



CITY OF BEVERLY HILLS
PUBLIC WORKS SERVICES DEPARTMENT
MEMORANDUM

TO: PUBLIC WORKS COMMISSION

FROM: Trish Rhay, Assistant Director of Public Works Services - Utilities 
Michelle Tse, Senior Management Analyst *MST*

DATE: February 12, 2015

SUBJECT: Water Meter Project Status Update

ATTACHMENT: 1. February 3, 2015 Formal Session Report
2. February 3, 2015 Formal Session – Supplemental Memo

Staff will provide an update regarding the City's automated water utility meter reading system. There are several components that make up this system. There are an increasing number of the meter transmitting units ("MTUs") that are not working due to its age and low/no battery voltage; these units are needed to transmit water consumption reads through the system for utility billing and water tracking purposes.

Recently, the City Council approved the purchase of meter transmitting units ("MTUs"). A copy of the February 3, 2015 City Council Formal Session report and supplemental memo is attached for reference. These documents provide an overview of the system's framework and the related components needed to maintain and upgrade the system.



AGENDA REPORT

Meeting Date: February 3, 2015
Item Number: D-10
To: Honorable Mayor & City Council
From: Trish Rhay, Assistant Director of Public Works Services – Utilities
Michelle Tse, Senior Management Analyst
Subject: APPROVAL OF A PURCHASE ORDER IN THE AMOUNT OF \$440,000
WITH ACLARA TECHNOLOGIES LLC FOR WATER METER
TRANSMITTING UNITS (MTUS)
Attachments: None

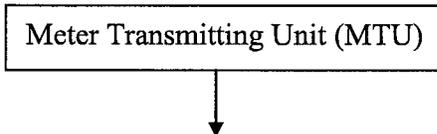
RECOMMENDATION

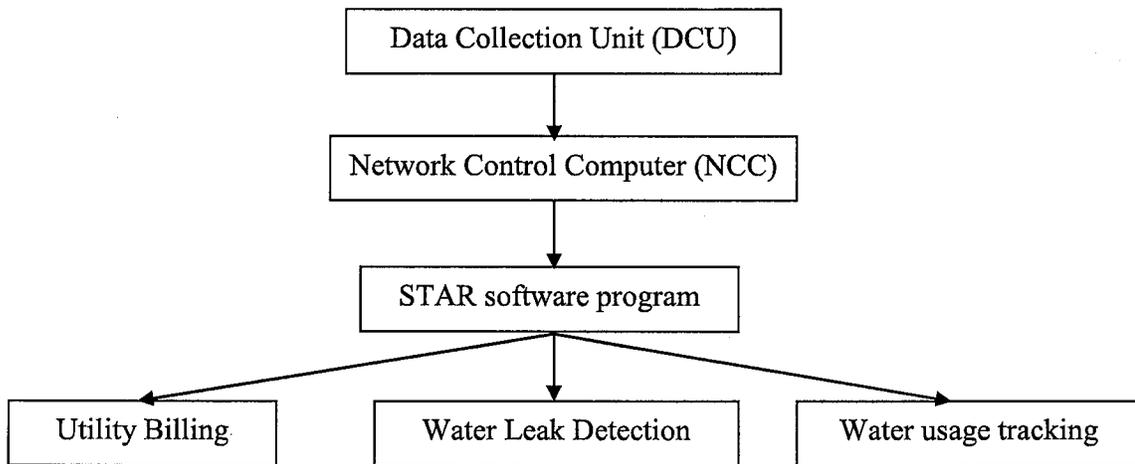
Staff recommends the City Council move to approve a purchase order in a not-to-exceed amount of \$440,000 for meter transmitting units (MTUs) with Aclara Technologies LLC.

INTRODUCTION

In 2008, the City Council approved the implementation of an Aclara automated water utility meter reading system (“meter system”) in lieu of a manual meter reading system. The intent of utilizing an automated system was to allow for value-added information including leak detection information, tamper detection, and reverse flow detection to be captured, transmitted and communicated to the City’s database daily. Additionally, the water consumption information could be used to track water usage and better streamline utility billing operations.

The purchase order for meter transmitting units (MTUs) will ensure continued operations by replacing these aging components with upgraded units. There are several components that make up the overall automated water utility meter reading system. A schematic of the overall system is included below.





The meter transmitting units (“MTUs”) are affixed to each water meter; there are approximately 11,000 of these units located throughout the City’s service area. Each MTU records the water consumption usage from each meter and transmits the information to a data collection unit (“DCU”). These DCUs are strategically placed throughout the City, and collectively transmits the water usage information to the Network Control Computer (“NCC”), a server that feeds the water consumption information into the STAR program. The STAR program is used by City staff to extract information for utility billing, generate leak detection reports, and feeds information into the City’s water tracker program for customers to track their water usage.

DISCUSSION

The level of maintenance and repairs to the equipment has been increasing given the aging system. Both the server hardware and software were recently upgraded as part of the regular maintenance. However, an increasing number of the MTUs affixed to the meters are reaching near the end of product life and need to be replaced. The replacement of approximately 11,000 MTUs will ensure the water usage information continues to be transmitted to be used for water billing, leak detection, and water use tracking purposes.

The MTU portion of the City’s system will be replaced with a newer Series 3000 model since the current “Legacy” model used by the City is no longer manufactured. A number of these Series 3000 model units have been installed as part of a pilot program to test for compatibility with the City’s existing meter reading system; there are no compatibility issues. A Request for Proposal was not completed since the product is sole-sourced. Aclara Technologies LLC manufactures their own devices.

FISCAL IMPACT

Funds are available in the Capital Improvement Program (Project 0669) in Fund 800 (Water Enterprise Fund) to cover the MTU equipment replacement. Project 0669 currently has \$930,000 earmarked for water meter replacement-related projects.

Don Rhoads
Approved By

George Chavez
Approved By



SUPPLEMENTAL AGENDA REPORT

Meeting Date: February 3, 2015
Item Number: D-10
To: Honorable Mayor & City Council
From: Trish Rhay, Assistant Director of Public Works Services – Utilities
Michelle Tse, Senior Management Analyst
Subject: APPROVAL OF A PURCHASE ORDER IN THE AMOUNT OF \$440,000 WITH ACLARA TECHNOLOGIES LLC FOR WATER METER TRANSMITTING UNITS (MTUS)
Attachments: None.

This report provides supplemental information regarding the Consent Calendar item titled "A PURCHASE ORDER IN THE AMOUNT OF \$440,000 WITH ACLARA TECHNOLOGIES LLC FOR WATER METER TRANSMITTING UNITS (MTUS)." The Purchase Order is for the supplies needed for the system-wide replacement related to the City's automated water utility meter reading system. This supplemental report transmits additional information as it relates to the City's automated water utility meter system replacement project.

DISCUSSION

The level of maintenance and repairs to the system has been increasing given the aging system. In addition to seeking the City Council's approval for the purchase of the water meter transmitting units for system replacement, staff is currently working on other components related to the replacement project. Staff will be conducting a formal bid process for installation services needed to assist with the system-wide replacement of these units. Given the lead time needed for manufacturing and shipment of the supplies, staff is first proceeding with the purchase order during the February 3, 2015 meeting. Agreements related to the installation services and regular maintenance of the system will be presented to the City Council at a future meeting.

FISCAL IMPACT

In addition to the \$440,000 for the purchase of the system components, costs for the system's software and server maintenance is approximately \$19,000 per year and preliminary costs for installation services is currently estimated to be \$400,000. As such, total project cost including all these components is approximately \$859,000. Funds are available in the Capital Improvement Program (Project 0669) in Fund 800 (Water Enterprise Fund) to cover the MTU equipment replacement project. Additionally, funds in the Water Enterprise Fund are budgeted for maintenance.

Meeting Date: February 3, 2015


George Chavez
Approved By
