



COUNCIL AGENDA: 4-26-05  
ITEM: 7.1

# Memorandum

**TO:** HONORABLE MAYOR AND  
CITY COUNCIL

**FROM:** Carl W. Mosher

**SUBJECT:** SEE BELOW

**DATE:** 4-7-05

Approved

*Ray Winer*

Date

*4/7/05*

**SUBJECT: AGREEMENT WITH CAROLLO ENGINEERS FOR ENGINEERING SERVICES FOR FISCAL YEAR 2004-2005 AND FISCAL YEAR 2005-2006 CAPITAL IMPROVEMENT PROJECTS**

## RECOMMENDATION

1. Approval of an agreement with Carollo Engineers, commencing in April 2005 and terminating on June 30, 2007, for engineering studies, preliminary and detailed design, preparation of bidding documents, and office engineering support services pertaining to design during construction for the Water Pollution Control Plant alternate disinfection, concrete repair, electrical system review/coordination and absorption chiller replacement projects, in an amount not to exceed \$596,000 for basic services, plus \$75,000 for additional services, for a total not to exceed contract amount of \$671,000 and a term of two (2) years.
2. Adoption of a resolution authorizing the Director of Environmental Services to execute an amendment to the agreement with Carollo Engineers, subject to the appropriation of additional funds by the City Council, to modify the scope of services to add engineering studies, preliminary and detailed design, preparation of bidding documents, and office engineering support pertaining to design during construction for the Water Pollution Control Plant transmission pump station frequency drive replacement project, increasing the maximum compensation for basic and additional services by \$150,000 and increasing the total not to exceed contract amount of \$821,000.

## BACKGROUND

Plant staff identified six capital improvement projects needing consulting engineering services within the next two fiscal years. The scope of consulting engineering services includes preliminary evaluations, environmental regulatory assistance, design, design review assistance, and bid period services.

Four projects were identified for FY 2004-2005: Alternative Disinfection Design, Concrete Tanks Repair, Plant Electrical Reliability Improvement, Absorption Chillers Replacement. Two projects were identified for FY 2005-2006: Filtration Improvements and Transmission Pump Station (TPS) Variable Frequency Drives Replacement. These projects require experience and expertise in concrete corrosion and in design of chemical stations and medium and high voltage electrical power distribution systems, among others. Staffing resources and specialty expertise required to work on these projects are currently limited within the City.

### ANALYSIS

On July 28, 2004, a competitive Request for Proposals (RFP) was issued to solicit proposals from engineering firms interested in providing engineering services for six capital improvement projects. The RFP was advertised in the newspaper and on the City's websites. Four engineering consulting firms responded to the RFP. The proposals were reviewed by a screening panel consisting of Environmental Services Department's, Water Pollution Control Plant staff. The screening panel quantified and confirmed the technical and professional expertise of each responding firm in the design of wastewater treatment projects and selected all four firms for an interview. The firms are listed alphabetically as follows:

1. Carollo Engineers, Walnut Creek, CA, Branch office
2. CH2M Hill, Inc., San Jose, CA, Branch office
3. HDR, Inc., Oakland, CA, Branch office
4. Malcolm Pirnie, Inc., Emeryville, CA, Branch office

A separate interview board consisting of members of the Treatment Plant's Technical Advisory Committee and the Plant's senior management staff interviewed the four firms. Firms were rated based on their project team's qualifications, experience and expertise in successfully performing studies and designing similar wastewater treatment plant projects and understanding of project constraints and associated challenges. At the completion of the interview process, Carollo Engineers received the highest rating and the interview board unanimously recommended Carollo Engineers as the first choice. References provided by other agencies where Carollo Engineers provided similar services in the past were found to be excellent.

After the consultant interview process, City staff reprioritized and evaluated several capital projects in the Five-Year Capital Improvement Programs as part of the department-wide effort to fund the Water Pollution Control Plant Reliability Improvements Project. It was determined, as part of this effort that the Plant Electrical Reliability Improvement Project, a \$63 million project to upgrade and replace the Plant's aging electrical distribution system will be delayed by four years. Adequate reserve funds are available to cover emergency electrical repairs at the Plant for

the next few years. The portion of the Filtration Improvements Project related to valves replacement will also be delayed in order to provide the funding needed to award the Plant Reliability Improvements Project.

In addition, City staff reconsidered and decided to utilize existing City staff resources to implement the design and manage the construction of the Absorption Chillers Replacement Project and the portion of the Filtration Improvements Project related to control automation. As a result, the scope of work for the Plant Electrical Reliability Improvement Project is reduced to electrical system review and coordination related to emergency repairs at the Plant. The scope of the work for the Filtration Improvements Project related to valves replacement is deleted and the control automation is maintained with internal staff as described above. The scope of work for the Absorption Chiller Replacement Project is reduced to providing as-needed design review assistance.

In summary, four projects are identified for FY 2004-2005: Alternative Disinfection design, Concrete Tanks Repair, as-needed review assistance for Emergency Electrical Repair projects, and as-needed design review assistance for the Absorption Chillers Replacement project. One project is identified for FY 2005-2006: Transmission Pump Station (TPS) Variable Frequency Drives Replacement design.

## **OUTCOME**

Professional engineering services leading to the study and design of the five specified projects in this memo.

## **PUBLIC OUTREACH**

The notice for the Request for Proposal for this service was posted in the *San Jose Post Record*, the Environmental Services Department's website, the Bid Hotline section of the Department of Public Works' website, Integrated Marketing Systems (IMS), and A/E Consultants Information Network. Departmental staff also distributed the notice for Request for Proposals to consultants currently listed in the Department's consultant mailing list. This mailing list contained firms that included both Minority and Women Business Enterprise.

The Plant is exempt from the Local Preference Policy per Ordinance No. 27136, Section 1, 4.06.050 B.

### COORDINATION

The project and memorandum have been coordinated with the Department of Finance, Risk Management, the City Attorney's Office and the City Manager's Budget Office; and scheduled to be heard at the April 14, 2005 Treatment Plant Advisory Committee meeting.

This recommendation has been reviewed by QUEST Partnership to evaluate if in-house expertise can be used in-lieu of contracting services to an outside vendor. Analysis confirms that, at present, there is no in-house expertise and it remains more cost effective to contract out this service.

### COST IMPLICATIONS

1. AMOUNT OF RECOMMENDATION: \$671,000
2. COST OF PROJECT:

Engineering Services	\$596,000
Additional Services	\$75,000
<b>TOTAL CONTRACT COST</b>	<b>\$671,000</b>
3. SOURCE OF FUNDING: 512 – San Jose/Santa Clara Treatment Plant Capital Fund
4. FISCAL IMPACT: This project is consistent with the Council-approved Budget Strategy Economic Recovery section in that it meets the expressed principles by focusing on the protection of a vital core city service, emphasizing expenditures that reduce costs, and accelerating a capital improvement project that provides positive externalities. No impact to the General Fund is anticipated from this action.

The total contract amount for this project is \$671,000, which includes \$596,000 for engineering services and \$75,000 for additional services. Additional services are reserved for preparation of supplemental documents not detailed in the basic services or changes in conditions, beyond the control of the consultant.

**BUDGET REFERENCE**

Fund #	Appn. #	Appn. Name	Total Appn.	Amt. For Contract	2004-2005 Adopted Capital Budget (Page)	Last Budget Action (Date, Ord. No.)
<b>Remaining Contract Costs</b>			<b>\$ 671,000</b>			
<b>Current Funding Available</b>						
512	4679	Alternative Disinfection	600,000	\$443,000- Engineering Services  \$75,000- (contract for Additional Services)	V-250	2/15/2005, Ord. No. 27358
512	5690	Plant Infrastructure Improvements	\$2,986,000	\$90,000	V-263	10/12/2004, Ord. No. 27267
512	4341	Plant Electrical Reliability	\$3,000,000	\$45,000	V-255	
512	4332	Equipment Replacement	\$1,525,000	\$18,000	V-262	
<b>Total Current Funding Available</b>			<b>\$8,111,000</b>	<b>\$671,000</b>		

**NONDISCRIMINATION**

The City of San Jose Non-discrimination Requirements are included in this project as required in Chapter 4.08 of the San Jose Municipal Code.

HONORABLE MAYOR AND CITY COUNCIL

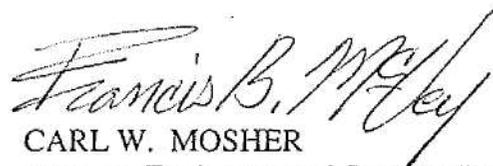
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**CEQA**

Not a project.

A handwritten signature in cursive script, appearing to read "Francis B. Mosher", is written over the printed name "CARL W. MOSHER".

CARL W. MOSHER

Director, Environmental Services Department