



MEMORANDUM

To: Mayor and City Council
From: Jennifer Miller, Director of Finance
Date: April 10, 2018
Reference: Presentation of the Advanced Water Meter System Project
2030: Sustainable City Government, Goal 3
Excellent and Well-maintained City Infrastructure and Facilities

Introduction:

Currently, the City has three different types of water metering systems. We have approximately 6,700 analogue meters, 5,800 radio read meters, and 1,000 cellular meters. The current meter replacement program includes \$300,000 annually to upgrade analogue meters to either a radio read meter or a cellular meter. Under the current program, it will be another 6 ½ years before all analogue meters are upgraded to an advanced water meter solution.

Background:

The project started in 2009 by installing about 200 radio read meters at commercial locations deemed a safety concern (i.e. on Denton Tap). The original plan was to upgrade \$300,000 worth of meters each year. Following this plan would take about another 6 ½ years before all meters are upgraded as there are approximately 6,700 analog meters remaining.

Staff decided to explore an opportunity to complete the project sooner, so an RFP was issued in the Spring 2017 to determine what technology was available and how much it would cost to complete the project now rather than over 6 ½ years. The RFPs provided various solutions from radio read, to cellular, to fixed network. It also revealed that the \$300,000 currently budgeted each year for the project would not be sufficient to pay the principle & interest payments if certificate of obligations were issued to complete the project now. It was determined to reject all bids and revise the RFP based on the knowledge gained from the RFP process.

The second RFP specified that a fixed network solution was desirable. It also stated that the project would probably only cover residential meters and not commercial. It was determined that the remaining 900 commercial analog meters in the system would be replaced over the next several years using the money budget by Utility Operations for replacement meters since the residential meters would be new and under warranty. The reason for replacing all residential meters is so all residents have access to the same technology and level of customer service. Currently, the three different water meter systems provide varying levels of customer service. This project would provide the same level of service to all our residential customers. In addition, it is our residential customers that contact the City with billing questions. The fixed network solution provides an opportunity to provide proactive customer service rather than reactive.

In October 2017, we engaged the professional services of Siemens Industry, Inc (Siemens) to explore the City-wide replacement of water meters to one technology solution over a 12-14-month period. Replacing all meters would improve our water meter system as the City would move from managing and maintaining three different water meter systems to one system and all customers, commercial and residential, would have access to the same level of service. Chad Nobles with Siemens and City staff will present the findings from an audit of our water meter system, database, and field analysis. The presentation will also include the project history, proposed design/build scope of work for the implementation of an advanced metering infrastructure (AMI) system with Firm Fixed Pricing, cost comparisons, recommendations, and next steps.

Analysis:

Changing all meters to an AMI system will provide a standard solution to all customers. Currently, we cannot provide the same level of service to all customers because we have three different metering systems. Moving all meters to the same solution will allow the City to obtain meter reads in real time rather than once a month which provides:

- Utility Billing with the means to provide proactive rather than reactive customer service,
- Customers with a tool to access and monitor their water account thereby giving them control over their water usage, and
- the City with the means to enhance its water conservation efforts.

The current \$300,000 budgeted each year is not sufficient to cover the debt payment for the bond issue needed to cover this project as proposed. However, Siemens developed a scope of work that includes supplementing our project budget by utilizing Performance Contracting. They will share:

- an overview of Performance Contracting,
- the results of their audit of Coppell's water meters, database, and field analysis,
- a comprehensive scope of work, and
- a review of the project cash flow.

Legal Review:

Legal will complete its review of the contract with Siemens prior to staff bringing the item forward for Council's consideration of approval on April 24, 2018.

Fiscal Impact:

Siemens has provided a cost of \$6,391,732.80 inclusive of project design, project management, and installation of an AMI system to replace all water meters in the City. The project will be funded via Certificates of Obligations. The principle and interest payments will be paid from the project cash flow, the \$300,000 annual budget for the project, and the decrease in the budget need for replacement meters.