

Schaaf & Wheeler
CONSULTING CIVIL ENGINEERS

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December 16, 2016

Mr. Jack Muench, PE
City of Mountain View
500 Castro Street
Mountain View, CA 94041

Subject: Proposal for Engineering Services – Shoreline Sewer Pump Station Rehabilitation

Dear Jack:

The purpose of this letter is to provide a scope for engineering services as requested by the City of Mountain View for the short-term rehabilitation of the City's Shoreline Sewer Pump Station (Project). This letter summarizes the scope of work that will be provided by Schaaf & Wheeler and our sub-consultants MTH Engineers and Biggs Cardosa & Associates. Please review, and if acceptable, this letter may serve as the basis for a Scope of Work to be included in an agreement for engineering services.

The Project improvements reflect recommendations for Immediate Repairs in Schaaf & Wheeler's Shoreline Sewer Pump Station Assessment Report, 2015. The scope of improvements include:

1. Remove or seal all penetrations between the wetwell and the drywell, including conduit penetrations and access hatches. Seal all conduits as they exit the wetwell.
2. If access hatches remain, install fall protection devices on hatches.
3. Replace drywell ventilation system with system that provides at least 6 air changes per hour, is equipped with intake and exhaust fans, and provides visual and audible alarms in case of ventilation failure.
4. Replace wetwell ventilation system with system that provides at least 12 air changes per hour, is equipped with intake and exhaust fans, and provides visual and audible alarms in case of ventilation failure.
5. Repair or replace the non-functional motor disconnect switches that are adjacent to the electric motors.
6. Replace existing pump discharge header and damaged valves. Where possible use corrosion resistant materials such as HDPE for piping and epoxy coating and lining for metallic components. A guidance bypass pumping plan will be provided as part of the design documents.

7. Install secondary pump controller and float switches designed to start and stop pumps in case of a main controller failure. Reconfigure hydraulic gate operation to occur only after the secondary controller has failed.

Scope of Services

Task 1. Project Verification and Kick-off

Schaaf & Wheeler will collect all required background information obtained during the pump station assessment work and request additional information from the City as necessary. Our engineers will prepare a summary memorandum of our understanding of required improvements with description of construction work required for each improvement. The City will be provided the memorandum for review and to confirm scope of Project. Schaaf & Wheeler will attend a kick-off meeting with our electrical engineering sub-consultant MTH Engineers to discuss the scope of the Project, coordinate required fieldwork and discuss the schedule for the design effort. Fieldwork for the project will consist of verification of dimensions, equipment specifications, and current conditions.

Task 2. Detailed Design

Schaaf & Wheeler will begin detailed design work based on feedback from the City during Task 1. Two working draft submittals will be prepared for City review at 75% and 95% Completion, respectively. Work draft submittals will include Plans, Specifications, and Construction Cost Estimate. Schaaf & Wheeler will participate in a review meeting to discuss City review comments after each working draft submittal. One final Bid Documents submittal will be prepared that will include City Standard Specifications and Front End, Project team supplemental/technical specifications, and completed bid form with Engineer's Estimate.

Task 3. Bid Support

Schaaf & Wheeler will provide bid support services to assist the City during the public bid process. Schaaf & Wheeler will attend the pre-bid conference, assist City in response to bidders' requests for clarifications, and prepare addenda as required.

Task 4. Construction Support

Schaaf & Wheeler will provide construction support services including:

- Attend Pre-construction Conference
- Review Contractor Submittals and Shop Drawings
- Respond to Requests for Information (RFIs)
- Assist City with resolving issues during construction
- Attend final walk-through and generate punchlist
- Prepare Record Drawings

Task 5. Project Management

Schaaf & Wheeler will provide Project Management associated with the design of the project, including:

- Coordination with the City staff throughout the duration of the project as well as Quality Assurance/Quality Control (QA/QC) activities for project deliverables.
- Coordination with subconsultants and product vendors.
- General project control including schedule and budget.

Assumptions

The scope of work detailed above is based on our current understanding of the project requirements and is based on the following assumptions:

- City will provide administration of construction bidding and construction management
- Design of external buried structures are not part of this scope of work. If City desires relocation of wetwell access hatch outside of electrical room, additional scope and fee can be provided.
- Detailed site surveying is not required
- Building permitting and other agency permit assistance is not included in this scope
- The following items are **NOT** included within the Scope of Work detailed here or the Fee quoted:
 - o Field visits and/or attendance at construction meetings not specifically included in the scope of work above.
 - o Construction inspections.

Schedule

Schaaf & Wheeler is flexible with the project schedule and can reasonably accommodate the City's project schedule. In general, the following is a duration schedule for tasks provided above:

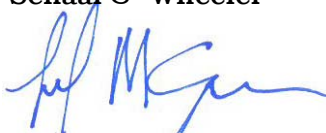
Project Verification and Kick-off Mtg	2 weeks from NTP
75% Design Submittal	4 weeks from K-O Mtg
95% Design Submittal	3 weeks from review Mtg
Final Bid Documents	1 week from review Mtg

Consultant's Compensation

Based on the above understanding, scope, assumptions, and our conversations with the City, we propose to provide engineering services on a time and materials basis in accordance with the attached standard charge rates and detailed fee estimate, with a total not to exceed \$99,975. S&W will invoice services on a monthly basis.

Schaaf & Wheeler looks forward to working with the City of Mountain View on this important project. Please feel free to call me at (408) 246-4848 should you have any questions or require any additional information.

Sincerely,
Schaaf & Wheeler



Leif M. Coponen, PE
Vice President

<p align="center"> City of Mountain View Engineering Services for Shoreline Sewer Pump Station Rehabilitation Schaaf & Wheeler Fee Proposal - December 16, 2016 </p>										
	Hourly Rate	Project Manager	Senior Engineer	Assistant Engineer	Designer (drafting)	Schaaf & Wheeler Subtotal	Biggs Cardosa Associates Structural Engineering Subconsultant	MTH Engineers Electrical Engineering Subconsultant	Subconsultant Markup (0%)	Total
Task 1	Projection Verification / Kick-off	\$225	\$200	\$160	\$140	\$	\$	\$	\$	\$
		4	8	4	0	\$ 3,140	\$ -	\$ 2,400	-	\$ 5,540
						\$				\$
Task 2	Detailed Design	16	32	40	28	\$ 20,320	\$ 20,934	\$ 29,585	-	\$ 70,839
A	75% Design Submittal (PS&E)	4	16	24	12	\$ 9,620	\$ 11,526	\$ 7,800	-	\$ 28,946
	Meet with City for 75% Design Review	2				\$ 450			-	\$ 450
B	95% Design Submittal (PS&E)	4	8	16	8	\$ 6,180	\$ 6,970	\$ 16,215	-	\$ 29,365
	Meet with City for 95% Design Review	2				\$ 450			-	\$ 450
C	Final Bid Documents Submittal	4	8		8	\$ 3,620	\$ 2,438	\$ 5,570	-	\$ 11,628
Task 3	Bid Support	6	0	4	0	\$ 1,990	\$ 542	\$ -	-	\$ 2,532
A	Attend Pre-Bid Meeting	2				\$ 450			-	\$ 450
B	Respond to Bidders' RFC	2		2		\$ 770	\$ 542		-	\$ 1,312
C	Prepare Addenda	2		2		\$ 770			-	\$ 770
Task 4	BidSupport	4	10	12	3	\$ 5,240	\$ 4,914	\$ 8,210	-	\$ 18,364
A	Attend Pre-Construction Meeting	2				\$ 450		\$ 510	-	\$ 960
B	Review Contractor Submittals		4	8		\$ 2,080	\$ 3,344	\$ 3,230	-	\$ 8,654
C	Respond to RFIs		2	4		\$ 1,040	\$ 784	\$ 780	-	\$ 2,604
D	Assist Resolving Construction Issues		4			\$ 800		\$ 2,040	-	\$ 2,840
E	Punchlist / Record Drawings	2			3	\$ 870	\$ 786	\$ 1,650	-	\$ 3,306
Task 5	Project Management	12	0	0	0	\$ 2,700			-	\$ 2,700
	TOTAL FEE	42	50	60	31	\$ 33,390	\$ 26,390	\$ 40,195	-	\$ 99,975

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Hourly Charge Rate Schedule

Personnel Charges

Charges for personnel engaged in professional and/or technical work are based on the actual hours directly chargeable to the project.

Current rates by classification are listed below:

<u>Classification</u>	<u>Rate/Hr</u>	<u>Classification</u>	<u>Rate/Hr</u>
Project Manager	\$225	Construction Manager	\$215
Project Engineer	\$215	Senior Resident Engineer	\$185
Senior Engineer	\$200	Resident Engineer	\$165
Associate Engineer	\$180	Assistant Resident Engineer	\$150
Assistant Engineer	\$160	Construction Inspector	\$135
Junior Engineer	\$150		
Designer	\$140		
Technician	\$135		
Engineering Trainee	\$105		

Principal time is \$315 per hour and is charged only for work done in preparation for litigation and other very high level-of-expertise assignments. Court or deposition time as an expert witness is charged at \$420 per hour with a minimum of four hours per day.

Materials and Services

Subcontractors, special equipment, outside reproduction, data processing, computer services, etc., will be charged at 1.10 times cost.

These rates are subject to revision semi-annually.

Effective 1/1/17