

Municipality of Lakeshore – Report to Council

Operations

Water Management



To: Mayor & Members of Council

From: Albert Dionne, C.E.T.
Division Leader – Water Management

Date: July 12, 2021

Subject: Lifecycle Water Meter Replacement Program

Recommendations

Approve an enhanced Lifecycle Water Meter Replacement Program which includes the replacement of 4,500 meters in the amount of \$1,871,000 including net HST, as presented at the October 12, 2021 Council meeting; and

Approve single source procurement with Neptune Technologies Inc. in the amount of \$1,871,000; and

Approve the transfer of \$1,034,000 from the Water Reserve to fund the enhanced program.

Background

The Municipality has approximately 4,500 water meters that are currently nearing the end of their lifecycle. Meters that are nearing the end of the lifecycle result in less accurate readings with the potential of no readings once the meters stop working or fails.

The Lifecycle Water Meter Replacement Program includes replacement (and upgrading) the existing end of life meters to Advanced Meter Infrastructure (AMI). AMI increases the accuracy of the meter reads and results in accurate and increased annual revenue. Furthermore, upgrading technology will enhance our ability through Automated Meter Reading (AMR) service, which reduces time and costs related to reading and billings.

When the Water Management Division initially established a Lifecycle Water Meter Replacement Program in late 2019, it identified an approximate budget of \$500,000 each year to complete a lifecycle replacement. This program and associated budget would allow Municipal staff to replace between 500 to 800 meters per year.

The program was brought forward in both the 2020 and 2021 budgets. Based on the delay with the program in 2020 and 2021 (and the encumbered funds), trying to achieve the numbers needed to make a difference with the replacement program is now determined to be unachievable.

The Municipality reached out to Neptune to assist with the development of a solution to get the replacement program on track. In discussions with Neptune, an enhanced Lifecycle Water Meter Replacement Program was proposed. The enhanced program includes replacement of 4,500 water meters over the next eight (8) months. 3,500 water meters will be completed by Neptune and 1,000 water meters will be completed by Municipal staff under Neptune's program.

In accordance with the Canadian Free Trade Agreement (CFTA) dated September 24, 2021, Article 513: Limited Tendering subsection (b), if the goods or services can be supplied by a particular supplier and no reasonable alternative or substitute goods or services exist for any of the following reasons:

- (v) to ensure compatibility with existing goods, or to maintain specialized goods that must be maintained by the manufacturer of those goods or its representative.

The Municipality's existing water meters are manufactured and supplied through an approved Neptune dealer; therefore, the program will continue with the placement and operation of Neptune meters. This allows for compatibility with the software and allows for consistency related to the newer meters that have been replaced within the lifecycle program to date, the programming and the installation and operation knowledge of these meters across the Municipality.

Comments

Based on the above, Administration obtained a proposal from Neptune for replacing and upgrading the technology of Lakeshore's water meters as the current provider of Lakeshore's water meters. A copy of the presentation related to the program is included as Appendix A to this report.

Key features of the proposal include:

- Increased revenue through accurate readings;
- Elimination of manual meter readings for cost savings;
- Leak detection, tamper detection and reverse flow detection;
- Replacement (installation) of 4500 meters; and
- Preparation for AMR.

Should Council approve Neptune's proposal, Neptune offers a complete turnkey solution for the Municipality's enhanced Lifecycle Water Meter Replacement Program including comprehensive customer communication, call center for appointment setting and customer service, installation services, inventory management, and complete data management to transition to our billing services.

The Neptune project team includes Project Managers, experienced installers, IT support, public communication experts, technical support, administrative support and customer service expertise. The combination of these resources ensures effective implementation of the Lifecycle Water Meter Replacement Program.

Water Service appointments will be assumed by Neptune, including appointments for designated Municipal staff to support the program.

After this enhanced program has been executed, a more achievable Lifecycle Water Meter Replacement Program will be established to continue to keep up with the meter replacements moving forward at a lower budget requirement per year.

Financial Impacts

In 2020 Council approved a budget of \$580,000 (\$448,000 was encumbered to 2021). In 2021 Council approved a budget of \$500,000 for the Lifecycle Water Meter Replacement Program (\$111,000 spent to date in 2021). The program received a total approved budget of \$1,080,000, with a current balance of \$837,000.

A breakdown of the project costs and funding is summarized below.

Project Cost	Project Cost (including non-recoverable HST)
Neptune Technology Inc. replacement costs	\$1,479,224
Lakeshore Water Distribution replacement costs	\$391,776
Total Project Cost	\$1,871,000

Project Funding	
2020/2021 Water Meter Replacement Budget	\$837,000
Total Project Cost	\$1,871,000
Project Surplus/(Deficit)	(\$1,034,000)

As noted in the table above the Water Meter Replacement Program has a deficit of \$1,034,000 over the approved budget(s) allocated for this program. This deficit would be funded from the Water Reserve.

There is an expected five-year payback recovery for the overall project cost (considering an estimated annual revenue increase of \$315,000).

Attachments

Appendix A – Presentation by Neptune Technologies Inc.

Report Approval Details

Document Title:	Water Meter Replacement Program.docx
Attachments:	- Lakeshore Meter Replacement Project.pptx
Final Approval Date:	Oct 21, 2021

This report and all of its attachments were approved and signed as outlined below:

Jessica Gaspard

Kristen Newman

Truper McBride