

RESOLUTION NO. 5147

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SOLEDAD
APPROVING TASK ORDER #32 FROM HARRIS & ASSOCIATES IN THE AMOUNT
OF \$140,471 FOR DETAILED DESIGN ENGINEERING SERVICES FOR THE CITY'S
WASTEWATER EFFLUENT REUSE PROJECT – PHASE II, AND AUTHORIZING
THE CITY MANAGER TO EXECUTE SAID TASK ORDER ON BEHALF OF THE
CITY OF SOLEDAD**

WHEREAS, the City of Soledad desires to produce and utilize reclaimed wastewater, wherever possible and practical, to offset use of and thereby conserve groundwater; and

WHEREAS, on December 15, 2010, Council authorized submittal of a Proposition 84 grant application with Soledad as the lead agency to the CA Department of Water Resources (DWR) for an Integrated Regional Water Management (IRWM) grant for a reclaimed water delivery system project for agricultural and recreation areas in and near the City of Soledad; and

WHEREAS, on March 6, 2013, Council authorized the City to accept a Proposition 84 grant from the CA Department of Water Resources with the City as the lead agency for the administration of the grant; and

WHEREAS, Council retained Harris and Associates to provide on-call engineering design, construction management and post construction services for Water Projects; and

WHEREAS, projects such as this pump station and underground pipeline project require three phases of engineering work: preliminary design, final detailed design and regulatory agency permitting; and construction management including post-construction document preparation; and

WHEREAS, on May 6, 2015, Council authorized a Task Order with Harris and Associates in the amount of \$83,880 for Task Order #19 - *Preliminary* Design of this project, after which Harris has submitted a preliminary design report and plans in October of 2015; and

WHEREAS, as requested by the City, Harris has submitted Task Order #32 for Detailed Design, which if approved, along with already completed Task Order #19 for preliminary Design, completes the first two of three phases of engineering work necessary for this project; and

WHEREAS, funding for Task Order No. 32 will come from the IRWM Grant, with the City's match drawn from the Water Capital Fund.

NOW THEREFORE, BE IT HEREBY RESOLVED, by the City Council of the City of Soledad hereby approves Task Order #32 with Harris & Associates in the amount of \$140,471, a copy of which is attached hereto as Exhibit "A" and by reference incorporated herein, and the City Manager is hereby authorized and directed to execute the same on behalf of the City of Soledad.

PASSED AND ADOPTED by the City Council of the City of Soledad at a regular meeting duly held on the 6th day of January, 2016, by the following vote:

AYES, and in favor thereof, Councilmembers: Christopher K. Bourke, Richard J. Perez, Patricia D. Stephens, Mayor Pro Tem Alejandro Chavez and Mayor Fred J. Ledesma

NOES, Councilmembers: None

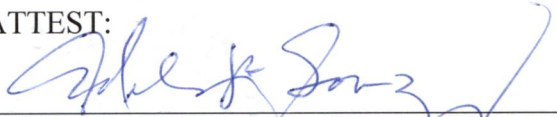
ABSTAIN, Councilmembers: None

ABSENT, Councilmembers: None



FRED J. LEDESMA, Mayor

ATTEST:



ADELA P. GONZALEZ, City Clerk

recycled water system and that a new pump station will not be required. It is assumed that this Final Design will include the improvements recommended in our preliminary design report, unless otherwise indicated herein.

This project will include three sections of new 10-inch recycled water transmission piping, as summarized in Table 1 below.

Table 1 – New Transmission Piping Segments Required

New Pipe Location	Upstream Connection Location	Downstream Connection Location	Approx. New Pipe Length
Northwest of the WRF	In WRF, connect to existing W3 Pumps' Discharge	Farm Access Road, North of WRF	900 LF
Farm access Rd North of WRF and Front St	Farm Access Road South of RR Tracks	Front St at Maranda Rd	1,300 LF
San Vicente Rd	Intersection of Front St and San Vicente Rd	Intersection of San Vicente Rd and Market St	1,025 LF

In general, the new transmission pipeline design will include the following:

- Approximately 3,100 linear feet (LF) by open trench method
- Approximately 120 LF of jack and bore installation beneath Union Pacific Railroad (UPRR) track crossing
- Five tie-ins to existing 8-inch recycled water piping, one tie in to the existing W3 system in the WRF
- A flow meter on the recycled water transmission main in the WRF, either exposed or in a vault with a traffic rated hatch cover
- Disconnect of all connections between the existing recycled water piping and the potable water system, to be determined by the City's backwater and cross connection study (assumed 2 connections). The City's backwater and cross connection study will be prepared by others and not a part of this proposal.

In addition to the new recycled water transmission piping described above, this project will include the following improvements at the WRF:

- A recycled water truck fill station with a flow meter and card reader near the WRF headworks
- Grading and paving at the truck fill station area (an approx. 5,500 square foot area)
- Installation of a pressure reducing valve (PRV) for the W3 system downstream of the new recycled water main tie in, including a vault with traffic rated cover and a bypass.
- Minor electrical improvements at the WRF for power supply and signal circuit from the chlorine residual analyzer, truck fill station, and flow meter.

Our preliminary design report recommended that the new recycled water transmission piping tie into the W3 system near the WRF headworks, also that PRVs be installed on an expected six W3 service lines. However, after recent investigation into the number and size of the W3 service lines, it was determined that a better alternative would be to tie the new recycled water transmission pipeline into the W3 system at the W3 pump station and install one PRV on the W3 main piping downstream of the new connection. This option will reduce the pressure in the entire W3 system and eliminate the need for multiple PRVs on the W3 service lines. This proposal assumes that this new alternative for a single PRV installed on the W3 main will be used, which requires approximately 550 linear feet of additional new recycled water pipeline from what was anticipated in our preliminary design report.

This project does not include the recycled water “distribution system” or transmission facilities to California Department of Corrections and Rehabilitation (CDCR) facilities, (i.e. any piping not shown in Exhibit A).

II. SCOPE OF WORK

The Reclaimed Wastewater Transmission Line Project will be broken into three phases:

1. Preliminary Design (Completed October 2015)
2. Final Design
3. Construction Management and Post-Construction (Future)

The Preliminary Design, Phase 1, has already been completed under our previous task order. This proposal is for the Final Design, Phase 2.



Design services during construction, construction management, and post construction services, Phase 3, will be completed under a future Task Order.

Harris will provide the following services under this Task Order for Phase 2:

Task Description	Our Approach	Deliverables
1.0 Project Administration		
1.1 Monthly Progress Reports	A brief progress report will accompany each monthly Harris invoice. It will discuss budget and schedule status, issues resolved and unresolved, and “next steps.”	Monthly progress report.
2.0 Coordination and Investigation		
2.1 Kick-off Meeting	We will meet with City staff to confirm the scope of work, schedule, budget, project goals; discuss format of deliverables; and clarify responsibilities of each party.	Meeting notes with lists, as appropriate (PDF Files)
2.2 Topographic Survey	<p>Our sub-consultant, Monterey Bay Engineers, will perform a topographic survey of the areas not surveyed during the preliminary design phase. Not all areas were surveyed during the preliminary design because the pipeline alignment was not yet determined.</p> <p>The survey will include existing surface features and utilities for the new pipe section and improvements at the in the WRF and the new pipe section from the farmland north of the WRF to the intersection of Front St and Moranda Rd.</p>	Survey information incorporated into AutoCAD file
2.3 Potholing	<p>Our sub-consultant, Subtronic, will pothole critical utility crossings so that the design can minimize intermediate high and low points in the pipe profile. Existing utility locations will be shown on our plans and profiles based on the potholing. This proposal includes three days of potholing (approximately 15 potholes).</p> <p><i>This proposal also includes an optional service for Subtronic to perform utility locating for the new piping in the WRF needed for the single PRV alternative.</i></p>	Pothole logs, and information incorporated into Plans
2.4 Site Visits	Site visits will be performed to determine if there are any potential constraints to the proposed construction (2 site visits budgeted).	



Task Description	Our Approach	Deliverables
2.5 Coordination for Changes to W3 Pump Operation	We and our subconsultant, Bonneau Dickson, will coordinate with the City's WRF staff and Flotronix, the supplier of the existing W3 system, to determine the needed changes to existing W3 system operation and controls for use with the recycled water system.	Technical Memo with Recommendations
2.6 PRV Vault and RW Flow Meter	We will review City provided record drawings and investigate options for tie into the W3 pump discharge, installation of a new PRV vault for the W3 system, and installation of the recycled water flow meter near the W3 pump station.	Plans, Sections, and Details included in the Drawings
2.7 Coordination for SCADA Modifications	We and our mechanical and electrical engineering subconsultants will coordinate with the City's SCADA maintenance firm for them to add items and make modifications to the SCADA system for the improvements at the WRF.	Technical Memo with Recommendations
2.8 Caltrans Coordination	Coordination with Caltrans for the crossing beneath the HWY 101 Bridge over Front St and assisting the City with the encroachment permit application.	Filled out permit application for City submission
2.9 UPRR Coordination	Coordination with UPRR for the crossing beneath the railroad tracks and assisting the City with the encroachment permit application.	Filled out permit application for City submission
3.0 65% Submittal Package		
3.1 65% Plans	We will develop and submit 65% plans including general sheets, civil/mechanical sheets, pipeline plan & profile sheets, electrical sheets, and detail sheets at the 65% design stage.	65% versions of all plans
3.2 65% Opinion of Probable Construction Cost	We will prepare a 65% opinion of probable construction cost.	Itemized cost opinion spreadsheet.
3.3 65% Specifications and Contract Documents	At the 65% complete stage we will prepare draft technical specifications and Contract Documents.	Draft 65% Contract Documents & Specifications
3.4 Quality Control Review	Prior to the 65% phase submittal, all plans and documents will be reviewed by Harris' Quality Control Manager.	N/A.



4.0 Pre-Final 90% Submittal Package		
4.1 65% Design Review Meeting	We will attend a review meeting with the City to address comments to the 65% design. Review comments from the City will be incorporated into the 90% design.	Meeting notes (PDF file)
4.2 Pre-final 90%Plans	We will develop and submit pre-final plans including general sheets, civil/mechanical sheets, pipeline plan & profile sheets, electrical sheets, and detail sheets at the 90% design stage.	Pre-final versions of all plans
4.3 90% Preliminary Opinion of Probable Construction Cost	We will prepare a pre-final opinion of probable construction cost.	Itemized cost opinion spreadsheet.
4.4 90% Specifications and Contract Documents	At the 90% complete stage we will prepare draft technical specifications and Contract Documents.	Draft 90% Contract Documents & Specifications
4.5 Quality Control Review	Prior to the preliminary phase submittal, all plans and documents will be reviewed by Harris' Quality Control Manager.	N/A.
5.0 Final Documents		
5.1 90% Design Review Meeting	We will attend a review meeting with the City to address comments to the pre-final design. Review comments from the City will be incorporated into the final design. We will also coordinate with the City by phone and email to resolve design issues to finalize plans.	Meeting notes (PDF file)
5.2 Final Submittal Plans	We will develop and submit final plans for the City to issue for bid.	Bond hardcopy, and PDF and ACAD files for plans.
5.3 Final Opinion of Probable Construction Costs	We will prepare a Final Construction Cost Estimate and bid schedule.	Electronic (excel format) and hardcopy versions of estimate.
5.4 Final Specifications and Contract Documents	We will prepare Final Specifications and Contract Documents.	Electronic and hardcopy versions of specs.
5.5 Quality Review	Prior to the final submittal, all plans and documents will be reviewed by Harris' Quality Control Manager.	N/A



6.0 Bid Period Services		
6.1 Pre-Bid Meeting	We will attend the pre-bid meeting scheduled by the City.	
6.2 Answer Bidders Questions	We will answer questions from bidders through City staff during the advertising period. We will log questions and provide City with documented responses.	Log of questions received and answers given, for City to distribute if appropriate.
6.3 Addenda Assistance	We will prepare any required technical or design-related addenda for distribution by the City.	Addenda input for City's use in issuing any addenda.

Our level of effort (on an "hourly not-to-exceed" basis) and assumptions are shown in the attached Exhibit B. Additional efforts unforeseen at the authorizing of this task order will be provided under a subsequent authorization.

Please contact Frank Lopez at (831) 233-9242 with any questions on our scope or fee.

Regards,
HARRIS & ASSOCIATES, Inc.



Jasmine Cuffee, PE
 Director, Engineering Services
 Manager of Civil Design

HARRIS & ASSOCIATES, Inc.



Frank S. Lopez, PE, QSD, CFM
 Project Director

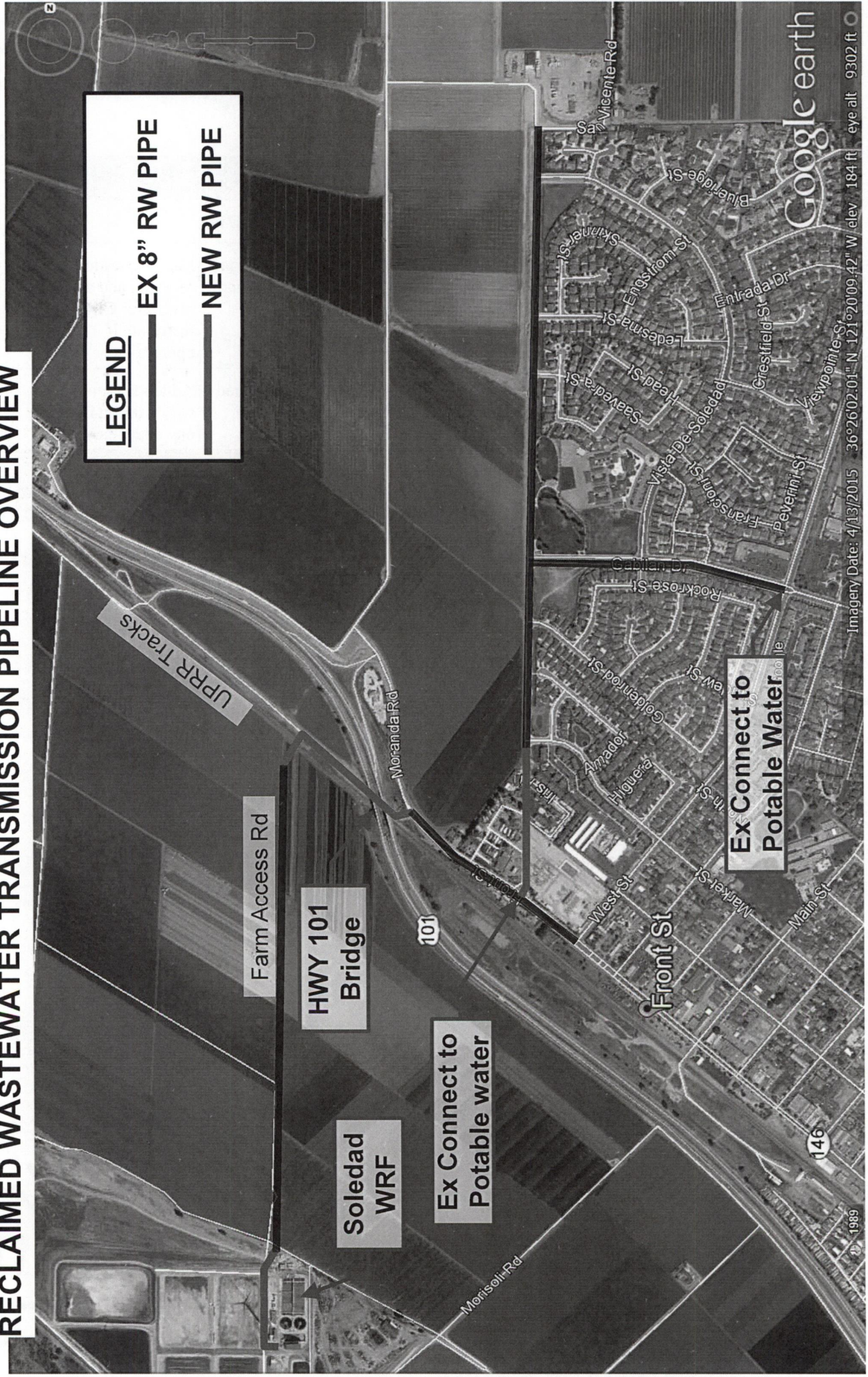
Accepted:

 By: City of Soledad

 Date

Approved by CC Reso. 5147 01.06.16

EXHIBIT A RECLAIMED WASTEWATER TRANSMISSION PIPELINE OVERVIEW



CITY OF SOLEDAD
 RECLAIMED WASTEWATER TRANSMISSION PIPELINE
 FINAL DESIGN

TASK, PHASE, DESCRIPTION	STAFF					TOTALS
	Project Director F Lopez HOURS	PD QA/QC J Cuffee HOURS	Project Manager K Maire HOURS	Design Engineer R Novak HOURS	Clerical HOURS	
FINAL DESIGN PHASE						
1.0 PROJECT ADMINISTRATION						
1.1 Monthly Progress Reports	4		6	1		
SUBTOTAL HOURS	4	0	6	1	0	11
SUBTOTAL DOLLARS	\$720	\$0	\$990	\$130	\$0	\$1,840
2.0 COORDINATION AND INVESTIGATION						
2.1 Kick-off Meeting	3	2	2	2	2	
2.2 Topographic Survey (See Subconsultant, MBE, Below)			2	6		
2.3 Potholing (See Subconsultant, Subtronic, Below)		1	2	4		
2.4 Site Visits (2 budgeted)	4		4	32		
2.5 Coordination for Changes to W3 Pump Operation		1	4			
2.6 PRV Vault and RW Flow Meter		2	12	6		
2.7 Coordination for SCADA Modifications		1	2			
2.8 Caltrans Coordination	1		1	4		
2.9 UPRR Coordination	1		1	4		
SUBTOTAL HOURS	9	7	30	58	2	106
SUBTOTAL DOLLARS	\$1,620	\$1,470	\$4,950	\$7,540	\$180	\$15,760
3.0 65% DESIGN						
3.1 65% Plans	4	4	48	80		
3.2 65% Opinion of Probably Construction Cost		1	4	8		
3.3 65% Specifications and Contract Documents	2	4	40	6	4	
3.4 Quality Control Review		8				
SUBTOTAL HOURS	6	17	92	94	4	213
SUBTOTAL DOLLARS	\$1,080	\$3,570	\$15,180	\$12,220	\$360	\$32,410
5.0 PRE-FINAL 90% DESIGN						
5.1 65% Design Review Meeting	3		2	2	1	
5.2 90% Plans	2	2	32	48	2	
5.3 90% Opinion of Probably Construction Cost		1	2	4		
5.4 90% Specifications and Contract Documents	1	1	12	2	2	
5.5 Quality Control Review		8				
SUBTOTAL HOURS	6	12	48	56	5	127
SUBTOTAL DOLLARS	\$1,080	\$2,520	\$7,920	\$7,280	\$450	\$19,250
6.0 FINAL DOCUMENTS						
6.1 90% Design Review Meeting	3		2	2	1	
6.2 Final Submittal Plans	1	1	16	24	2	
6.3 Final Opinion of Probable Construction Cost		1	1	4		
6.4 Final Specifications and Contract Documents	1	2	5		1	
6.5 Quality Control Review		4				
SUBTOTAL HOURS	5	8	24	30	4	71
SUBTOTAL DOLLARS	\$900	\$1,680	\$3,960	\$3,900	\$360	\$10,800
7.0 BID PERIOD SERVICES						
7.1 Pre-Bid Meeting	3		2	2	1	
7.2 Answer Bidders Questions	1	1	6	2		
7.3 Addenda Assistance	2	2	8	8	2	
SUBTOTAL HOURS	6	3	16	12	3	40
SUBTOTAL DOLLARS	\$1,080	\$630	\$2,640	\$1,560	\$270	\$6,180
A. HARRIS DESIGN HOURS AND COST						
HOURS PER POSITION	36	47	216	251	18	
HOURLY RATE (TYPICAL)	\$180	\$210	\$165	\$130	\$90	
HARRIS (Design) SUBTOTAL COST	\$6,480	\$9,870	\$35,640	\$32,630	\$1,620	\$86,240
B. SUBCONSULTANT COST - FIRM						
	ROLE		CODE	FEE		
Bonneau Dickson	Mechanical Engineering		BD	\$10,625		
SA Engineering	Electrical Engineering		SA	\$10,428		
Subtronic Corporation	Potholing		SUBT	\$12,988		
Monterey Bay Engineers, Inc	Topographic Survey		MBE	\$10,300		
SUBCONSULTANT TOTAL COST:						\$44,341
SUBCONSULTANT MARK-UP (10 %)						\$4,434
C. OPTIONAL SERVICE - UTILITY LOCATING AT WRF						
	ROLE		CODE	FEE		
Sub Firm - Subtronic Corporation	Utility Locating at WRF		SUBT	\$4,960		
SUBCONSULTANT MARK-UP (10 %)						\$496
OPTIONAL SERVICE TOTAL COST						\$5,456
D. TOTAL COST WITHOUT OPTIONAL SERVICES (NOT TO EXCEED):					Total :	\$135,015
E. TOTAL COST INCLUDING OPTIONAL SERVICES (NOT TO EXCEED):					Total :	\$140,471

**CITY OF SOLEDAD
RECLAIMED WASTEWATER TRANSMISSION PIPELINE
FINAL DESIGN**

ASSUMPTIONS:

1 Assumed plan sheet list:

RECLAIMED WASTEWATER TRANSMISSION PIPELINE - FINAL DESIGN		
Description	Scale	# Sheets
General Sheets		
Title Sheet	-	1
Notes, Legend, and Abbreviations	-	1
Keymap	-	1
Civil/Mechanical Sheets		
Flow Meter and PRV Vault Plan	1" = 5'	1
Flow Meter and PRV Vault Sections	1/2" = 1'	1
Truck Fill Station Grading and Paving Plan	1" = 10'	1
Truck Fill Station Piping Plan	1" = 5'	1
Truck Fill Station Sections	1/2" = 1"	1
Transmission Pipeline Plan and Profile Sheets	1" = 20'	8
Civil Detail Sheets	-	2
Electrical Sheets		
General Notes, Details, Legend, and Abbreviations	-	1
Truck Fill Station Plan	1" = 10'	1
Flow Meter and PRV Vault Plan	-	1
TOTAL PLAN SHEETS		21

- 3 Hours and fee may be renegotiated if the project is delayed by factors beyond Harris' control.
- 4 Hours for additional design iterations are not included.
- 5 Utilities will design their relocations, if any are needed.
- 6 The number of budgeted meetings is indicated on the spreadsheet.
- 7 No geotechnical investigation is included.
- 8 No environmental study or permitting is included.
- 9 The City's boiler plate front end Specifications from previous design will be revised for this project, or City will provide more current version in Word.
- 10 City review comments will be presented to Harris on one consolidated set of marked up documents.
- 11 Printing of final bid documents will be by City (or Harris at cost plus markup)
- 12 It is assumed that the City will perform the following tasks: CEQA compliance, pay encroachment permit fees, obtain any required easements.
- 13 It is assumed that the City SCADA maintenance firm will perform all required modifications to the SCADA system. Recommendations will be provided via tech memo.
- 14 It is assumed that the existing W3 controls can be adjusted for use with the recycled water system and that replacement of major equipment will not be required.
- 15 The City will determine and provide approximate locations of all connections between existing recycled water piping and the potable water system.
- 16 Design for the recycled water "distribution system" (piping not shown in Exhibit A) is not included.
- 17 Design Services During Construction is not included and will be in a future task order.
- 18 Construction Management and Inspection is not included, but could be included in a future task order if desired by the City.