



Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: Kerrie Romanow
Matt Cano

SUBJECT: SEE BELOW

DATE: April 30, 2018

Approved

D. DSYL

Date

5/10/18

SUBJECT: REPORT ON BIDS AND AWARD OF CONSTRUCTION CONTRACT FOR 7757 – ADVANCED FACILITY CONTROL AND METER REPLACEMENT - PHASE 1 PROJECT AT THE SAN JOSE-SANTA CLARA REGIONAL WASTEWATER FACILITY

RECOMMENDATION

- (a) Report on bids and award of a construction contract for 7757-Advanced Facility Control and Meter Replacement - Phase 1 Project to the low bidder, C. Overaa & Co., for the base bid and Add Alternate Nos. 1 to 4, in the amount of \$5,790,000, and approve a 20 percent construction contingency in the amount of \$1,158,000.
- (b) Adopt a resolution authorizing the Director of Public Works to negotiate and execute one or more change orders in excess of \$100,000 for the duration of the project, not to exceed the total contingency amount approved for the project.

OUTCOME

Award of the construction contract to C. Overaa & Co (Overaa)., will allow for the construction and completion of the Advanced Facility Control and Meter Replacement - Phase 1 Project (Project), which will improve operational reliability and efficiency at the San José-Santa Clara Regional Wastewater Facility (RWF). Approval of a 20 percent construction contingency will provide funding for unanticipated work necessary for the proper and timely completion of the Project. Adoption of a resolution authorizing the Director of Public Works to negotiate and execute change orders up to the contingency amount will allow for implementation of any changes required in the Project for completion as scheduled in the fourth quarter of 2020.

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BACKGROUND

The RWF relies on control equipment, such as flow meters, valves and actuators, sensors and transmitters, for process monitoring and control to maintain safe and efficient operation of the RWF and full compliance with its National Pollutant Discharge Elimination System (NPDES) permit. Most of the control equipment at the RWF was installed during the 1960s and 1970s and is in poor condition and requires excessive maintenance. Some of the control equipment is difficult to repair because it is no longer supported by the manufacturers, and replacement parts are scarce or not available. Therefore, there is an urgent need to replace the control equipment to increase equipment and data reliability and integrity, and to improve the RWF's overall operations and efficiency.

The Project will replace and/or upgrade the control equipment in the Secondary B Battery and Nitrification B Battery treatment areas, as shown in Attachment A. The project scope includes replacing 52 flow meters, 24 valves, 12 valve actuators, 26 sensors and transmitters, associated piping modifications, and electrical improvements.

Construction is scheduled to begin in July 2018, with substantial completion in December 2020. Major construction work will be performed during the planned maintenance shutdown periods for each battery in 2019 and 2020, respectively.

Council Resolution No. 71816, adopted on November 4, 2003, requires pre-qualification of contractors on all public works projects in which the Engineer's Estimate is \$10 million or more. The Engineer's Estimate for this project is \$10.4 million, and the Project will be delivered using a conventional design-bid-build delivery method. Based on these factors, staff conducted a pre-qualification process in October 2017. Six general contractors submitted their pre-qualification packages. Staff evaluated the packages and determined that four general contractors met the pre-qualification requirements. Of the four pre-qualified contractors who were invited to bid on the Project, three submitted bids.

ANALYSIS

Bids were opened on February 8, 2018 with the following results:

Contractor	Base Bid Amount	Add Alt Total	Total Bid	Variance Amount	Over/ (Under) Percent
C. Overaa & Co. (Richmond)	\$5,302,000	\$488,000	\$5,790,000	(\$4,566,829)	(44)
Monterey Mechanical Co. (Alameda)	\$6,205,000	\$576,000	\$6,781,000	(\$3,575,829)	(35)
Kiewit Infrastructure West Co. (Fairfield)	\$7,416,700	\$1,398,000	\$8,814,700	(\$1,542,129)	(15)
Engineer's Estimate	\$9,000,000	\$1,400,000	\$10,400,000		

In addition to the base bid scope of work there are four Add Alternate bid items as follows:

Add Alternate No. 1: Replacement of Secondary Clarifiers B-1 to B-8 Effluent Flow Meters and all associated modification work.

Add Alternate No. 2: Replacement of Secondary Clarifiers B-9 to B-11 Effluent Flow Meters and all associated modification work.

Add Alternate No. 3: Replacement of Secondary Tank B-5 West End Feed Flow Meters, Sensors, Transmitter, and all associated modification work.

Add Alternate No. 4: Replacement of Secondary Tank B-6 West End Feed Flow Meters, Sensors, Transmitters, and all associated modification work.

Contractor	Add Alt No. 1	Add Alt No. 2	Add Alt No. 3	Add Alt No. 4
C. Overaa & Co.	\$97,000	\$62,000	\$169,000	\$160,000
Monterey Mechanical Co.	\$90,000	\$57,000	\$249,000	\$180,000
Kiewit Infrastructure West Co.	\$674,000	\$199,000	\$279,000	\$246,000
Engineer's Estimate	\$250,000	\$160,000	\$520,000	\$470,000

A total of three bids were received and all of the bids were below the Engineer's Estimate. The low bids may be attributed to the following factors:

- Equipment vendor quotes used on the bid are likely lower than the quotes used in the Engineer's Estimate due to the competitive nature of the bidding process, and
- Lower mobilization and staffing costs as Overaa has other construction projects ongoing at the RWF.

The low bid submitted by C. Overaa & Co. is 44 percent under the Engineer's Estimate. Staff considers the low bid submitted for the Project is acceptable for the work involved and recommends awarding a construction contract to the low bidder, Overaa. Add Alternates Nos. 1, 2, 3, and 4 are recommended for award because there is sufficient project budget to accommodate these additions to the Project.

Construction contingencies for capital projects are established by Council Resolution No. 71319:

- a. Five percent of the total contract amount for street, sidewalk or park projects;
- b. 10 percent of the total contract amount for utilities and building projects;
- c. 15 percent of the total contract amount for building renovation projects;
- d. Such other amount as may be approved by the City Council for a particular project.

Staff recommends a 20 percent construction contingency for this Project. This contingency is recommended to account for the challenge of maintaining continuous operations at the RWF during construction, complex project interfaces with existing electrical and process control facilities, potential utility conflicts, access constraints, and the potential for conflicts with other concurrent capital improvement and maintenance projects. The higher contingency percentage is also recommended given the lower contract amount.

Staff also recommends delegating authority to the Public Works Director to execute one or more change orders in excess of \$100,000 for the duration of the Project, in a total not to exceed the contingency approved for the Project, and subject to other applicable limitations on the authority of the director in the San José Municipal Code. Approval of these recommendations will provide funding for any unanticipated work necessary for the proper and timely completion of the Project, and provide staff with the flexibility to efficiently respond to unforeseen changed conditions for the duration of the Project.

EVALUATION AND FOLLOW-UP

No follow-up action with City Council is expected at this time. A progress report on this and other RWF capital projects will be made to the Transportation and Environment Committee, Treatment Plant Advisory Committee (TPAC), and the City Council on a semiannual basis. Monthly progress reports of the RWF Capital Improvement Program (CIP) will also be submitted to TPAC and posted on the City's website.

PUBLIC OUTREACH

This project was advertised on BidSync.com on January 3, 2018 and advertised in the San José Post Record. This memorandum will be posted on the City's Council Agenda website for the May 22, 2018, City Council meeting.

COORDINATION

This Project and memorandum have been coordinated with the City Attorney's Office, the City Manager's Budget Office, and Departments of Fire, Finance, and Planning, Building and Code Enforcement.

COMMISSION RECOMMENDATION/INPUT

This item is scheduled to be heard at the May 17, 2018 TPAC meeting. A supplemental memo with the committee's recommendation will be included in the amended May 22, 2018 City Council meeting agenda.

FISCAL/POLICY ALIGNMENT

This Project is consistent with the Council-approved focus on rehabilitating aging RWF infrastructure, improving efficiency, and reducing operating costs. This Project is also consistent with the budget strategy principle of focusing on protecting our vital core services.

COST SUMMARY/IMPLICATIONS

1.	AMOUNT OF RECOMMENDATION:	\$ 5,790,000
2.	COST OF PROJECT:	
	Project Delivery	\$ 3,544,000*
	Construction	\$ 5,790,000
	Contingency (20%)	\$ 1,158,000
	Total Project Costs	\$10,492,000
	Prior Year Expenditures	<u>\$ 1,311,412</u>
	Remaining Project Costs	\$ 9,180,588

* Project delivery estimate includes: \$1,223,800 for professional consultant services (feasibility/development, design, and engineering services during bid and award, construction and post construction phases); \$289,000 for project management during feasibility and development phase; \$162,000 for project management during design phase; \$101,000 for project management during bid and award phase; \$1,675,800 for construction management (including special inspections); and \$92,400 for project management during post construction and project closeout phase.

The estimated project delivery cost is 61% of the construction cost, which is in line with project delivery costs for capital projects at the RWF and other wastewater facilities. Construction management costs for this project are slightly higher than average due to the extended construction duration resulting from operational constraints and additional coordination needed to ensure that the work is completed during the planned maintenance shutdown periods.

3. COST ELEMENTS OF CONTRACT:
This is a lump sum contract. \$5,790,000
4. SOURCE OF FUNDING: Fund 512 – San José-Santa Clara Treatment Plant Capital Fund
5. OPERATING COSTS: The annual costs to operate and maintain the upgraded facilities are not anticipated to impact the San José-Santa Clara Treatment Plant Operating Fund as this is an equipment replacement project, and therefore there will be no additional annual operations and maintenance costs.
6. PROJECT COST ALLOCATION: In accordance with the recommendations set forth in the Capital Project Cost Allocations Technical Memorandum (Carollo Engineers, March 2016), this project is allocated between the four billable parameters relative to the rolling weighted average distribution of all RWF assets.

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BUDGET REFERENCE

The table below identifies the fund and appropriations proposed to fund the contract recommended as part of this memorandum and remaining project costs, including project delivery, construction, and contingency costs.

Fund #	Appn #	Appn Name	Current Total Appn	Amt for Contract	2017-2018 Adopted Capital Budget Page	Last Budget Action (Date, Ord. No.)
Remaining Project Costs			\$9,180,588			
Remaining Funding Available						
512	7224	Advanced Facility Control and Meter Replacement	\$13,248,000	\$5,790,000	279	10/17/2017 Ord. No. 30014

CEQA

Exempt, File No. PP16-130, CEQA Guidelines Section 15301, Existing Facilities.

/s/
KERRIE ROMANOW
Director
Environmental Services Department

/s/
MATT CANO
Director
Public Works Department

For questions, please contact Ashwini Kantak, Assistant Director, Environmental Services Department at (408) 975-2553.

Attachment A – Advanced Facility Control and Meter Replacement - Phase 1 Project Map

Attachment A - Project Map

Advanced Facility Control and Meter Replacement – Phase 1



Phase 1 Scope

Secondary – B Battery (Construction in 2019)

- 39 Flow Meters
- 16 Sensors

Nitrification – B Battery (Construction in 2020)

- 13 Flow Meters
- 24 Valves and 12 Actuators
- 10 Sensors