



Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: John Stufflebean

SUBJECT: SEE BELOW

DATE: 07-22-10

Approved

Date

7-26-10

COUNCIL DISTRICT: City-Wide

SUBJECT: CONTRACT CHANGE ORDER NO. 38 FOR THE SAN JOSÉ / SANTA CLARA WATER POLLUTION CONTROL PLANT- ALTERNATIVE DISINFECTION PROJECT

RECOMMENDATION

Approval of a change order No. 38 for the "San José/Santa Clara Water Pollution Control Plant, Fiscal Year 2007-2008 Capital Improvement Program, Alternative Disinfection Project," to extend the project completion date by 109 working days to allow for completion of additional work in the amount of \$41,660. This change order is funded by the existing contingency for this project, approved by the City Council on May 13, 2008.

OUTCOME

Approval of this proposed change order will allow the contractor, Anderson Pacific Engineering Construction, Inc. (APEC), sufficient time beyond the six months already credited through previous changes orders and rain delays, to complete additional work related to the project's electronic process-control automation system.

BACKGROUND

In May 2008, City Council approved the Alternative Disinfection Project and awarded the contract to APEC. The project will replace the use of the existing gaseous-chlorine and sulfur-dioxide systems with liquid sodium hypochlorite and sodium bi-sulfite, respectively. The use of liquid sodium hypochlorite and sodium bi-sulfite is a safer method to disinfect wastewater and thereby eliminates the need to store large volumes of chlorine and sulfur dioxide gasses on site.

Construction work for the Alternate Disinfection Project began on August 18, 2008. The original estimated completion date was February 19, 2010. To date, the City has extended the project completion date by a total of 126 working days to August 26, 2010.

ANALYSIS

The project includes the construction of a chlorination facility and a de-chlorination facility. Each of these facilities consists of chemical storage tanks and associated delivery systems. Each of the treatment systems includes pumps, piping, valves, and instrumentation hardware and software for the automated control of the dosing of these chemicals.

During March 2010, the dechlorination facility was completed and thoroughly tested to ensure the designed operability. During this testing phase, the automated control component failed, forcing a shut down and conversion to manual operations. This automated control component is essentially a large cabinet that contains all of the data-communications equipment that allow for the interaction of data between the pumps, valves and other process related equipment.

The automated control component was designed by in-house staff. The design staff evaluated the failure and determined that the design needed additional redundancy of data communications channels. Although operable, staff is currently in the planning and design phase to achieve this reliability through alternate means for the dechlorination facility to ensure its intended use. This re-designed change will be implemented by staff at a later date. (The cost to remove the already installed cabinet with a new one would be considerably higher than adding additional reliability design.)

Meanwhile a similar component on the chlorination system was scheduled to be fabricated with the original design. Learning from the dechlorination failure, staff quickly put a hold on fabrication and re-designed this portion of the automated-control system with the added redundancy. In order to implement this modification, the City executed a change-order with APEC in the amount of \$41,660 to furnish and install the re-designed automated-control system component for the Chlorination system. The project contingency amount has adequate funding to cover the additional costs and no budgetary changes are required. However, considering the complexity of the system and the time required to fabricate, install, and test both the component and the new process, a contract schedule extension of a total of 109 working days to February 15, 2011 is needed for APEC to complete the additional work.

San José Municipal Code Section 14.4.420(F) requires Council approval of a change order that results in the extension of the contract completion date beyond 180 days. Given the previous change orders, an extension of 109 working days would result in the extension of the contract completion date beyond 180 days. Accordingly, Environmental Services Department (ESD) is requesting the City Council to approve a change order extending the contract completion date by 109 working days to February 15, 2011 so that APEC can complete the additional work.

To avoid further delays in project completion, ESD has already executed a change order for APEC to start the additional work. If the City Council does not approve the extension that staff is requesting, then the contractor will furnish the re-designed component and City staff will install it along with the necessary wiring, programming and testing that needs to be done after installation. The post installation work is already part of the original contract with AEPC and staff will have to negotiate a credit change order to withhold payment for that portion of the work.

This additional work in completing the installation of the automation controls component will not have any negative impact on the current Plant operations, as the existing disinfection system is fully functional and is not slated for decommission until all satisfactory testing and debugging of the new facilities is completed.

EVALUATION AND FOLLOW-UP

The project is currently on budget and with the approval of this contract extension, no other follow-up action with the Council is expected at this time. Should start-up or testing conditions need additional change orders to be executed that require council action, staff will bring forth those recommendations at that time.

POLICY ALTERNATIVES

Alternative # 1: Not approve the extension and terminate the contract.

Pros: None

Cons: The project will proceed as designed with the identified malfunction not corrected. Staff will have to implement the corrections before putting the system in service or procure another contract to complete the modifications.

Reason for not recommending: Requires additional time to complete the project at potentially higher costs and phasing out of the gaseous chlorination system will be delayed.

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)**

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- 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. This memo will be posted on the City web site for the August 17, 2010 council agenda.

COORDINATION

This project and memorandum have been coordinated with the City Manager's Budget Office, and the City Attorney's Office. This item is scheduled to be heard at the August 12, 2010 Treatment Plant Advisory Committee meeting.

FISCAL/POLICY ALIGNMENT

This project is consistent with the Council approved Budget Strategy Economic Recovery section in that it will help spur construction spending in our local economy and protect a critical infrastructure component.

COST SUMMARY/IMPLICATION

This action requires no additional funding. The \$41,660 required for the contract extension is covered by the contingency funding approved by Council on May 13, 2008. These funds are encumbered and available for this purpose.

CEQA

Exempt, PP07-145

/s/

JOHN STUFFLEBEAN

Director, Environmental Services

For questions please contact Bhavani Yerrapotu, Division Manager, Environmental Services Department, at (408) 945-5321.