



Memorandum

TO: HONORABLE MAYOR AND
CITY COUNCIL

FROM: John Stufflebean

SUBJECT: SEE BELOW

DATE: 05-26-09

Approved

Date

COUNCIL DISTRICT: City- Wide

SUBJECT: REPORT ON BIDS AND AWARD OF CONTRACT TO THE LOW BIDDER, BAY CITY BOILER & ENGINEERING CO., INC., FOR THE SAN JOSÉ/SANTA CLARA WATER POLLUTION CONTROL PLANT, FY 2008-2009 CAPITAL IMPROVEMENT PROGRAM, WASTE HEAT RECOVERY BOILER A-1 REPLACEMENT

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, Waste Heat Recovery Boiler A-1 Replacement," to the low bidder, Bay City Boiler & Engineering Co. Inc., in the amount of \$ 136,000, and approval of a 10% contingency in the amount of \$13,600.

OUTCOME

Award of this construction project will allow for replacement of the existing old waste heat recovery boiler of Engine A-1 with a more efficient unit at the Secondary Blower Building and increase energy saving at the Plant.

BACKGROUND

The Secondary Blower Building has six internal combustion engines, each of which powers a blower. The blowers supply air for secondary treatment of the wastewater. Each of the engines is equipped with a waste heat recovery boiler. These boilers recover the heat emitted by the exhaust gases which would otherwise be wasted to the atmosphere. Heat in the boilers is recovered in the form of steam which is used to heat digesters for solids processing.

Of the six waste heat recovery boilers, one was replaced in 2003 and the remaining five are over 30 years old. Due to age and corrosion, the older boilers have begun to leak, are less efficient,

and the cost to maintain them has been increasing. This project will replace one of the older waste heat recovery boilers (boiler for Engine A-1) with a more efficient unit.

ANALYSIS

The project was advertised for bids and a total of three 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</u> | <u>Amount</u> <u>Percent</u> |
| O.C. McDonald Co. Inc. | San José | \$158,026 | \$8,026 | 5% |
| Engineer's Estimate | | \$150,000 | | |
| Environmental Systems Inc., of Northern California | Santa Clara | \$ 142,400 | (\$7,600) | (5%) |
| Bay City Boiler Engineering Co. Inc. | South San Francisco | \$136,000 | (\$14,000) | (9%) |

Staff reviewed and analyzed all three bids and determined them to be responsive. Bay City Boiler & Engineering Co. Inc. is the lowest bidder with a bid price of \$136,000. This low bid is 9% below the Engineer's Estimate.

The City has contracted with Bay City Boiler & Engineering Co. Inc. in the past for installation of a City-purchased waste heat recovery boiler. They completed the installation satisfactorily. Based on the references provided, and staff's experience with this contractor, staff believes that Bay City Boiler & Engineering Co. Inc. possesses adequate knowledge and technical capabilities to implement this project.

Council Policy provides for a standard contingency of 10% on public works projects involving utilities. Staff considers the standard contingency appropriate for this project.

EVALUATION AND FOLLOW-UP

The project is currently within budget with a projected completion date of January 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 saving as the project is not implemented

Cons: Continued use of the existing old and inefficient leaking waste heat recovery boiler will result in higher operations and maintenance costs.

Reason for not recommending: If the project is not implemented, the additional energy that can be captured by the new boiler will be lost and the operations and maintenance costs to operate existing boiler is expected to progressively increase every year.

PUBLIC OUTREACH/INTEREST

- Criteria 1:** Requires Council action on the use of public funds equal to \$1 million or greater. **(Required: Website Posting)**
- Criteria 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)**
- Criteria 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 does not meet any of the above criteria, however, as a common practice, a Notice-to-Contractors inviting qualified firms to submit bids was published by the City Clerk's 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 the City efforts to reduce energy

consumption in the City facilities which is one of the strategies for achieving the adopted Green Vision Goals.

COST IMPLICATIONS

1. AMOUNT OF RECOMMENDATION/COST OF PROJECT: \$156,500
2. COST OF PROJECT

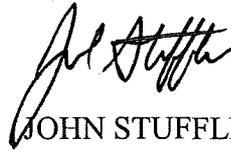
| | |
|------------------------------------|-----------------------|
| Construction | \$ 136,000 |
| Contingency | \$ 13,600 |
| TOTAL PROJECT COSTS | \$ 149,600 |
| Prior Year Expenditures | \$0 |
| REMAINING PROJECT COSTS | \$ 149,600 |
3. SOURCE OF FUNDING: 512 – San José-Santa Clara Treatment Plant 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.) |
|--|--------|-----------------------|--------|--------------------|-------------------------------|------------------|-------------------------------------|
| Remaining Project Costs | | | | \$149,600 | | | |
| Current Funding Available | | | | | | | |
| 512 | 5332 | Equipment Replacement | 152555 | \$6,430,000 | \$149,600 | V158 | 6/24/2008, Ord. No. 28349 |
| Total Current Funding Available | | | | \$6,430,000 | | | |
| Additional Funding Recommended | | | | | | | |
| Total Funding for Remaining Project Costs | | | | \$6,430,000 | | | |

CEQA

Exempt: PP09-079



JOHN STUFFLEBEAN
Director, Environmental Services

For questions please call Ting Ong, Senior Engineer, Technical Support Services, Environmental Services Department, at (408) 945- 5132.