



# Memorandum

**TO:** HONORABLE MAYOR  
AND CITY COUNCIL

**FROM:** John Stufflebean

**SUBJECT:** SEE BELOW

**DATE:** 09-28-09

Approved

Date

10-2-09

**COUNCIL DISTRICT:** Citywide

**SUBJECT: FIRST AMENDMENT TO THE NEW CONSTRUCTION CONTRACT WITH ANDERSON PACIFIC ENGINEERING CONSTRUCTION, INC. FOR NEW CONSTRUCTION OF VARIOUS EQUIPMENT 2008-2009.**

## RECOMMENDATION

Adopt a resolution:

(a) Authorizing the Director of Environmental Services to execute a first amendment to the New Construction of Various Equipment 2008-2009 Contract with Anderson Pacific Engineering and Construction Inc. to:

- (1) Change the contract term from a one year term with the option of two additional one year terms to a two year contract term.
- (2) Modify the compensation to enable the payment of the total contract amount up to \$1,450,930.00 over a two year term instead of paying the total contract amount over a one year term with two optional one year terms.

## OUTCOME

Approval of this amendment to the contract will enable the timely construction, replacement and repair of critical infrastructure at the San Jose/Santa Water Pollution Control Plant (Plant).

## BACKGROUND

On April 21, 2009, Council approved a contract with Anderson Pacific Construction Inc., in an amount not to exceed \$450,930 for a one year term, with an option to extend the contract by two

additional one year terms for an amount not to exceed \$500,000 per term, for a total contract amount up to \$1,450,930. The purpose of this contract is to provide an efficient project implementation vehicle for the various new construction projects at the Plant, that include emergency and non-emergency repairs and replacement of various piping, valves, equipment etc., on a time and materials basis. The term of the contract was based on previously completed condition assessments and information at the time regarding work needs.

## **ANALYSIS**

Since the award of this contract, the Plant has implemented an aggressive process optimization and reliability improvement effort to attain the 20% reduction in energy goal over the next two years and eventually meet the City's Green Vision of 50%. The Plant is also preparing to implement demonstration and pilot projects that will verify actual conditions for performance and demonstrate actual process reliability. These projects include routing the supernatant from the Residual Solids Management Facility through Area E before returning to the Plant, and enhanced control of nitrification air valves to reduce air consumption, a primary use of energy for in the treatment process. These projects have a positive return on investment of two years or less where the costs of construction result in savings equal to the costs of construction. The rapid implementation of these projects has cost \$310,200 to date with another \$200,000 in projects that are ready for construction upon execution of this amendment, which exceeds the amount remaining available under the existing contract.

The Plant's Master Plan team has also identified the need to initiate process method pilot studies to determine the most effective approaches for modifying existing processes. These pilots include modification of existing process facilities to pilot different technologies. The piloting of these unit processes determines the best unit process for the Plant's solids processing to reduce the risk of implementing a process Plant-wide that does not meet performance expectations. Given the significant Plant investment for these process changes, piloting will verify assumptions, identify other issues and lead to the best suited process and greater probability of a smooth start up when initiated.

This contract will also enable the Plant to respond to critical repairs in a number of process areas, which require a shutdown before maintenance can be performed. Currently, the nitrification area of Biological Nutrients Removal (BNR) treatment is been shut down for maintenance and repair. With the process shut down, staff now has access to areas previously not available for inspection due to submergence with Plant influent. These inspections have identified the need for critical process repairs not known prior to the process shut down. Examples of these include failed and delaminating concrete in channels of nitrification, and corrosion failure in nitrification composed of air piping in aeration tanks and drain valves. Additional shut downs of critical processes are scheduled over the next two years that staff anticipates will result in similar findings based on past experiences.

Given the rapid implementation schedule for the above projects, staff sees that the remaining \$1,000,000, under the contract will be needed sooner than originally contemplated. The

proposed amendment will enable the Plant to respond to these critical repairs within the shut down period and return the process to normal operation.

### **Changing the Term of the Contract**

The existing contract provides the City with the flexibility to perform needed repairs and installation of new equipment at the Plant when and where they are needed. Over the next nineteen months, additional projects are projected that will reduce energy consumption and improve plant reliability as discussed above. Modifying the term of the agreement from a one year term with two additional one year options to a two year term will enable staff to rapidly implement these projects by allowing the use of a in place contract with available funds. This ability to rapidly implement projects benefits the City in the following six areas:

- Immediate response to process failure as a result of aging infrastructure to reduce down time of critical equipment for the treatment of wastewater.
- Takes immediate advantage of energy reduction and increase efficiency of various treatment processes such as reductions in air used in treatment, reduced loading of nutrients, and equalization of flow allowing for expedited benefit of decreased energy cost consistent with the two year 20% energy reduction goal.
- Allows the City to take advantage of competitive material pricing as a result of the down turn in the economy.
- Enables staff to carry out newly identified work developed by the process reliability and improvement studies and respond to unknown critical repairs found during Plant shut downs of critical process such as Nitrification BNR, A & B side, Secondary BNR B side, and Backwash equalization basin.
- Provides contract resources to complete new construction and equipment replacements to address high rag loadings associated with high flows caused by heavy rainfall associate with El Niño year creating high flow conditions.

Accelerating the implementation of these projects will allow the Plant to realize the energy reduction goal of 20% by 2012, as set forth in the Energy Strategic Plan.

### **Change in Compensation**

The proposed amendment will not increase the total contract amount of \$1,450,930.00. The amendment modifies the contract by changes the term from a potential three year term to two years with a proposed completion date of April 21, 2011. Instead of being paid in increments of \$450,930, \$500,000, and \$500,000 over a potential three year term, the contractor may be paid up to \$1,450,930.00 over a two year term under the proposed amendment.

### EVALUATION AND FOLLOW-UP

Decreasing the term of this contract will require the Plant to seek additional contracts upon the exhaustion of the contract amount or the end of the term of the contract. These contracts will be brought forward for Council action as necessary, at the appropriate time. Plant's efforts at achieving the energy goals will be reported through Council updates on the Energy Strategic Plan.

### POLICY ALTERNATIVES

*Alternative 1:* Utilize City Employees to complete the project.

**Pro:** Potential savings of money by using in-house staff.

**Con:** Lack of experience, resources, and time to perform the work.

**Reason for not recommending:** City staffs lack the experience, resources, and time required to perform. Having staff perform the work would delay implementation of the project and corresponding reduction in energy costs.

*Alternative 2:* Prepare new project bids and contracts.

**Pro:** Preparing new bids could result in greater competition and reduced labor cost.

**Con:** This will delay installation and replacement of critical equipment needed for wet weather and delay the benefits of energy reduction and improved efficiencies. It may also not result in lower bids and may increase costs to City, and would likely result in increased material cost by missing the window of opportunity as a result of the down turn in the economy. Staff cost to implement projects associated with bid preparation would also increase.

**Reason for not recommending:** Increases cost to the City and hinder efforts towards achieving the goals set forth in the Energy Strategic Plan.

### PUBLIC OUTREACH/INTEREST

- X **Criterion 1:** Requires Council action on the use of public funds equal to \$1 million or greater. **(Required: web 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 action meets criteria 1 above. This council memo will be posted as part of the Council and TPAC agenda on the City's website.

**COORDINATION**

This project has been coordinated with Offices of Equality Assurance and Risk Management, City Manager's Budget Office, and the City Attorney's Office. This item is scheduled to be heard at the October 8, 2009 Treatment Plant Advisory Committee meeting.

**FISCAL/POLICY ALIGNMENT**

This action is consistent with the Council approved Budget Strategy to focus on rehabilitating aging Plant infrastructure and improving wastewater treatment efficiency. This action is also consistent with the 20% energy reduction goal assigned to the Plant

**BUDGET REFERENCE**

Fund #	Appn #	Appn. Name	RC #	Total Appn.	Amount for Contract	Proposed CIP Budget Page	Last Budget Action (Date, Ord. No.)
512	4332	Plant Infrastructure Improvements	038685	\$4,630,000	\$500,000*	V-145	6/23/2009 28593

\* The total amount for this contract is \$1,450,930. Of this, \$450,930 was paid in 2008-2009, and \$500,000 is already included in the 2009-2010 CIP in the Plant Infrastructure Improvements appropriation. Changing the terms of the contract as recommended would result in an additional spending of \$500,000 in 2009-2010.

**CEQA**

Exempt, PP08-202

/s/  
JOHN STUFFLEBEAN  
Director, Environmental Services

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