

# **Municipality of Lakeshore**

## **Report to Council**

### **Engineering & Infrastructure Services**

#### **Environmental Services**



**To:** Mayor & Members of Council

**From:** Albert Dionne, C.E.T.  
Manager, Environmental Services

Michelle Heslop, AIMA  
Supervisor of Revenue

**Date:** December 15, 2020

**Subject:** Upgrade to Water Meter Read Program

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#### **Recommendations**

Direct Administration to proceed with an upgrade to the current water meter reading software and the associated equipment; and,

Authorize the purchase of the water meter reading software and the associated equipment to be funded from the water reserve at a total cost of \$30,350 plus the non-refundable HST.

#### **Background**

For purposes of water meter reading and billing, the Municipality currently utilizes N\_Sight Systems (N\_Sight) to download meter reads. N\_Sight is software managed and licensed by Neptune. The Municipality has the software installed on only one computer in the revenue department and since the software is now outdated, it cannot be transferred to another computer and/or the information accessed by additional staff.

Meter readings are currently taken by either Olameter (a 3<sup>rd</sup> party utility service) and/or the Public Works road patrol staff.

Olameter is scheduled to read any non-radio frequency meters that requires a read either for a regular billing cycle (cannot be read by the road patrol) or for final reads when properties are sold. Olameter staff attend Town Hall, download the appropriate routes required for meter reading, conduct the reads (using 3 handheld units known as Neptune Micro Flex CE5320) and then return to Town Hall to upload the data into the N\_Sight software for billing.

Public Works staff conduct meter reads in accordance with the Public Works road patrol schedule (completed on standard 3, 7, 14 and 21 days cycles). Public works staff use the Neptune MRX 900 which includes an antenna strapped onto the patrol truck which wirelessly connects to a laptop. The laptop loads the required reads into the system as staff complete their road patrols. Once completed, the laptop is returned to Town Hall and the data is imported into the N\_Sight software for billing.

As the current hand held equipment used by Olameter continues to age requiring more frequent repairs, replacement parts are becoming scares, rendering repairs to these units very difficult. Batteries are no longer holding a charge and poor screen resolution sometimes makes the screen difficult to read. Ineffective equipment can lead to missed reads or more frequent call outs thereby added costs to the Municipality by the service provider.

The aging equipment used by Public Works staff has also contributed to operating inefficiencies requiring staff to sometimes attend several locations repeated times or on subsequent dates to get reads. This equipment at times has been unreliable at obtaining meter reads due to factors such as distance away from the meter or weather conditions. This too contributes to added costs and operating inefficiencies for the Municipality.

Under the current program, utilizing the equipment and software that is currently in place has some limitations in being able to provide property owners with timely data. Public works staff work on a monthly road patrol schedule. Meter read schedules are loaded in accordance with the road patrol schedule. This means that reads can only be uploaded to the system at the end of the monthly schedule. This prevents the data from being accessed in a timely manner. Upgrading this system will allow for real time data being uploaded to the water billing department which would allow consumption issued to be identified in a more timely manner.

## **Comments**

The proposed upgrades will include an upgrade to the most current cloud based software as well as replacement of the current equipment to current equipment that works in a wireless platform providing real time data reads to the software portal.

With the recommended upgrades, both Olameter staff and Public Works staff would no longer have to attend Town Hall to upload the meter reads. Data will be simultaneously upload on site to the proposed new cloud based system that will accessible by staff online. Since this can be done remotely with more reliable equipment, time and effort for both parties would be saved and efficiencies recognized.

Since reads will be uploaded to the cloud based software and available immediately this will allow revenue staff access to consumption data in real time.

It is being recommended that the updated software and replacement equipment be obtained from Neptune, as Neptune is the sole provider of the water meters installed across the municipality. Using software that is directly compatible with the meter is the recommended approach.

### **Financial Impacts**

The cost to purchase the software and the associated equipment is \$30,350 plus the non-refundable HST. This project has not been budgeted in the 2021 budget as the information relative to this project was not available at the time of completing the 2021 budget. Should Council direct Administration to proceed with the upgrade, this project can be funded from the Water reserve as it is directly related to water services.

The software will require an annual operating budget of \$10,050 (plus the non-refundable HST) for the annual license. The first year of the license cost (2021) has been included in the above implementation cost, however this will be required to be included in the 2022 budget (and in subsequent years for the duration of the contract).

### **Report Approval Details**

Document Title:	Upgrades to Water Meter Read Program.docx
Attachments:	- FP Report.pdf
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This report and all of its attachments were approved and signed as outlined below:

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