



**DATE:** July 18, 2017

**TO:** Mayor and City Council

**FROM:** Director of Utilities & Environmental Services

**SUBJECT** Cast Iron Water Pipeline Replacement Project: Approval of Additional Funds to Pay Contract's Retention and Close the Project

### **RECOMMENDATION**

That Council adopts the attached resolution increasing the construction contract by \$46,327 to cover the unanticipated cost of additional paving required to complete the water pipeline replacement project.

### **BACKGROUND**

The City has approximately 350 miles of water distribution pipeline, of which approximately twenty-one (21) miles is cast iron, which has a design life of roughly fifty years. The subject project was part of a continuing pipeline replacement program to maintain and upgrade the City's water distribution system. Besides age, the criteria for cast iron pipeline replacement include recent leak history and hydraulic carrying capacity. The cast iron water mains selected by staff to be replaced were on Dean Street (Sutro Street to D Street), Lucien Way, Orchard Avenue (Lucien Way to Tioga Road), Park Street (Winton Avenue to Meek Avenue), Park Street/Glade Street Easement, and Pleasant Way. A total of 995 feet of twelve-inch pipe and 4,615 feet of four and six-inch pipe were replaced and upgraded with eight-inch polyvinylchloride (PVC) or ductile iron.

On March 24, 2015, Council approved the plans and specifications for the project and called for bids to be received on April 28, 2015. The construction contract was awarded to California Trenchless in the amount of \$1,158,040 on May 19, 2015. The low bid was \$220,960 below the engineer's estimate of \$1,379,000. The contractor commenced work in December 2015, and the project was completed in December 2016.

### **DISCUSSION**

For the most part, project tasks were completed within the budget (for a complete breakdown of the actual work completed for each project task, please reference the Statement of Final Quantities - Attachment IV). However, the construction contract amount has been exceeded, predominantly due to unanticipated paving expenses. The project estimate assumed a typical

six-inch thickness asphalt concrete paving and a removal and replacement expense associated with that. This is an assumption for collector or neighborhood street type. In reality, the asphalt thickness turned out to be between eight to twelve-inches, which is typically associated with major arterial streets. This caused the pavement replacement and restoration line item to increase from 870 tons to 1380 tons and exceed the original estimate of \$134,850 by \$79,050 (for a total of \$213,900).

The originally approved administrative change order budget (\$100,000) was not fully utilized. Two administrative change orders were approved, totaling \$53,577. The first was to replace defective corporation stops, and tie-in the water main in the Orchard Avenue area. The second was for additional excavation work in the same area. As stated, this amount is still below the \$100,000 budget. This leaves \$46,423 available in the budget. Therefore, a portion of the overage caused by the additional pavement cost can be absorbed with the remaining funding.

Council approval is required to authorize additional funds to pay the contract retention and close the project.

### **ECONOMIC IMPACT**

There are no economic impacts to Hayward customers.

### **FISCAL IMPACT**

A total of \$2,850,000 has been appropriated for this project in the Water System Capital Improvement Fund. The final project costs are below.

| <u>Project Costs</u>                | <u>Estimated at Award</u> | <u>Final Costs</u> |
|-------------------------------------|---------------------------|--------------------|
| Project Administration – City Staff | \$70,000                  | \$117,955          |
| Work by City Staff                  | Not Budgeted              | \$129,275          |
| Inspection & Administration         | \$40,000                  | \$46,065           |
| Construction Contract               | \$1,158,040               | \$1,204,367        |
| TOTAL PROJECT COST:                 | \$1,268,040               | \$1,497,662        |

As noted in the May 19, 2015 agenda report (<http://citydocuments.hayward-ca.gov/weblink/0/doc/188277/Page1.aspx>) where the request to award the subject contract was detailed, the project scope envisioned other related cast iron pipeline replacement work, some of which was completed by City staff. In order to provide a comprehensive overview of the costs associated with the project, those related costs are included above.

Staff requests the Council authorize an amendment to the construction contract which would increase the amount by \$46,327 to \$1,204,367. There is sufficient project budget to cover the requested contract increase.

## **PUBLIC CONTACT**

There has been no public contact regarding this request. As part of the project, notices were provided to affected property owners to inform them of the nature and purpose of the work, potential impacts, work schedule, and contact information if they wish to obtain additional information about the project. Water customers were also notified of any planned temporary water service interruptions.

## **NEXT STEPS**

If Council approves an additional amount of \$46,327 to cover the total cost of the contraction contract, staff will release retention to the contractor and close the project.

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*Recommended by:* Alex Ameri, Director of Utilities & Environmental Services

Approved by:



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Kelly McAdoo, City Manager