



# Memorandum

**TO:** HONORABLE MAYOR AND  
CITY COUNCIL

**FROM:** John Stufflebean

**SUBJECT:** SEE BELOW

**DATE:** 05-26-09

Approved

*Deanne Silva*

Date

*5/26/09*

**COUNCIL DISTRICT:** City-Wide

**SUBJECT: REPORT ON BIDS AND AWARD OF CONTRACT TO THE LOW BIDDER, PACIFIC INFRASTRUCTURE, FOR THE SAN JOSÉ/SANTA CLARA WATER POLLUTION CONTROL PLANT, FY 2008-2009 CAPITAL IMPROVEMENT PROGRAM, NITRIFICATION GATE AND CHANNEL AERATION IMPROVEMENTS PROJECT**

## RECOMMENDATION

Report on bids and award of construction contract for the project entitled "San José/Santa Clara Water Pollution Control Plant, FY 2008-2009 Capital Improvement Program, Nitrification Gate and Channel Aeration Improvements Project," to the low bidder, Pacific Infrastructure, in the amount of \$1,684,000, and approval of a 15% contingency in the amount of \$253,000.

## OUTCOME

Award of this construction project will provide for easier maintenance, add operational flexibility, improve maintainability and increase energy efficiency of the Nitrification treatment facilities at the Plant.

## BACKGROUND

The Nitrification treatment facilities, which provide secondary biological treatment, were built in the mid-1970s. The facilities, originally designed to allow for isolation of either Battery A or Battery B of the Nitrification treatment facilities, enabled staff to perform major system maintenance work on one battery while the other is in operation. Over the years, the concrete embedded steel frames for the isolation gates located at the influent channels to Battery A and Battery B have become severely corroded, eliminating the operational flexibility to isolate either batteries.

The Nitrification treatment facilities also include a coarse bubble aeration system designed to keep wastewater solid particles in the influent channels in suspension and maintain dissolved oxygen levels in the mixed liquor channels. Mixed liquor channels convey wastewater from the Nitrification aeration tanks to the Nitrification clarifiers. An existing common air header distributes air to both the influent and mixed liquor channels and balancing the air flow to the channels has been extremely difficult. In addition, the existing aeration piping components, which includes pivoting piping arms, valves, and diffusers, are badly corroded and leaking, requiring frequent repair or replacement. As a result, it is difficult to maintain uniform air flow throughout the channels.

This project will provide new gate frames at the entrance to each influent channel at Batteries A and B and a new stainless steel isolation gate. This project will also reconfigure the existing combined air system with a separate aeration system to the influent channels and the mixed liquor channels and replace existing air piping, valves, and diffusers.

**ANALYSIS**

The project was advertised for bids and a total of five bids were received and opened on May 7, 2009 with the following results:

<u>Contractor</u>	<u>City</u>	<u>Bid Amount</u>	<u>Variance Over/ (Under)</u>	
			<u>Engineer's Estimate Amount</u>	<u>Percent</u>
Gantry Constructors, Inc.	Clarkdale, AZ	\$2,122,000	\$352,537	19.9 %
Monterey Mechanical Co.	Oakland	\$1,988,000	\$218,537	12.4 %
D. W. Nicholson Corp.	Hayward	\$1,890,000	\$120,537	6.8 %
<b>Engineer's Estimate</b>		<b>\$1,769,463</b>		
Anderson Pacific Engineering Construction, Inc.	Santa Clara	\$1,720,000	(\$49,463)	(2.8 %)
Pacific Infrastructure	Pleasanton	\$1,684,000	(\$85,463)	(4.8 %)

Staff received and analyzed all five submitted bids and determined all of them to be responsive. Pacific Infrastructure is the lowest bidder with a bid price of \$1,684,000. This low bid is 4.8 % below the Engineer's Estimate.

Council Policy provides for a standard contingency of 10% on public works projects involving utilities. However, staff recommends a 15% contingency because this project involves connections to existing air piping, electrical and control systems, and other utilities located inside equipment galleries and other areas that are difficult to access. In addition, while the initial condition assessment of an existing air header piping indicated that the pipe is in good condition and can be reused, portions of the pipe may need to be replaced during construction. The 15% contingency is expected to cover for any unanticipated tasks necessary for proper completion of this work.

### **EVALUATION AND FOLLOW-UP**

The project is currently within budget with a projected completion date of February 2010. No additional follow up actions with the Council are expected at this time. Should additional changes to the project be required due to change orders executed beyond the appropriated contingency amount, staff will bring forward those changes for approval by the Council.

### **POLICY ALTERNATIVES**

**Alternative #1:** Reject bid and drop the project.

**Pros:** Cost savings if the project is not implemented.

**Cons:** Isolation gate and aeration system for the Nitrification channels will not be installed or replaced.

**Reason for not recommending:** If the project is not implemented, Nitrification Batteries A and B cannot be isolated for major maintenance work and any major maintenance would require shutting down the entire Nitrification treatment facilities. In addition, continued use of existing deteriorated and leaking channel aeration piping will result in escalating energy consumption and operation and maintenance costs.

### **PUBLIC OUTREACH/INTEREST**

- Criterion 1: Requires Council action on the use of public funds equal to \$1 million or greater. (Required: **web Posting**)
- Criterion 2: Adoption of a new or revised policy that may have implications for public health, safety, quality of life, or financial/economic vitality of the City. (Required: **E-mail and Website Posting**)
- Criterion 3: Consideration of proposed changes to service delivery, programs, staffing, that may have impacts to community services and have been identified by staff, Council or a Community group that requires special outreach. (Required: **E-mail, Website Posting, Community Meetings, Notice in appropriate newspapers**).

This action meets Criterion 1 above. A Notice to Contractors inviting qualified firms to submit bids was published by the City Clerk Office in the *San José Post Record*, and by the City's Project Manager on Environmental Services Department website and Public Works Department Bid Hotline. Bid documents were also sent to the Builder's Exchanges of the surrounding Bay area cities and counties.

This memo has been posted on the City's website for June 16, 2009 Council Agenda.

### **COORDINATION**

This project and memorandum have been coordinated with the Office of Risk Management, Equality Assurance, City Manager's Budget Office, and the City Attorney's Office. This item is scheduled to be heard at the June 11, 2009 Treatment Plant Advisory Committee meeting.

### **FISCAL/POLICY ALIGNMENT**

This project is consistent with the Council approved Budget Strategy to focus on rehabilitating aging Water Pollution Control Plant (Plant) infrastructure, improve efficiency, and reduce operating costs. This project is also consistent with City efforts to reduce energy consumption in City facilities, which is one of the strategies for achieving the adopted Green Vision Goals.

### **COST IMPLICATIONS**

1. AMOUNT OF RECOMMENDATION/COST OF PROJECT: \$1,937,000
2. COST OF PROJECT

Construction	\$1,684,000
Contingency	<u>\$253,000</u>
<b>TOTAL PROJECT COSTS</b>	<b>\$1,937,000</b>
Prior Year Expenditures	\$0
<b>REMAINING PROJECT COSTS</b>	<b>\$1,937,000</b>
3. SOURCE OF FUNDING: 512 – San José-Santa Clara Treatment Plant Capital Fund.
4. FISCAL IMPACT: Existing funds are available for this project. No additional appropriation action is required.

**BUDGET REFERENCE**

Fund #	Appn #	Appn. Name	RC #	Total Appn.	Estimated Amount for Contract	Adopted CIP Page	Last Budget Action (Date, Ord. No.)
<b>Remaining Project Costs</b>				<b>\$1,937,000</b>			
<b>Current Funding Available</b>							
512	4332	Equipment Replacement	152605	\$6,430,000	\$1,937,000	V157	6/24/2008, Ord. No. 28349
<b>Total Current Funding Available</b>				<b>\$6,430,000</b>			
<b>Additional Funding Recommended</b>							
<b>Total Funding for Remaining Project Costs</b>				<b>\$6,430,000</b>			

**CEQA**

Exempt: PP09-067



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