



CITY OF SANTA BARBARA

COUNCIL AGENDA REPORT

AGENDA DATE: September 18, 2012

TO: Mayor and Councilmembers

FROM: Engineering Division, Public Works Department

SUBJECT: Increase In Construction Change Order Authority For Cater Water Treatment Plant Advanced Treatment Project

RECOMMENDATION:

That Council authorize an increase in the Public Works Director's change order authority to approve expenditures for extra work for the Cater Water Treatment Plant Advanced Treatment Project, Contract No. 23,803 in the amount of \$886,016 for a total project change order authority of \$2,284,016, bringing the total contract amount to \$16,264,016.

DISCUSSION:

The Cater Water Treatment Plant (Cater) treats the water for the City of Santa Barbara and the Montecito and Carpinteria Valley Water Districts. The Cater Water Treatment Plant Advanced Treatment Project (Ozone Project), currently under construction, is the culmination of many years of work to determine the best solution for the South Coast water agencies to comply with the upcoming Stage 2 Disinfection By-Products Rule, which will lower the allowable level of disinfection by-products in drinking water.

On June 21, 2011, Council awarded a contract to Cushman Contracting Corporation (Cushman) for construction of the Ozone Project. The Ozone Project is financed through a low interest Safe Drinking Water State Revolving Fund loan. Construction of the Ozone Project began in August of 2011, and is estimated to be completed in April, 2013.

At this time, staff have identified two new project elements that need to be incorporated into the current Ozone Project. The new project elements involve the replacement of five deteriorating chemical tanks, and the installation of a dry-polymer feed system. These changes are discussed below.

REPLACEMENT OF FIVE CHEMICAL TANKS

The condition of the five 6,000 gallon fiberglass reinforced chemical tanks used to store sodium hypochlorite (the chemical used to disinfect the drinking water produced by the Cater Plant) have deteriorated significantly. One tank is currently out-of-service and cannot be used, and two others have developed small leaks that continue to worsen. The remaining two tanks are currently in operation, but are of the same generation as the three failing tanks. The proposed tank replacement requires removing the five tanks from the chemical building, including relocating some utilities, and installing five new tanks in their place.

Staff recommends that these tanks be replaced as part of the Ozone Project, at a cost of \$757,544, which staff believes is a competitive price. Staff also believes that it is to the City's advantage to increase the change order authority to allow the tanks to be replaced by Cushman, the current contractor, because the work could be performed this winter when water demands are low; Cushman is already mobilized, which is a cost savings to the City; and construction management could be covered under the current Ozone Project contract at no additional cost. The proposed increase in the scope of work of the Ozone Project will allow the compromised tanks to be quickly and efficiently replaced.

DRY-POLYMER FEED SYSTEM INSTALLATION

Water treatment solids are a by-product of the treatment process. Cater staff have been working with various off-site facilities for the disposal of Cater's water treatment solids. In the past, staff was sending Cater's water treatment solids to the Ventura Regional Sanitation District. However, more stringent regulations forced staff to send Cater's water treatment solids to the Chiquita Canyon Landfill in Castaic California. Staff recently discovered that constituents in the liquid polymer used in creating the water treatment solids is what is causing the solids to violate local disposal regulations. Staff proposes changing to a dry-polymer, which would put Cater's water treatment sludge back in compliance with local disposal regulations. Staff would then be able to consider using other local options for disposal. This would be a significant cost savings to the City.

Staff recommends that a dry-polymer feed system be installed as part of the Ozone Project. The system can be added as part of the new Dewatering Building, at a cost of \$128,472. Staff believes this is a competitive cost and that Cushman is qualified to perform the work.

SUMMARY

Staff believes these proposed increases in Change Order Authority are in the best interest of the City. The contract changes can be implemented by Cushman without additional charges for mobilization, and they can be completed without any additional construction management charges.

BUDGET/FINANCIAL INFORMATION:

FUNDING

The original change order authority approved by Council was \$1,398,000 which is 10 percent of the construction costs. The Project is 60 percent complete and approximately half of the original change order authority has been used. The two items discussed in this report represent a significant change in scope of the original project, and the cost for both items exceeds the existing change order authority. Considering the importance of the proposed work, and that the Ozone Project is halfway complete, staff recommends increasing the change order authority by \$757,544 for replacement of the chemical tanks plus \$128,472 for the dry-polymer feed system installation for a total of \$886,016.

The Department of Public Health has agreed that the proposed work is eligible for Ozone Project loan funds, and there are sufficient funds in the loan amount to cover this request.

The following summarizes the additional expenditures recommended in this report:

CONSTRUCTION CONTRACT FUNDING SUMMARY

	Base Contract	Change Order	Total
Initial Contract Amount	\$13,980,000	\$1,398,000	\$15,378,000
Proposed Increase		\$886,016	\$886,016
Totals	\$13,980,000	\$2,284,016	\$16,264,016

The following summarizes all project design costs, construction contract funding, and other project costs.

ESTIMATED TOTAL PROJECT COST

**Cents have been rounded to the nearest dollar in this table.*

Design	Subtotal	\$1,892,000
Construction Contract		\$13,980,000
Construction Change Order Allowance		\$2,284,016
Construction Management/Inspection (by Contract)		\$1,811,113
Design Support during Construction (by Contract)		\$716,100
SCADA Integration (by Contract)		\$782,571
Construction Administration (by City Staff)		\$142,000
Construction Survey (by City Staff)		\$55,000
Construction	Subtotal	\$19,770,800
Project Total		\$21,662,800

There are sufficient funds in the Cater Water Treatment Plant Project Fund (as funded by the Safe Drinking Water State Revolving Fund loan) to cover these expenditures.

PREPARED BY: Joshua Haggmark, Principal Engineer/LS/sk

SUBMITTED BY: Christine F. Andersen, Public Works Director

APPROVED BY: City Administrator's Office