



Legislation Text

File #: 20-0038, **Version:** 1

TO:

Honorable Mayor and Members of the City Council

THROUGH:

Bruce Moe, City Manager

FROM:

Stephanie Katsouleas, Public Works Director

Shawn Igoe, Utilities Division Manager

SUBJECT:

Consider Waiving Formal Bidding per MBMC Section 2.36.140 and Adopting a Resolution Approving an Agreement with Core and Main, LP for the Budgeted Purchase of a Water Advanced Metering Infrastructure (AMI) System for an Amount Not-to-Exceed \$3,500,000 for the Water Meter Upgrade and Automation Project and Adopting a Resolution Approving Two Agreements with Master Meter, Inc. for End User License and Maintenance Services (Public Works Director Katsouleas).

a) WAIVE FORMAL BIDDING

b) ADOPT RESOLUTION NOS. 20-0014 AND 20-0027 APPROVING AGREEMENTS

RECOMMENDATION:

Staff recommends that the City Council:

- a) Waive formal bidding per Manhattan Beach Municipal Code (MBMC) Section 2.36.140 (waivers); and
- b) Adopt Resolution No. 20-0014 approving an agreement with Core and Main, Inc. for the budgeted purchase of a Water Advanced Metering Infrastructure (AMI) system, for a not-to-exceed amount of \$3,500,000 for the Water Meter Upgrade and Automation Project.

FISCAL IMPLICATIONS:

The City's Water Fund currently has a budget of \$5.34 million in Fiscal Year 2019-2020 for implementation of the water meter upgrade project. An allocation of \$3,500,000 will be used to purchase automated water meters that will be installed citywide. The remaining funds allocated in the budget will be used to cover installation, project management and integration, which will be initiated later this spring and carried out in several phases due to the large scope of the project.

The City will save approximately \$735,000 off the cost of the hardware, software, and related equipment by purchasing the meters before February 29, 2020 due to a 2019 promotional opportunity offered by the manufacturer.

BACKGROUND:

The City currently reads approximately 13,500 water meters on a bi-monthly basis, which takes a

considerable amount of staff time to perform manually. Staff also provides on-site customer service by performing “meter checks” to rule out potential leaks when there is irregular high water consumption. However, because water bills are issued every two months, many weeks may pass before residents become aware that there may be a water loss problem. The inability to view data “real-time” is a frustration expressed by some of the City’s water customers, in particular because Southern California Edison and The Gas Company already have smart meters and provide access to real-time data. Additionally, many meter boxes in the City, where water meters are housed, are inaccessible, obstructed or hard to access due to fencing, overgrown landscaping, the presence of dogs, vehicle parking and locked gates. These factors result in additional work for the City’s meter readers because they often require repeat visits to read the meter, and then the data must be manually input by Finance’s billing staff.

Automated meters report water usage throughout the day at fixed intervals (e.g., every 15 minutes). With this type of reporting frequency, smart water meters have the intrinsic ability to detect anomalies, like leaks or irregular usage, and notify staff and customers instantly. Having an automated system in place would virtually eliminate staff’s access challenges and the residential frustrations associated with high water bills because it eliminates the long gaps between meter reading. In return, smart meters will save residents and businesses money, decrease water loss, and reduce staff time spent helping residents trouble-shoot potential sources of a leak.

DISCUSSION:

The City’s goal of converting existing, manual-read, water meter infrastructure to an automated system has been planned for several years. In anticipation of upgrading metering technology in 2020, in 2018/2019 staff conducted vendor evaluations, received vendor presentations from leading manufacturers, surveyed surrounding cities, and pilot tested two leading candidate water AMI systems (see below for more information). These actions significantly aided staff evaluation efforts, ultimately leading to the selection of Master Meter as the best water AMI system to meet the City’s infrastructure and operational needs.

Staff also strongly supports adopting advanced metering technology because it improves the customer experience. A major component of the AMI project is the customer portal, which allows customers to login to a secure online website to see their water usage at any time, set water budgets and consumption thresholds, receive notifications or alerts, and pay their bill online. The water AMI system can also provide customers and utility staff real-time data, which will aid in resolving customer concerns, in addition to proactively notifying customers of suspected leaks or other account concerns.

In 2018, the City began pilot testing two different automated meter infrastructure systems to evaluate the efficacy of each vendor’s AMI technology. The pilot test included installing 25 automated water meters manufactured by each company throughout Manhattan Beach, as well as supporting communication equipment on the elevated storage tank, to evaluate/confirm communication strength and data reporting capabilities. During the pilot testing period, both vendors demonstrated the abilities of their respective technologies and how they would interface with the City’s financial software. Both vendors also demonstrated exceptional performance in meter functionality.

However, based on staff’s analysis and evaluation at the conclusion of the pilot program, staff determined that Master Meter Allegro presented the best overall value of performance and price, while also meeting the specific requirement of the City for under-the-lid and under-the-glass meter

operations. More specifically:

- Master Meter's under-the-glass register that attaches to the meter significantly reduces the need to purchase new meter box covers because the antenna needed to transmit meter data is built into the meter's register. External antennas are utilized by most other vendors, which would require the City to replace most meter box covers at an additional cost.
- The internal antenna provided on the Master Meter reduces the potential risk of trip and fall incidences because there are no protrusions.
- Master Meter provides a dedicated data signal frequency for transmitting meter data, and utilizes a stronger signal output (two watts vs. one watt), thus requiring less data collectors and repeaters throughout the City.
- Master Meter provides a 10-year warranty on parts and meter reading accuracy, and an additional 10-year prorated warranty on parts.
- All meters less than five years old will receive a replacement register only, and the City will continue to use the body of the meter.

If approved, water meters purchased before February 29, 2020 will result in saving the City approximately \$735,000 off the full retail price due to Master Meter's promotion. Note that the \$3.5 million request is \$239,938 more than the estimated cost of the meter replacements. These additional funds are being requested in anticipation of having to purchase some larger meters over what are currently installed, which is primarily due to housing remodels that will require meter upgrades over the duration of implementation.

Waiver of Formal Bidding

Master Meter products are only available from Core and Main, LP, who is the single authorized dealer in Southern California for public agencies. As a result, competitive formal bidding is not possible. If the City were to purchase from another dealer located outside Southern California, that dealer could lose its distribution rights with the manufacturer. In addition, the City could face challenging issues with equipment warranty and repairs and maintenance.

CONCLUSION:

This AMI replacement project will provide residents with universal access to the benefits provided by the automated water meters. It will also save staff time in reading bi-monthly meter data, when making site visits to re-read meters, when starting and stopping water service, and in troubleshooting irregular water consumption.

Therefore, staff recommends that City Council waive formal bidding per MBMC Section 2.36.140 and adopt Resolution No. 20-0014 approving an agreement with Core and Main, LP, for the budgeted purchase of a water Advanced Metering Infrastructure system in an amount not-to-exceed \$3,500,000.

PUBLIC OUTREACH:

The AMI project will involve, with very few exceptions, all water customers within the City limits. As part of the installation portion of this project which will be brought back to City Council, a communications plan will be developed. This will outline how customers will be notified when their water service may be impacted.

ENVIROMENTAL REVIEW:

The City has reviewed the proposed activity for compliance with the California Environmental Quality Act (CEQA) and has determined that the activity is not a "Project" as defined under Section 15378 of the State CEQA Guidelines; therefore, pursuant to Section 15060(c)(3) of the State CEQA Guidelines the activity is not subject to CEQA. Thus, no environmental review is necessary.

LEGAL REVIEW:

The City Attorney has approved the agreement as to form.

ATTACHMENTS:

1. Resolution No. 20-0014
2. Agreement - Core and Main, LP (Master Project Agreement)
3. Agreement - Master Meter Harmony (End User Agreement)
4. Agreement - Master Meter Harmony (Maintenance Agreement)
5. AMI Meter Pricing
6. AMI System Promotional Offer