

# NAPA SANITATION DISTRICT

CAROLLO ENGINEERS - TASK ORDER No. 17 Sarco Creek Pipeline Replacement Project (CIP #15703)

Date: \_\_\_\_\_

Issued under Professional Services Agreement dated <u>July 31, 2014</u>.

To: Carollo Engineers

## **Project Description:**

Engineering Services During Construction for the Sarco Creek Pipeline Replacement Project.

## Description of Scope of Services to be performed by Consultant under this Task Order:

See Attachment 'A' – Scope of Services

Description of Services to be Provided by District:	See Attachment A – Scope of Services						
Deliverables:	See Attachment A – Scope of Services						
Consultant Project Manager:	Anne Prudhel, PE						
Consultant Quality Control Manager:	Tim Taylor, PE						
Schedule to Perform Services:	April 2016 to December 2016						
Time & Materials Not-to-Exceed Cost Limit:	\$87,736.00						
	See Attachment B – Budget Estimate						

#### APPROVALS:

#### **CAROLLO ENGINEERS**

Ву: \_\_\_\_

Authorized Representative

Date

## NAPA SANITATION DISTRICT

Ву: \_\_\_\_

Purchasing Agent

Date

NSD Account No.: <u>CIP 15703</u>

## ATTACHMENT A

#### NAPA SANITATION DISTRICT SARCO CREEK PIPELINE REPLACEMENT PROJECT ENGINEERING SERVICES DURING CONSTRUCTION

#### SCOPE OF SERVICES

#### February 17, 2016

## INTRODUCTION

In January 2016, Carollo completed design of the Sarco Creek Pipeline Replacement Project (Project). The Project is scheduled to begin construction in May 2016. Construction Management services (general construction contract management and inspection) will be provided under a separate contract directly with the District or by the District. Carollo's Scope of Services herein is to provide engineering services during construction to the District and the Construction Manager. This Scope of Services is based on a construction period of 7 months from Contractor's notice to proceed until final project acceptance and project closeout.

## SCOPE OF SERVICES

This section presents the Scope of Services for the Sarco Creek Pipeline Replacement Project -Engineering Services During Construction.

## **Task 1 - Project Management and Meetings**

Consultant shall provide the appropriate level of project administration and management of this project and attend specified meetings herein during the construction period.

**Task 1.1 - Project Management.** Carollo shall provide the appropriate level of project management and administration necessary for proper planning, execution, monitoring, quality control, and reporting of this project. Carollo shall also prepare a brief monthly progress summary letter report for attachment to the monthly invoice to track status of budget expenditures and key work activities completed during that billing period.

## Deliverables:

• Monthly invoices with progress summary letter report.

**Task 1.2 – Pre-Construction Meeting.** Carollo's project manager and project engineer shall attend a pre-construction meeting with the District, Construction Manager, and Contractor. The purpose of the meeting is to facilitate understanding of the contract requirements by all parties

involved. The meeting will be conducted by the Construction Manager. Meeting notes will be prepared by the Construction Manager.

## Deliverables:

- As-needed, provide discussion topics to the District and/or Construction Manager prior to the meeting.
- Attendance and input at the pre-construction meeting.

**Task 1.3 – Progress Meetings.** Carollo shall attend progress meetings with the District, Construction Manager, and Contractor. The purpose of these meetings is to discuss construction status and to review key issues with the Contractor. The meetings will be conducted by the Construction Manager. Meeting notes will be prepared by the Construction Manager. For budgeting purposes, Carollo's project manager or project engineer shall attend a total of 6 progress meetings.

## Deliverables:

- As-needed discussion topics to the District and/or Construction Manager prior to the meeting.
- Attendance and input at the progress meetings.

## Task 2 – Review RFIs

Carollo shall review RFIs to assist the District and Construction Manager during the construction period.

**Task 2.1 – Review RFIs.** Carollo shall review and respond to requests for information (RFIs) from the Contractor forwarded by the Construction Manager. In responding to the RFIs, Consultant shall issue interpretations and clarifications to the contract documents. For budgeting purposes, Carollo shall respond to approximately 15 RFIs assuming an average review time of 4 hours to process and respond to each RFI. Note the budget allocated for this task may be higher or lower depending on the final number of RFIs reviewed and the complexity of each RFI submitted by the Contractor.

## Deliverables:

Responses to RFIs.

## Task 3 – Review Shop Drawings

Carollo shall provide review shop drawings to assist the District and Construction Manager during the construction period.

**Task 3.1 – Review Shop Drawings.** Carollo shall review and respond to shop drawing submittals (excluding temporary shoring submittals) from the Contractor forwarded by the Construction Manager. Submittals shall be reviewed and marked-up in accordance with the contract documents. Marked-up submittals will be returned to the Construction Manager for processing and distribution to the Contractor and other parties. For budgeting purposes, Carollo shall respond to approximately 30 submittals assuming an average process and review time of 4 hours per submittal and 15 resubmittals assuming an average process and review time of 2 hours per submittal. Note the budget allocated for this task may be higher or lower depending on the final number of submittals reviewed and the completeness of each shop drawing submitted by the Contractor.

## Deliverables:

• Marked-up submittals and resubmittals.

## Task 4 – Other Engineering Support Services

Carollo shall provide other engineering support services specified herein to assist the District and Construction Manager during the construction period.

**Task 4.1 – Prepare Design Clarifications.** Carollo shall prepare design clarifications to clarify and/or change the intent of the contract documents at the request of the District and/or Construction Manager. In preparing the design clarification, Carollo shall issue revised specifications, drawings, and/or sketches, if necessary, to clarify and/or change the intent of the contract documents. For budgeting purposes, 40 hours have been budgeted for this task.

## Deliverables:

• Completed design clarifications.

**Task 4.2 – Review Request for Proposals.** Carollo shall review changes to the Contract Documents proposed by the Contractor during the construction period. It is assumed these changes will be screened initially by the Construction Manager for merit. If it is determined that the request is worthy of further review, the Construction Manager will issue a formal Request for Proposal (RFP). Carollo shall review the RFP for impact on design intent, costs, and impacts to the construction schedule. For budgeting purposes, 16 hours have been budgeted for this task.

## Deliverables:

• Responses to RFPs.

**Task 4.3 – Review Change Orders.** Carollo shall assist the Construction Manager in reviewing proposed change orders submitted by the Contractor. Carollo's review shall be limited to merits of the change order and providing input on applicable unit and material prices of selected items. It is assumed the Construction Manager will prepare an independent cost estimate of the proposed change order for verification and to negotiate the proposed change order cost with the Contractor on behalf of the District. For budgeting purposes, 8 hours have been budgeted for this task.

## Deliverables:

• Review comments to change orders.

**Task 4.4 – Final Inspection.** Carollo shall assist the Construction Manager with the final project "walk-through" inspection in preparing a punch list of outstanding items to be completed by the Contractor to achieve final acceptance.

## Deliverables:

• Input on final punch-list.

**Task 4.5 – Easement Assistance.** LCC will develop a legal description and plat map for the new pipeline location to provide to Caltrans in support of Caltrans' transfer of the easement to NSD. The budget for this task assumes that Caltrans will provide any preliminary legal descriptions and plat maps they have developed for the utility easement, drainage easement, and temporary construction easement and that they will provide copies of any title reports they have already obtained and the at the District will provide information on the existing easement for the pipeline, if available.

## Deliverables:

• Legal description & Plat Map (1).

**Task 4.6 – Geotechnical Specialty Inspection.** RGH will provide inspection as needed for geotechnical related field issues. They will also review geotechnical related change order requests, and RFIs and provide input as needed.

#### Deliverables:

• Field notes, responses to RFIs, opinions on change order requests as required.

## Task 5 - Record Drawings

Carollo shall prepare record drawings of the project to incorporate changes made during the construction period.

**Task 5.1 – Record Drawings**. Carollo shall prepare record drawings using Carollo's standard format to include changes made during the construction period after contract closeout. It is assumed that the Contractor and Construction Manager will maintain a current set of marked-up drawings detailing field changes and clarifications. Carollo shall not be responsible for field measuring as-built conditions and will rely solely on the information provided by the Construction Manager as the basis for preparing the record drawings.

## Deliverables:

• One electronic copy of the record drawings.

ATTACHMENT B LABOR AND BUDGET ESTIMATE NAPA SANITATION DISTRICT SARCO CREEK PIPELINE REPLACEMENT PROJECT ENGINEERING SERVICES DURING CONSTRUCTION FOR 7 MONTHS														
	PM	PE/Struct	CAD Drafter	Word Processor	Total	Labor	Subconsultants (Includes 5% Fee) RGH LCC		PECE		Mileage		ODC	Total
Task Task Description	\$245	\$194	\$163	\$102	Hours	Cost	Geotechnical	Survey	\$11.70	Printing	Trips	Amount	Total	Cost
1.0       Project Management and Meetings         1.1       Project Management (7 months)         1.2       Pre-Construction Meeting (1)         1.3       Progress Meetings (6)         Task 1.0 Totals =	\$245 28 4 8 40	0 4 24 28	0 0 0 0 0	0 0 0 0 0	28 8 32 68	\$6,860 \$1,756 \$6,616 \$15,232	Geolechnical	Sulvey	\$328 \$94 \$374	\$0 \$0 \$0 \$0	0 1 6	\$0 \$46 \$276	\$328 \$140 \$650 .0 Totals =	\$7,188 \$1,896 \$7,266 \$16,350
2.0 Review RFIs 2.1 Review RFIs Task 2.0 Totals =	<u>12</u> 12	<u>48</u> 48	<u>0</u> 0	<u>0</u> 0	<u>60</u> 60	<u>\$12,252</u> \$12,252			\$702	\$0	0	\$0 Task 2	\$702 .0 Totals =	<u>\$12,954</u> \$12,954
3.0 Review Shop Drawings 3.1 Review Shop Drawings Task 3.0 Totals =	<u>16</u> 16	<u>128</u> 128	<u>0</u> 0	<u>0</u> 0	<u>144</u> 144	<u>\$28,752</u> \$28,752			\$1,685	\$0	0	\$0 Task 3	\$1,685 .0 Totals =	<u>\$30,437</u> \$30,437
<ul> <li>4.0 Other Engineering Support Services</li> <li>4.1 Prepare Design Clarifications</li> <li>4.2 Review Requests for Proposals</li> <li>4.3 Review Change Orders</li> <li>4.4 Final Inspection</li> <li>4.5 Easement Assistance</li> <li>4.6 Geotechnical Specialty Inspection Task 4.0 Totals =</li> <li>5.0 Record Drawings</li> </ul>	4 4 2 0 2 2 14	20 12 6 8 2 4 52	8 0 0 0 0 0 8	0 0 0 0 0 0 0	40 16 8 4 6 82	\$7,423 \$3,308 \$1,654 \$1,552 \$878 \$1,266 \$16,081	\$3,150	\$2,625	\$468 \$187 \$94 \$94 \$47 \$70	\$0 \$0 \$0 \$0 \$0 \$0	2 0 1 1 0	\$92 \$0 \$46 \$46 \$0 Task 4	\$560 \$187 \$94 \$140 \$2,718 \$3,220 .0 Totals =	\$7,983 \$3,495 \$1,748 \$1,692 \$3,596 \$4,486 \$22,999
5.1 Record Drawings 5.1 Record Drawings Task 5.0 Totals = Project Totals =	2 2 84	8 8 264	<u>16</u> 16 24	0 0 0	<u>30</u> 30 384	<u>\$4,646</u> \$4,646 \$76,962	\$3,150	\$2,625	\$351 \$4,493	\$0 \$0	0	\$0 Task 5 \$506	\$351 .0 Totals = \$10,774	<u>\$4,997</u> \$4,997 \$87,736