COUNCIL AGENDA: 03-02-10
ITEM: 2.6

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Memorandum

TO: HONORABLE MAYOR AND CITY COUNCIL

FROM: John Stufflebean

SUBJECT: **SEE BELOW**

DATE: 02-08-10

Approved Deanna Santana Date 2/17/10

COUNCIL DISTRICT: City-Wide

SUBJECT: ACTIONS RELATED TO BIDS FOR THE SAN JOSÉ/SANTA CLARA WATER POLLUTION CONTROL PLANT, FILTER REHABILITATION, FY 2009/2010 PROJECT

RECOMMENDATION

(a) Reject all bids for the San José/Santa Clara Water Pollution Control Plant, Filter Rehabilitation, FY 2009/2010 project.

(b) Adopt a resolution authorizing the City Manager or her designee to:

1. Award the contract for the San José/Santa Clara Water Pollution Control Plant, Filter Rehabilitation, FY 2009/2010 project to the lowest responsive and responsible bidder in an amount not to exceed $300,000 and approval of a 10% construction contingency, subject to the concurrence of the Treatment Plant Advisory Committee; and

2. Decide any timely bid protest(s), make the City's final determination as to the lowest responsive and responsible bidder, or to reject all bids and re-bid the project.

OUTCOME

Rejecting all bids will enable staff to revise the Project Specifications to clarify experience requirements for the San José/Santa Clara Water Pollution Control Plant (Plant), Filter Rehabilitation, FY 2009/2010 project in order to ensure that bidders have the technical experience necessary to successfully complete the project. Authorizing the City Manager or her designee to award the project to the lowest responsive and responsible bidder and to decide any timely bid protest(s), to make the City's final determination as to the lowest responsive bidder, or to reject

all bids and re-bid the project, will enable staff to timely re-bid the project and award the contract.

BACKGROUND

The Plant has a total of 16 filters which remove residual suspended solids from the biological nutrient removal (BNR) process. The filters provide a safety measure that protects the National Pollutant Discharge Elimination System (NPDES) permit for Bay discharge in case there is an upset in the BNR process. Each filter has two cells and consists of 22" specified depth of anthracite coal at the top, 12" of silica sand in the middle, and 12" of supporting gravels at the bottom as filtration media to trap solids. The filter influent is introduced into each filter and flows to both cells with sufficient hydraulic head to cause the influent to flow by gravity through the filters at the normal filter head loss less than 10 feet. Under normal operation when an individual filter exceeds the 10 feet of head loss, the filter is backwashed to remove filtered debris. A surface wash system and a backwash system are provided to restore "in service" filters to normal head loss. Anthracite coal and silica sand are continuously washed out in the backwash cycle. Anthracite coal is also gradually broken down to smaller size than specified size due to the backwash process.

Of the 16 filters, one filter is designated for research purposes to improve filtration process using new technology. The effluent from 11 filters discharges directly into the South Bay and has to meet the NPDES permit related to suspended solids. As a result of the backwash cycle, a significant amount of anthracite coal and silica sand has been lost in the past ten years and the performance of these filters is deteriorating. In addition, 10% to 15 % of filtered water is treated and recycled for backwashing the filters. That is twice the generally accepted target for good performing filters. Because of the poor performance of the filters, they don't backwash as well as they should, which takes additional energy, chemicals, and operating time for them to perform.

Four filters currently supply all of the recycled water to the South Bay Water Recycling System, and the effluent from these filters has to meet the State's Title 22 requirements as stipulated in the NPDES permit which regulates recycled water quality for reuse. Due to the loss of anthracite coal and silica sand and the wearing down of anthracite coal during backwash, performance of the four filters has deteriorated in the past ten years. As a result, the filters have to run at a lower hydraulic loading rate per filter than design rate because of deteriorating filter media. The deteriorating filters may not be able to meet rapidly increasing demand for recycled water in a hot summer. The concern for poor filter performance is even more significant because the filters must be in service to deliver recycled water. A loss of these filters or limiting of the capacity will cripple the recycled water system, which is a significant part of the water supply matrix for the Santa Clara Valley.

ANALYSIS

Bids were opened on December 22, 2009, with the following results:

Contractor	Bid Amount	Variance Over/(Under)	% Over / (Under)
Cowan and Thompson Construction, Inc.	$146,290	($153,710)	(51)
ERS Industrial Services	$152,777	($147,223)	(49)
Anderson Pacific Engineering Construction, Inc.	$222,220	$77,800	(26)
Engineer's Estimate	**$300,000**	-------	-------
D.W. Nicholson Corporation	$919,000	$619,000	206

Analysis of the bids revealed that the apparent low bidder, Cowan and Thompson, Inc., does not have the requisite three years of experience in filter rehabilitation projects. The Project Specifications for the project requires that contractors shall have a minimum of three years of experience in rehabilitation of filters including repairs and replacements of under-drain tiles for water treatment or wastewater treatment plants. Staff reviewed the remaining bids and found that the bidders submitted different information to demonstrate that they met the requisite experience. Because of inconsistencies in the bids, staff determined that the three years experience requirement needed to be clarified in order to: (1) ensure that the bidders understand what is being requested of them; and (2) ensure that the City obtains bids from qualified contractors who have previously performed filter rehabilitation projects. As a result, staff is recommending that all bids be rejected so that revisions can be made to the Project Specifications that will illicit the bidders' experience with filtration rehabilitation projects.

The portion of the project that will rehabilitate the four filters, which provide recycled water to the South Bay Water Recycling System, has to be completed by contractor the end of April 2010 in order to meet high demand for recycled water in the summer. To ensure that a contractor has been retained and is ready to proceed with the work, it is recommended that Council authorize the City Manager or her designee to award the project to the lowest responsive and responsible bidder and to decide any timely bid protest(s), to make the City's final determination as to the lowest responsive bidder, or to reject all bids and re-bid the project.

EVALUATION AND FOLLOW-UP

The project is currently within budget. In order to remain on schedule, expedited execution of the contract is necessary, by way of authorizing the City Manager or her designee to take each of the above-referenced actions as necessary.

POLICY ALTERNATIVES

Alternative #1: Award to apparent lowest bidder, Cowan and Thompson Construction, Inc., based on the as-bid project specifications and bidding instructions.
Pros: Awarding the contract will eliminate the potential for delay of contract implementation.
Cons: Awarding the contract with ambiguities in the Project Specifications could result in a protest and delay the award of the contract.
Reason for not recommending: Clarifying the Project Specifications and re-bidding the contract will ensure a fair bidding process for all interested contractors.

Alternative #2: Award to second lowest bidder, ERS Industrial Services, based on the as-bid project specifications and bidding instructions.
Pros: Awarding the contract will eliminate the potential for delay of contract implementation.
Cons: Awarding the contract with ambiguities in the Project Specifications could result in a protest and delay the award of the contract.
Reason for not recommending: Clarifying the Project Specifications and re-bidding the contract will ensure a fair bidding process for all interested contractors.

PUBLIC OUTREACH/INTEREST

- ☐ **Criterion 1**: Requires Council action on the use of public funds equal to $1 million or greater. **(Required: Website 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 item does not meet any of the above criteria. To solicit contractors, this project was advertised in the *San José Post Record*, as well as on the Public Works Bid Hotline and Environmental Services Department Request for Proposal bids list.

COORDINATION

This project has been coordinated with Risk Management, Equality Assurance, the City Manager's Budget Office, Department of Public Works, and the City Attorney's Office. This item is scheduled to be heard at the February 25, 2010 meeting of the Treatment Plant Advisory Committee (TPAC).

COST SUMMARY/IMPLICATIONS

1. AMOUNT OF RECOMMENDATION: **$330,000***
2. COST OF PROJECT:

Construction	$300,000
Contingency	$30,000
TOTAL PROJECT	$330,000

3 SOURCE OF FUNDING: 513 - San José/Santa Clara Treatment Plant Operations and Maintenance 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	2009-2010 Adopted Operating Budget Page	Last Budget Action (Date, Ord. No.)
Remaining Project Costs							
Current Funding Available							
513	0762	ESD Non-Personal Equipment	924300	$36,207,625	$330,000.00	XI-78	6/23/2009, 28593
Total Current Funding Available				$36,207,625			
Additional Funding Recommended							
Total Funding for Remaining Project Costs				$36,207,625			

CEQA

Exempt, File No. PP09-185

/S/
JOHN STUFFLEBEAN
Director, Environmental Services

For questions, please contact Jon Newby, Division Manager, Maintenance Mechanical Division, at (408) 945-5160.