

November 13, 2023

East Palo Alto Sanitary District 901 Weeks Street East Palo Alto, CA 943030

Akin Okupe, General Manager Attn:

Re: Proposal to Develop Design Drawings and Contract Documents for

Sanitary Sewer Pipeline Improvements based on

**Capital Improvement Plan Evaluations** 

Dear Mr. Okupe,

Sierra West Consultants, Inc. (Sierra West) is pleased to present this proposal to East Palo Alto Sanitary District (EPASD) for engineering services to prepare bidding and contract documents to replace designated sanitary sewer pipelines. Pipeline segments selected for replacement will be based on Capital Improvement Plan (CIP) evaluations that determine priority rankings from closed-circuit television (CCTV) inspections. This project is part of EPASD's ongoing wastewater collection system improvement program that addresses structural and capacity upgrades throughout the service area. It is understood that this phase of the program will address approximately 6,000 linear feet of pipelines.

This proposal defines the scope of work, anticipated schedule, and an estimated budget to evaluate CCTV results and existing conditions of the wastewater collection system, develop a priority list of capital improvement projects with opinions of probable costs, and compile these projects into a CIP document.

The selected high priority pipeline segments will be reviewed for their current capacities and final design diameters will be established based on updated hydraulic modeling and consultations with EPASD. It is expected that the new pipeline invert elevations and resultant pipeline slopes will remain the same as the existing pipelines. It is also expected that existing manholes will remain in place, although provisions will be incorporated into the design to account for the likelihood that new manholes may be needed based on unanticipated field conditions.

This proposal presents Sierra West's scope of work, anticipated schedule, and proposed budget.

## Scope of Work

Scopes of work are presented for the CIP and design drawings and contract documents.

### **Capital Improvement Plan**

Sierra West proposes to conduct and prepare the CIP in general accordance with California Government Code Section 65403. Specifically, this includes:

- A five-year plan for proposed and related capital improvements defining:
  - o Location and diameter of pipeline improvements
  - Opinions of capital budgets
  - o Projection of capital budgets over a 5-year planning horizon



- o Schedule for maintenance and rehabilitation for existing and proposed improvements
- Submit draft CIP to the planning agencies of each affected city and county to coordinate consistency with their respective General Plans.
- One public hearing prior to adoption pursuant to Government Code Section 65090
- Adoption by the Board of Directors

In addition, Section 65403 requires that the CIP be updated annually with revisions to extend the planning horizon by one year to maintain an ongoing 5-year program. The updates shall be given to local planning agencies 60 days prior to EPASD's formal annual review. Local agencies are provided 40 days to respond, and no response is considered an indication of acceptance. EPASD must consider planning agency comments, although EPASD may overrule any comments.

Sierra West proposes to conduct the aspects of the CIP mentioned above, although a Financing Plan is necessary to complete the CIP. It is anticipated that EPASD and other EPASD consultants will develop the financing plan and provide input for Sierra West to incorporate into the CIP.

Sierra West has reviewed the results of the CCTV investigations for Areas 1, 3, and 4. Sierra West will review the results for Area 2 and the Trunk Line and compile the results for all Areas. Sierra West will also review the *Addendum to the March 2015 East Palo Alto Sanitary District Master Plan Update* (Master Plan, Freyer & Laureta, April 28, 2021). From the CCTV results and the Master Plans, Sierra West will review the scoring system that considers pipeline rehabilitation and capacity improvement needs to develop a priority of pipeline replacement projects. Siera West will develop a technical memorandum summarizing the evaluation results.

With EPASD's input, Sierra West will develop a list of projects that fit into one or more of the following categories:

- 1. Replacement or Rehabilitation due to Structural Deficiencies
- 2. Capacity Improvement
- 3. Condition Assessment, such as ongoing CCTV investigations
- 4. Master Plan and other Management Plan updates
- 5. Buildings and Equipment

The CIP will be written in general accordance with the following outline:

- Introduction: Purpose and Scope with Priorities and Objectives
- Background: Service area, applicable General Plans, and Sources of Funding
- Wastewater Collection System: Review Master Plans, major interceptors and trunklines, proposed developments, changes in flow conditions, and identify distinctions between sanitary wastewater and inflow and infiltration (I/I) contributions.
- CCTV Investigation Results
- Proposed Projects
- Opinion of Probable Costs and Cash Flow Projections
- Financing Plan

In addition, Sierra West will prepare project sheets for up to five identified projects. Each sheet will summarize the project need, scope of improvements, opinion of capital costs, approximate impact on O&M costs, and a likely implementation schedule with cash flow requirements. The cost projections for each project will be summarized in a composite table to identify total projected costs for EPASD to review and comment. A final opinion of cost projections will be available as input to the Financing Plan.



Sierra West will prepare a draft CIP for EPASD's review. An updated draft can then be submitted to the local planning agencies for their review and comment. After receipt of outside comments and reviewing these comments with EPASD, a final CIP may be submitted to be adopted by EPASD Board of Directors.

# **Design Drawings and Contract Documents**

The final design will include plan and profile drawings, construction details, erosion control requirements, technical specifications, and contract and bidding documents. Base maps will be developed by conducting a topographic survey of the pipeline corridors. The survey will identify and locate edge of pavement, sidewalks, power poles, and other nearby structures that could affect construction activities. Existing buried utilities will also be identified through this process.

Available assessor parcel boundary maps will be used to show property boundaries. Surveyed right-of-way boundaries are not included, although can be included in the survey at an additional cost if desired. Design considerations will include approximately 20 pipeline segments on the order of 200 to 300 linear feet each for a total of 6,000 linear feet. It is anticipated that all pipeline segments will be within the paved areas of city streets.

Contract bidding documents and technical specifications will be updated from recent and similar EPASD projects. Sierra West will coordinate with EPASD and the City of East Palo Alto regarding encroachment permit requirements to be imposed during construction within the City's rights-of-way. Sierra West will also prepare an Engineer's Opinion of Probable Construction Costs for EPASD's consideration prior to advertising the project for bidding.

# **Proposed Schedule**

Sierra West has conducted reviews of CCTV results for designated Areas 1, 3, and 4. CCTV reviews are ongoing in Area 2 and the trunk line. It is anticipated that the Area 2 CCTV results will be finished within the next few weeks. Sierra West is prepared to immediately begin working on the CIP. It is estimated that the initial draft will be finished within two months from receipt of a signed agreement.

Sierra West will work through review comments with EPASD and incorporate the financing plan prior to sending a draft version to local planning agencies for their review. This process requires a minimum of 40 days, plus 15 days for Sierra West to incorporate any review comments. Once completed, the final CIP will be made available for EPASD Board of Directors review and adoption.

For the design drawings and contract documents, Sierra West anticipates that the topographic survey can be completed within four weeks after receipt of a written authorization to proceed. The design drawings and technical specifications will require an additional four weeks after the survey is finished.

### **Estimated Budget**

Sierra West proposes to prepare and submit the final CIP for the estimated budget of \$27,400. The task breakdown is:

•	Identify High Priority Pipelines and Technical Memorandum	\$ 6,000
•	Develop full draft CIP Report	\$12,800
•	Submit to Planning Agencies and Incorporate Comments	\$ 4,700
•	Submit to EPASD Board of Directors	\$ 3,900
	Total Estimated Budget for the CIP	\$27,400



The estimated project budget for the above design and engineering services is \$67,800. The task breakdown is:

•	Project Setup, Survey, Base Map with Existing Utilities	\$ 38,700
•	Prepare Design Drawings (12 P&P dwgs, cover, detail)	\$ 23,300
•	Update Contract Documents and Technical Specifications	\$ 5,800
	Total Estimated Project Budget for Design Drawings and Contract Documents	\$ 67,800

Sierra West proposes to conduct the above scope of work using the attached Schedule of Billing Rates and under the terms and conditions of an updated agreement with EPASD.

We appreciate this opportunity to work with EPASD. If you have any questions, please contact me at <a href="mailto:ibensch@sierra-west.net">ibensch@sierra-west.net</a> or (916) 207-5706.

Sincerely,

Sierra West Consultants, Inc.

Jeffrey C. Bensch, P.E. Principal Engineer



# Schedule of Billing Rates Sierra West Consultants, Inc.

Effective January 1, 2023

Grade	Rate (\$/hour)
Principal Professional	215
Senior Professional Project Manager	175
Project Professional	160
Construction Observation <sup>1</sup>	165
Staff Engineer/Geologist	130
Senior Technician	120
Technician	105
CADD Operator/Drafting	95
Clerical	90
Litigation Support, Deposition, or Expert Witness Services	300

Hourly Rates are subject to annual review and adjustment.

1. Prevailing wage for on-site construction observations

Reimbursable expenses will be billed at cost plus 10%. Auto mileage will be billed at government established rates in effect at the time of travel.

#### BUDGET ESTIMATE

SCOPE OF WORK: Prepare Capital Improvement Plan (CIP) CLIENT: East Palo Alto Sanitary District 11/13/2023

	Personnel												Profe	ssional and Cor	Tr	ravel & (	TOTAL					
Task Description	Principal Engineer	Project Manager	Senior Engineer/Geologist	Project Engineer/Geologist	Staff Engineer/Geologist	Senior Technician	Technician	CADD/Graphics	Admin/Clerical	Total Personnel	Legal	Laboratory	Electrical and Controls	Land Surveyor	Geotechnical	Environmental Compliance	Total Professional and Consultant Services	Travel	5	Expenses & Supplies	Equipment	Total Task
Summarize CCTV Results and Evaluations										\$ -							\$ -	\$	-			\$ -
Identify High Priority Projects with Opinoin of Costs										\$ -							\$ -	\$	-			\$ -
Combine and Summarize w/ Cost Projections and Tech Memo		2	32						1	\$ 6,035.00							\$ -	\$	-			\$ 6,035.00
Develop Draft CIP Report, Rvw w/ EPASD and Update		4	60					16	1	\$ 12,805.00							\$ -	\$	-			\$ 12,805.00
Submit to Planning Agencies and Incorporate Comments		2	24						1	\$ 4,635.00							\$ -	\$	-			\$ 4,635.00
Submit to EPASD Board of Directors		2	20						1	\$ 3,935.00							\$ -					\$ 3,935.00
Totals	0	10	136	0	0	0	0	16	4	\$ 27,410.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$	-	\$ -	\$ -	\$ 27,410.00

#### BUDGET ESTIMATE

SCOPE OF WORK: Sanitary Sewer Replacement Project, Phase II 2023/2024 CLIENT: East Palo Alto Sanitary District 11/13/2023

-					Pers	onnel					Professional and Consultant Services									Travel & Other Expenses				
Task Description	Principal Engineer	Project Manager	Senior Engineer/Geologist	Project Engineer/Geologist	Staff Engineer/Geologist	Senior Technician	Technician	CADD/Graphics	Admin/Clerical	Total Personnel	Legal	Laboratory	Electrical and Controls	Land Surveyor	Utility Locates	Environmental Compliance	Prof and C	Total fessional Consultant ervices	Mileage	Per Diem	Expenses and Supplie	Total	Task	
Project Setup and Management		8							2	\$ 1,570.00							\$	-				\$ 1,	,570.00	
Survey and Base Map		8	16		8			8	4	\$ 6,340.00				\$ 20,114	\$ 10,682		\$	30,795					,135.00	
Plan and Profile Dwgs (12 dwgs)		8	24		48			80	4	\$ 19,780.00							\$	-					,780.00	
Cover and Detail Dwgs (2)		2	8		8			8		\$ 3,550.00							\$	-					,550.00	
Prepare Final Contract Documents and Specifications		4	24		0			8	2	\$ 5,830.00							\$	-				\$ 5,	,830.00	
										\$ -							\$	-				\$	-	
										\$ -							\$	-				\$	-	
Totals	0	30	72	0	64	0	0	104	12	\$ 37,070.00	\$ -	\$ -	\$ -	\$ 20,114	\$ 10,682	\$ -	\$	30,795	\$ -	\$	- \$ -	\$ 67,	,865.00	