



**Date:** February 27, 2023

**To:** Mayor and Council

**Author:** Shaun Martinho, Manager of Public Works and Environmental Services

**RE:** Award of Water Meter Replacement Program

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## **RECOMMENDED ACTION**

1. That IED-22-203 Advanced Metering Infrastructure and Water Meter Replacement Project **BE AWARDED** to Neptune Technology Group Canada Co. in the amount of \$ 3,873,204.63 (excluding HST), and subject to content review by the Manager of Public Works and Environmental Services, legal review by the Town Solicitor and financial review by the Treasurer, the Mayor and Clerk **BE AUTHORIZED** to execute the requisite agreement; and,
2. That mandatory participation in the meter replacement program **BE APPROVED**, and any account holders who are non-compliant 50 days after the Town sends the notification letter will be subject to a water shut-off.

## **BACKGROUND**

The primary function of a water meter is to measure the amount of water consumed by customers to facilitate fair and accurate billing of water and wastewater services. Additionally, these meters are relied upon to ensure that appropriate revenues are collected to fund water and wastewater operations and related capital replacement projects.

As water meters age, they become less reliable, less accurate, and more costly to repair. The industry standard is to replace water meters every 15 to 20 years. The Town of Kingsville currently has 8708 meters of various ages and sizes.

In 2021, administration identified that Kingsville's water meter reading assets were becoming obsolete and that the system would require a significant upgrade in the near future. A consultant, Diameter Services Inc., was retained to help evaluate Kingsville's aging metering system and provide recommendations on alternative technologies that could improve customer service, reduce meter-reading costs, and create operational efficiencies.

At the regular meeting of Council on March 28<sup>th</sup>, 2022, several recommendations (Appendix A) were endorsed that defined the scope of work for upgrading Kingsville's drive-by metering system to fixed base Automated Metering Reading Infrastructure (AMI). As noted within the Appendix A, a project schedule "consisting of a 6-month procurement phase beginning in 2022 with a 3-month startup and a 12-month implementation phase starting in 2023" was approved.

At the end of 2022, a Project Team of administrators from Finance, Information Technology, Water Billing, and Infrastructure and Engineering worked with Diameter Services to develop the specifications for the new metering system and issued a Request for Proposal (RFP) to solicit a qualified vendor. Due diligence during negotiations with the preferred vendor has delayed timelines slightly, but Administration can now recommend the contract award.

## DISCUSSION

The Request for Proposal, "IED-22-203 Advanced Metering Infrastructure and Water Meter Replacement Project," was advertised on September 29, 2022, and closed on November 18, 2022. In total, three (3) bids were received. All proposals were evaluated and scored taking into consideration each proponent's cost, experience with similar projects, understanding of this project, proposed work plan, and value added benefits. The table below includes the average scores among the Project Team for each proposals.

Vendor Name	Initial Capital Costs	Scores (Out of 1000)
Neptune Technology Group Canada Co.	\$ 3,873,204.63	801.65
KTI Limited	\$ 3,976,526.52	767.56
Mueller Systems, LLC	\$ 3,846,081.79	277.15

Neptune Technology offers a turn-key solution that provides the best combination of service and technology to address the Town's metering needs for the next 20 years. Neptune has been manufacturing water meters for over 130 years, leading the industry in meter design innovation and state-of-the-art Advanced Meter Infrastructure (AMI). Neptune has experience working with water utilities and municipalities across Canada in performing large-scale meter installation projects and metering system implementations. Given their suitable proposal and considerable experience, administration is recommending award of tender to Neptune Technology Group Canada Co.

Meter replacement projects are complex because they involve specialized technology, network design, software implementation, and experts in field installation services requiring customer interaction and scheduling across broad geographic areas. There are several keys to the successful implementation of a project of this scale and complexity, including:

## **Public Outreach and Engagement**

Neptune has over 33 years of experience designing, creating and implementing proven techniques for appointment booking and customer communication specific to water meter programs. The goal will be maximizing the number of appointments generated, minimizing intrusion to homeowners and reducing costs. The success of the entire program rides on public acceptance, which is strongly influenced by a well-designed and implemented education program. The Town of Kingsville's Public Outreach Program will include an introductory contact letter, premium tri-fold pamphlet, door hangers, outbound phone attempts, canvassing, telemarketing, reminder letters, and a real-time online appointments website.

## **Customer Compliance**

The Project Team will divide the Town into smaller work areas during the start-up phase. The success of this project will be determined partly by the timely scheduling of appointments by homeowners while crews are working in their area. Customers must book appointments regularly to ensure installation crews can keep moving because there could be additional costs if they have to return later. That is why public outreach materials must have a strong message that meter replacement is mandatory.

Neptune Technology Group (Canada) Co and Diameter Services both have past histories on systems and policies that were implemented in other Municipalities to achieve successful meter replacement programs. They both indicated that other Municipalities ensure compliance with the program through non-compliance shut-off/water reduction notices and a non-compliance fee. As such, administration is recommending the following:

- That 30 days after initial contact within a work area, the account be moved into soft refusal if the Homeowner has not booked an appointment, and they be notified of non-compliance and warned of the consequences by letter.
- The soft refusal period lasts another 20 days during which time the account holder will need to respond to the non-compliance letter and schedule an appointment.
- After 50 days, if the property owner has not scheduled an appointment, that the water be turned off and the shut-off/turn-on fee of \$100.00 as specified in *By-law 6-2023 Being a by-law to impose fees and charges in the Town of Kingsville* be applied to the account.

## **FINANCIAL CONSIDERATIONS**

The initial capital costs of \$ 3,873,204.63 is within the amount budgeted for this project in the 2023 Capital Schedule (\$4,200,000.00).

It should be noted that Neptune provided the lowest-cost solution for the metering system over its projected lifespan. Vendors were required to submit estimated annual networking and maintenance costs over the over the 20-year life of the system. This can be seen in the following table:

<b>Vendor Name</b>	<b>Initial Capital Costs</b>	<b>Life Cycle Cost (20 yrs)</b>	<b>Total Cost</b>
Neptune Technology Group Canada Co.	\$ 3,873,204.63	\$1,558,835.89	\$6,138,205.79
KTI Limited	\$ 3,976,526.52	\$1,724,615.16	\$6,442,290.10
Mueller Systems, LLC	\$ 3,846,081.79	\$1,848,742.77	\$6,435,151.75

## **ENVIRONMENTAL CONSIDERATIONS**

Upgrading to AMI technology provides the following environmental benefits:

- Improved leak detection results in reduced water loss and decreases the energy needed to treat and convey water to consumers.
- Reduced truck rolls to read and maintain meters will result in a reduction of greenhouse gas emissions.

## **CONSULTATIONS**

Infrastructure and Engineering Department  
Finance and Information Technology Department  
Communications and Public Relations Coordinator  
Diameter Services Inc.  
Neptune Technology Group Canada Co.

PREPARED BY:



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