

6i
5-18-06



City Council Report

Date: May 18, 2009
To: City Council
Through: Jack Friedline, Deputy City Manager
From: Beth Huning, City Engineer
Subject: Access Manholes for 42-inch PCCP Water Mains and Tee Connection
Project No. 05-055-001
Council District No. 1 & 5

Purpose and Recommendation

The purpose of this report is to request Council's approval to increase the contract amount of Project 05-055-001 to pay for unforeseen conditions discovered during construction.

It is recommended that Council increase the contract amount by \$60,428.67 to cover the increased construction costs.

Background

Council awarded the contract for Project 05-05-001, Access Manholes for 42-inch Prestressed Concrete Cylinder Pipe (PCCP) Water Mains and Tee Connection on July 8, 2008. The contract amount was \$578,000.00, plus \$57,800.00 for change orders. With the change order allowance, the total contract amount was \$635,800.00. The final cost of construction including the cost to cover unforeseen conditions is \$696,228.67.

Discussion

During construction of this project, several unknown conditions were discovered when the 108-inch water line was excavated which resulted in the need for additional work. Because this piping is so large (9 feet in diameter), connections have to be specifically fabricated based on existing joint locations and the types of couplings used in the original installation. The original 108-inch diameter line was constructed in 1974 and the knowledge of the actual pipe couplings, location of pipe joints, and other adjacent utilities was limited to 35 year old record drawings. The actual field installation could not

be verified until the water line was out of service, the intersection of Lindsay and McDowell Roads was closed, and the pipe excavated.

Once excavated, staff found three conditions that changed and increased the scope of work that was originally bid. First, the pipe joint location was different than shown in the record drawings requiring a larger excavation and an extended roadway closure of the intersection at Lindsay and McDowell Roads. Secondly, a 24-inch water line and a 36-inch storm drain were located over the top of the 108-inch water line. This required extra construction work to isolate, remove and then replace these lines with new materials. Finally, the 108-inch water line had a different joint coupling than was shown on the record drawings, which required modifications to the newly fabricated 108-inch replacement pipe. Due to the critical nature of the repairs (including the location of the excavation in the intersection of two major streets and the limited time available to do the work before the water line had to be returned to service), the contractor was directed to complete the work and the City agreed to reimburse the contractor for their time and materials in accordance with the contract provisions. The contractor's time and materials were tracked by City Staff during the work. The cost of this additional work resulted in a contract increase of \$60,428.67.

Alternatives


There were no alternatives to completing this work on the water line. Staff directed the contractor to proceed with the work in order to maintain the reliability of the water distribution system and to open a major street intersection to traffic. Once the roadway was excavated and the utility conflicts discovered, the work needed to be completed so the new water system connections be placed into service.

Fiscal Impact

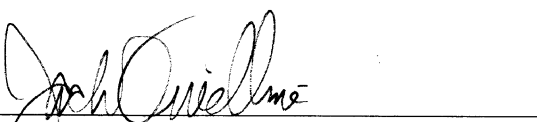
The total increase requested to the contract is \$60,428.67, for a total contract amount of \$696,228.67. Funding for this work will come from the Approved FY 08/09 Water Bond Capital program.

Concurrence

The Water Resources Department concurs with this recommendation.

for 
Kelly Jensen, Assistant City Engineer


Beth Huning, City Engineer


Jack Friedline, Deputy City Manager