct the Gabilan Drive Extension.~~

~~The project developer shall also be responsible for monitoring the intersection of Main Street and Gabilan Drive. Local roadways shall be monitored by the city at the developer's expense to ensure that acceptable levels of service are maintained in accordance with the City of Soledad's adopted standards until the extension is complete~~

~~Monitoring shall commence at issuance of the first building permit and shall be conducted in at least three stages, prior to issuance of the 600th, 900th, and 1,800th residential building permit~~

~~(excluding secondary units) or until the improvement is complete. Monitoring shall include the following:~~

~~a. Conduct analyses of all applicable traffic operations based on field-measured data;~~

~~b. Study prevailing traffic and roadway conditions;~~

~~c. Report the results to the City of Soledad Director of Public Works, who shall determine if and when the improvement is necessary to maintain acceptable levels of service at this intersection.~~

~~d. The project developer shall commence to construct the Gabilan Drive Extension if directed in writing to do so by the City of Soledad Director of Public Works and so long as the city issues any required permits. The developer's costs associated with the required improvements may be subject to partial reimbursement; however, the developer's obligation to install the improvements shall not be dependent on receipt of any reimbursement. The developer shall be obligated to install the identified improvements promptly upon notification from the city of the need to do so.~~

~~All required traffic impact fees shall be paid prior to the issuance of any building permit for each phase of development. No certificates of occupancy shall be issued for any development warranting the improvement until the Gabilan Drive extension improvements are installed, subject to the review and approval of the City of Soledad Director of Public Works.~~

~~In the alternative, if the City of Soledad Director of Public Works determines that the Gabilan Drive extension is not needed at the time of issuance of the building permit for the project's 1,800th residential unit, the project developer shall comply with the following.~~

~~If the Gabilan Drive Extension is expressly covered in the city's then-current traffic impact program, then the developer's payment of the applicable traffic impact fee shall constitute a fair share contribution toward the improvement of Gabilan Drive. The developer may choose to construct the improvement and may be subject to partial reimbursement at the discretion of the City of Soledad. If the Gabilan Drive Extension is not expressly covered in the then-current traffic impact fee program, the developer shall pay its fair share contribution (based on its pro rata contribution of trips) of costs to the City of Soledad for the construction of the Gabilan Drive extension.~~

~~Traffic facility improvement plans or traffic impact fees shall be subject to review and approval by the Director of Public Works.~~

The following change is made to Mitigation Measure 4.13-7, page 3-134 of the EIR Addendum:

4.13-7 The intersection of Andalucia Drive and Gabilan Drive will operate at an acceptable level of service<u>, determined by the City Director of Public Works,</u> with protected left-turn phasing along Gabilan Drive. The project developer is responsible for the construction of this improvement. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the Director of Public Works.

The following change is made to Mitigation Measure 4.13-8, pp 3-134 – 3-135:

4.13-8 The intersection of Orchard Lane and Metz Road will operate at an acceptable ~~LOS~~ level of service, determined by the Director of Public Works, with signalization and protected left-turn phasing on Metz Road and split phasing on Orchard Lane. The project developer is responsible for the construction of the improvement. No certificate of occupancy shall be issued for new residential or commercial buildings requiring the implementation of these improvements until said improvements have been fully constructed, subject to the review and approval of the Director of Public Works.

The following change is made to Mitigation Measure 4.13-9, pp 3-135 – 3-136:

4.13-9 Intersections of Oak Street and Front Street and Front Street and Nestles Road. ~~Construction of the Pinnacles Parkway project would improve intersection operations to acceptable levels of service:~~ Widen Front Street between Nestles Road and Oak Street and add a second eastbound left-turn lane at the intersection of Nestles Road and Front Street. The project developer is responsible for the project's fair share contribution of costs to mitigate the impact to this intersection; however, construction of the Pinnacles Parkway project, funded by Measure X revenues, would improve intersection operations to an acceptable level of service.

If the development of the project precedes completion of the Pinnacles Parkway, ~~The~~ the project developer shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance. All necessary fees shall be paid prior to the issuance of any building permits for each phase of development and shall be subject to the approval of the Director of Public Works.

The following change is made to Mitigation Measure 4.13-10, pp 3-118 – 3-119:

4.13-10 Moranda Road and U.S. Highway 101 Northbound Ramps: Signalize the intersection and widen the Northbound US 101 on ramp to add a second NB left-turn lane. This improvement requires coordination and approval by Caltrans.

The project developer is responsible for a fair share contribution of costs towards the construction of this improvement. Prior to the issuance of any building permit for each phase of development, the project developer shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance for the project's proportionate share of costs to construct this improvement and shall also pay the TAMC Regional Development Transportation Impact Fees.

The payment of fees is considered mitigation for project impacts to freeway highway and regional facilities. All required traffic impact fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works.

Subject to the review and approval by the Director of Public Works, the City Council may exercise its discretion and instead use the project's payment of city fees for the project's proportionate share of costs for construction of the Market Street Extension to Moranda Road and/or an extension of Gabilan Drive to U.S. Highway 101.

Improvements to this interchange are within the jurisdiction of Caltrans and not under the control of the city. Should the improvement of the interchange not be implemented by Caltrans the impact would be considered significant and unavoidable.

All required traffic impact fees shall be subject to the approval of the Director of Public Works.

~~4.13-10 The project developer is responsible for a fair share contribution of costs towards the construction improvements to the U.S. Highway 101 interchange at Moranda Road. Prior to the issuance of any building permit for each phase of development, the project developer shall submit payment of the City of Soledad traffic impact fee in effect at the time of building permit issuance for the project's proportionate share of costs to construct improvements to the intersection and northbound ramps of U.S. Highway 101 interchange at Moranda Road and shall also pay the TAMC Regional Development Impact Fees The improvements may include signalization of the intersection and widening the northbound U.S. Highway 101 on ramp to add a second northbound left turn lane. Implementation of these improvements would require widening the northbound ramp to accommodate two lanes. If the aforementioned improvements are not implemented by the time required, the project could either construct or contribute its fair share towards the construction of the extension of Gabilan Drive to U.S. Highway 101. Under this approach to mitigation, local roadways shall be monitored by the city at the developer's expense to ensure that LOS levels of service are maintained in accordance with the City of Soledad's adopted standards until the extension is complete. In addition the U.S. Highway 101 interchange at Moranda Road/Front Street will require reconfiguration/reconstruction to provide more efficient access to the project site and north Soledad in general. However, improvements to this interchange are within the jurisdiction of Caltrans and not under the control of the city.~~

~~All required traffic impact fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works.~~

The following change is made to Mitigation Measure 4.13-11, page 3-120:

4.13-11. U.S. Highway 101 Interchange at Moranda Road/Front Street. Prior to the issuance of any building permit the project developer shall pay the project's fair share of TAMC Regional Development Transportation Impact fees. These fees may be used by TAMC for the construction of interchange improvements that may include signalizing the intersection and adding a second lane on the off-ramp and/or reconfiguration and/or reconstruction of the U.S. Highway 101 interchange at Moranda Road/Front Street.

However, improvements to the interchange are within the jurisdiction of Caltrans and not under the control of the city. Should the improvement of the interchange not be implemented by Caltrans the impact would be considered significant and unavoidable.

All required traffic impact fees shall be subject to the approval of the Director of Public Works.

~~The project developer shall pay the project's fair share of TAMC regional development Impact fees for the construction of interchange improvements that may include signalization of the intersection the addition of a second lane on the off- ramp and/or reconfiguration/reconstruction~~

~~of the US 101 interchange at Moranda Road/Front Street. Widening Front Street (a city traffic facility) to two lanes southbound, between US 101 and Moranda Road is also necessary to provide more efficient access to the project site and north Soledad in general.~~

~~However, improvements to the interchange are within the jurisdiction of Caltrans and not under the control of the city. Should the improvement of the interchange be deemed infeasible by the Caltrans, or the widening of Front Street be deemed infeasible by the city, the impact would be considered significant and unavoidable. Prior to the issuance of any building permit for each phase of development, the project applicant shall submit payment of the traffic impact fee in effect at the time of building permit issuance, including the Regional Development Transportation Impact Fees, in order to mitigate the impact at this location. All required traffic impact fees shall be paid prior to the issuance of any building permit for each phase of development and shall be subject to the approval of the Director of Public Works.~~

The following change is made to Mitigation Measure 4.13-12, page 3-121:

4.13-12 U.S. Highway 101 Freeway Segments. Prior to the issuance of any building permit for each phase of development, the project developer shall submit payment of the TAMC Regional Development Transportation Impact Fee and City of Soledad traffic impact fees in effect at the time of building permit issuance in order to mitigate the project's impacts to the identified freeway segments. The payment of fees is considered mitigation for project impacts to freeway highway and regional facilities. All fees shall be shall be subject to the approval of the Director of Public Works.

CUMULATIVE TRAFFIC, SECTION 4.2

The following text is added to Mitigation Measure 4.13-13, page 4-4:

The fees collected for this improvement may instead be used by the City, at the discretion of the City Council, for the project's proportionate share of costs associated with the construction of an extension of Market Street from San Vicente Road to the Moranda Road/Front Street intersection. Construction of the Market Street extension would mitigate the project's cumulative impact at the intersection of Moranda Road and Front Street.

The following text is added to Mitigation Measure 4.13-14, page 4-4:

The fees collected for this improvement may instead be used by the City, at the discretion of the City Council, for the project's proportionate share of costs associated with the construction of an extension of Gabilan Drive from San Vicente Road to the northbound U.S. Highway 101 northbound ramps. Construction of the Gabilan Drive extension would mitigate the project's cumulative impact at the intersection of San Vicente Road and Gabilan Drive.

UTILITIES AND SERVICE SYSTEMS, SECTION 3.15

Mitigation Measure 4.14-1 is revised as follows:

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~~D~~The developer shall retain an engineer to design ~~and construct~~ the water supply and distribution system for the project ~~that is~~ to be integrated with the City's water distribution system ~~and~~ consistent with the Urban Water Management Plan and the City's ~~2005~~ Water Master Plan. ~~project applicant shall submit detailed design level infrastructure plans in accordance with this measure, subject to the r~~Review and approval by the City of Soledad Director of Public Works and City Council is required prior to recordation of first final map.

Prior to the issuance of any building permit in any phase, the developer shall construct the water supply and distribution system for the project based upon the performance standards in the Water Master Plan and with city design criteria in accordance with the approved design-level infrastructure plans, subject to the review and approval of the City of Soledad Director of Public Works.

Mitigation Measure 4.14-9 is revised as follows:

4.14-9 All ~~water and~~wastewater infrastructure shall be designed with sufficient capacity to accommodate the project and be required to adhere to all applicable City standards in terms of infrastructure sizing, design and construction. Prior to the issuance of any building and/or grading plan, the project applicant shall submit detailed ~~evidence, including but not limited to~~design-level infrastructure plans, consistent with the requirements of this mitigation, subject to the approval of the Director of Public Works.

The first line of Mitigation Measure 4.13-5 is revised as follows:

4.14-13 In order to prevent the wasteful use of energy, all new residential, commercial, and hospitality oriented structures shall incorporate the principles of passive solar design ~~to the maximum extent feasible~~.

APPENDICES

Appendix E (NEW)

Appendix E, Impact and Mitigation Summary, is added to the EIR Addendum that includes a summary table of significant impacts, mitigation measures that reduce them and their resultant significance with mitigation.