



# CITY OF SANTA BARBARA

## COUNCIL AGENDA REPORT

**AGENDA DATE:** October 25, 2016

**TO:** Mayor and Councilmembers

**FROM:** Engineering Division, Public Works Department

**SUBJECT:** Contract For Design Of Cater Water Treatment Plant Valve And Actuator Replacement Project

### **RECOMMENDATION:**

That Council authorize the Public Works Director to execute a City Professional Services contract with Carollo Engineers, Inc., in the amount of \$129,016 for design and construction management services of the Cater Plant Valve and Actuator Replacement Project, and authorize the Public Works Director to approve expenditures of up to \$12,902 for extra services of Carollo Engineers, Inc., that may result from necessary changes in the scope of work.

### **DISCUSSION:**

#### Background

The City's William B. Cater Water Treatment Plant (Cater) provides regional water treatment to the City of Santa Barbara, as well as the Montecito and Carpinteria Valley Water Districts. Cater is operated primarily by a sophisticated computer technology that automates the water treatment processes, which includes remotely controlling the associated valves and valve actuators. The existing valves and actuators for the filtering and backwash processes need to be replaced as part of normal maintenance and repair.

#### Project Description

The work consists of preparing design plans and specifications for the replacement of 38 valves and 49 actuators, ranging in diameter from 12 to 30-inches. The proposed contract services include prescribing the valve networking scheme, specifying the sequence of demolition, construction, and start-up of the new equipment, and providing engineering support services during construction.

The proposal from Carollo Engineers, Inc., (Carollo) included the following optional tasks that will be included as part of this contract:

- 1) An evaluation of Cater’s flow control systems for reducing water production at Cater. Drastically reducing Cater’s water production may be necessary during times of low demand and when the desalination plant and wells are in service.
- 2) An evaluation of the carbon dioxide (CO<sub>2</sub>) system to recommend sampling modifications for reducing water waste. Currently, a large water sample is required to control the CO<sub>2</sub> system, which is used to help optimize the treatment process.

Design Phase Consultant Engineering Services

Carollo is preferred for this work because they were the engineers of record for the Advanced Treatment Project, which integrated the ozone and solids handling into the treatment process. In the past, Carollo has been selected via a request for proposals for other Cater Plant improvements. As a result, Carollo has specific knowledge and experience of Cater’s operational needs, which makes them best qualified to perform the proposed work.

Staff recommends that Council authorize the Public Works Director to execute a contract with Carollo in the amount of \$129,016 for design and construction management services and \$12,902 for extra services, for a total amount of \$141,918.

Funding

**ESTIMATED TOTAL PROJECT COST**

|  |                    |
|--|--------------------|
| Design (Carollo – this contract)                                       | \$117,815          |
| Other Design Costs - City staff, etc.                                  | 10,000             |
| <b>Subtotal</b>  | <b>\$127,815</b>   |
| Estimated Construction Contract w/Change Order Allowance               | \$1,750,000        |
| Estimated Construction Management/Inspection (Carollo – this contract) | 24,103             |
| Estimated Construction Management/Inspection (City)                    | 50,000             |
| Estimated Other Construction Costs (testing, etc.)                     | 5,000              |
| <b>Subtotal</b>  | <b>\$1,829,103</b> |
| <b>TOTAL PROJECT COST</b>  | <b>\$1,956,918</b> |

There are sufficient appropriated funds in the Water Fund to cover the proposed design costs.

Sustainability Impact

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This repair and maintenance project will enable the Cater Water Treatment Plant to continue to reliably treat drinking water for South Coast water customers.

A copy of the contract is available for public review at the City Clerk's Office.

**PREPARED BY:** Catherine Taylor, P.E., Water System Manager/TE/kts

**SUBMITTED BY:** Rebecca J. Bjork, Public Works Director

**APPROVED BY:** City Administrator's Office