



City of Blaine Anoka County, Minnesota

Blaine City Hall
10801 Town Sq Dr NE
Blaine MN 55449

Legislation Text

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ADMINISTRATION - *Joe Huss, Finance Director*

APPROVE FIVE-YEAR AGREEMENT WITH SENSUS AND CORE & MAIN TO PROVIDE DATA STORAGE AND AUTOMATED METER SYSTEM SUPPORT

Staff is requesting Council approve a new five-year agreement with Sensus/Core & Main for water usage data collection and storage and technical support for the city's automated water meter system. The new agreement replaces the current agreement with Sensus, which has been in place since 2012, and coincides with the completion of the radio and meter installation project that began in 2018.

Under the current agreement, the City pays \$3,800 per month (\$45,600 annually) for this service. The new system would be installed in 2020 and the five-year support agreement would begin in 2021 and extend through 2025. First year (2020) costs for installation and training is \$31,000. Annual support and maintenance service charges would increase per the following schedule:

- 2021 - \$60,222
- 2022 - \$62,102
- 2023 - \$64,337
- 2024 - \$66,545
- 2025 - \$68,826

The increase is due to a new feature of the software upgrade for an analytics program that will allow staff the ability to more easily detect billing errors and actively monitor the system and establish custom alerts to notify staff about potential leaks or meter issues. This allows for a more proactive approach to fixing system issues versus the current reactive method. The annual cost for this feature is \$25,000 the first year, with a 3.6 to 3.9% annual increase over the remaining four years.

Additional background on the system:

In 2004, the City implemented the Sensus Fixed-Net Automated Meter Reading (AMR) System for Utility Billing. Per their bid, Sensus installed a system that employed unlicensed variable frequency radio technology to transmit water consumption information. The initial system installation included a number of pieces of equipment including radios (attached at the water meter), signal boosters located at various points throughout the City, a receiving station and a Data Operations Center (DOC) server, both located at City Hall. The DOC served as the repository for water consumption data for all Blaine utility accounts. Per the agreement, the system carries a 20-year warranty on all hardware components, except the DOC.

In 2012, Sensus migrated to new technology that provided superior performance to that of the system originally purchased and installed in 2004. The new system provided a licensed radio frequency and a stronger radio signal. The boost in the radio signal helped solve some recurring problems that the City experienced in getting timely consumption readings on a number of utility accounts. Sensus continued to support the original system and honor the 20-year warranty - any components for which Sensus is responsible, including radios, that fail while still under the 20-year warranty, were replaced with new technology components at no cost to the City. The new technology also allowed for the reduction of the number of signal boosters used to transmit data. In addition to continuing to honor the original 20-year warranty, Sensus continues to provide all of the transmitting hardware components required of the new system.

As part of the move to the new technology, Sensus began offering a cloud-based storage solution for off-site hosting of utility data. Since that implementation, the city-owned data has been housed on Sensus-owned servers and accessed by Blaine staff through a secure internet connection. A hosted solution provides cost savings for the City, including savings on capital expenses for the purchase of servers and other computer hardware, annual maintenance costs for data storage and processing hardware, and software support for the programs that operate the storage and processing hardware.

One drawback when the move to new technology was made was the need to maintain two data bases, since the data originating from the two separate systems is not compatible. The resulting inefficiency is most significant in the billing area where separate processes, one for the old technology and one for the new technology, would be required in order to produce utility bills.

In 2018, the City made a concerted effort to correct this inefficiency and complete the

installation of the updated technology throughout the entire system. A schedule of Council approvals for this project is as follows:

- March 15, 2018 - the City Council approved a contract to purchase roughly 14,000 radios equipped with new technology
- May 3, 2018 - Council approved a contract with HydroCorp, Inc. to install the new radios
- August 2, 2018 - as the installation of the new radios was underway, Public Works staff discovered a large number of water meters in use were quite old and in need of replacement. On this date, Council approved a \$920,000 contract with Core & Main to purchase 8,000 water meters. In conjunction with the purchase of the meters, Council approved an addendum to the HydroCorp contract to supply water meter installation services along with the radio installation

With the radio and meter installation project now complete, staff is requesting Council approval of a new five-year contract with Core & Main to support the data collection and cloud storage of the Automated Meter Reading system.

By motion, approve the contract with Sensus/Core & Main to provide data collection and storage services and support maintenance for the City's automated water meter system and authorize the Mayor and City Manager to execute the approved contract.