

# REPORT

**To the Honorable Mayor and City Council  
From the City Manager**

May 18, 2009

**SUBJECT**

Final Acceptance – Redwood City Recycled Water Project – Phase I – Seaport Distribution System – Bid Package 7 (Bike Path, East Bayshore Road, Maple Street, Blomquist Street, and Seaport Boulevard) Project.

**RECOMMENDATION**

Accept, by motion, the Redwood City Recycled Water Project – Phase I – Seaport Distribution System – Bid Package 7 (Bike Path, East Bayshore Road, Maple Street, Blomquist Street, and Seaport Boulevard) and authorize the release of bonds and retention according to city procedures.

**BACKGROUND**

On May 12, 2008, Council awarded the construction contract for the Redwood City Recycled Water Project – Phase I – Seaport Distribution System – Bid Package 7 to Shaw Pipeline Inc. of San Francisco. The project was awarded for a base bid of \$2,062,250.00 and construction began in July of 2008. The project is successfully completed in accordance with the plans and specifications. Twenty-one (21) change orders totaling \$257,591.00 were issued. The final contract amount is \$2,319,841.00, and 13% more than the contract amount initially awarded. Change orders resulted from quantity adjustments, and changes in work attributable to incidental/unforeseeable site conditions.

Change order activity generated by this project is greater than customary and exceeds the 10% previously authorized by the City Council. Some of the work locations included in this bid package have been heavily industrialized over the years and record drawings often proved unreliable. As a result, adverse subsurface field conditions required a timely redesign or response to keep the project on schedule and reasonably within budget. Problematic field conditions encountered on this project and associated change order activity are summarized in the table below. Change order activity is reported as percentage of contract value.

<b>Description</b>	<b>Change Order Activity</b>
Unforeseen Utility Alignments Existing utilities were inaccurately documented which required a change to the alignment of the recycled water pipe	6%
Jack and Bore Obstructions Unanticipated operation and regulatory agency permitting delays	6%
Additional Hazardous Material Offhaul Four times the material originally estimated required offhauling	2%
Additional Overlay Paving Excessively degraded road conditions required repair after construction activity	1%
Work deleted from scope	-2%
<b>Total</b>	<b>13%</b>

Unforeseeable subsurface conditions are part of the risk inherent to this type of construction. Staff acknowledges that the project proceeded without returning to Council to receive additional authorization for contract costs in excess of 10% of the awarded amount. The City Manager and senior management were apprised of this situation as it developed. They directed the project staff to continue the work based on the risk and potential consequences of stopping the work at that time. A work stoppage in order to receive additional Council authorization may have resulted in increased disruption to area businesses, excessive demobilization/remobilization construction costs, and may have delayed project completion. Despite the challenges of this project and the pressures of time and money, the project is completed on schedule while maintaining quality workmanship and business relationships, at a cost that exceeds previously approved amounts by 3%.

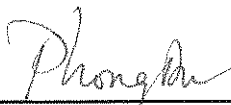
Bid Package 7 is the seventh distribution pipeline construction project and is part of the delivery system of recycled water to the Seaport area. This project continued the construction of the main transmission piping system along Seaport Boulevard that began in Bid Packages 5 and 6 at Blomquist Street. Piping was also installed along East Bayshore Road and connections made to the completed Bikepath Pipeline and Bid Package 4 projects. More than 3,700 linear feet of 24-inch diameter PVC pipe was constructed. Completion of this work and one short link of transmission piping from Bid Package 8 will allow delivery of recycled water to the Seaport area.

#### ALTERNATIVES

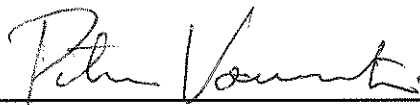
Council may choose not to accept the project or authorize the release of bonds and retention which would be contrary to the terms of the contract and prior Council action.

#### FISCAL IMPACT

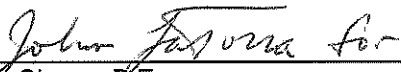
Funds have been appropriated from the Water Revenue Bond proceeds. The City has issued a series of three Water Revenue Bonds to finance Phase 1 of the Recycled Water Project. Available project funds, less unattributed interest, total \$5,854,318.36 as of March 31, 2009. Up to 25% of eligible construction costs of Bid Packages 5 through 9 may be reimbursed by the State's Proposition 13 Water Recycling Grant Program.



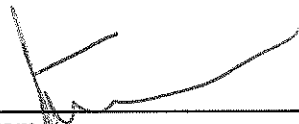
Phong Du, P.E.  
Senior Civil Engineer



Peter Vorametsanti, P.E., Acting Manager  
Engineering and Construction Division



Chu Chang, P.E.  
Community Development Services Director



Peter Ingram  
City Manager

#### ATTACHMENTS

None

#### RELATED DOCUMENTS IN CITY CLERK'S OFFICE

None