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**Subject:** Award of Contract 2019-T-231 Grimsby Water Storage System in the Town of Grimsby

**Report to:** Public Works Committee

**Report date:** Tuesday, January 14, 2020

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## **Recommendations**

1. That Contract 2019-T-231 Grimsby Water Storage System in the Town of Grimsby **BE AWARDED** to ROMAG Contracting Ltd. at their bid price of \$20,110,610.00 (including 13% HST).

## **Key Facts**

- The purpose of this report is to seek Council's approval to award Contract 2019-T-231 Grimsby Water Storage System in the Town of Grimsby.
- Schedule B of Niagara Region's Procurement By-law 02-2016, as amended June, 2019, requires Council approval for all tender awards in excess of \$5,000,000.
- Proposed works include a new 15 Mega-Litres (ML) potable drinking water reservoir facility to provide floating storage to the water distribution system, which includes a 500 mm diameter watermain backfeed, and upgrades to the existing Park Road Booster Pumping Station (BPS) and Reservoir facility.
- Construction is scheduled from January 2020 to September 2021 with a contract completion date of September 15, 2021.
- On October 28, 2019, Niagara Region initiated a competitive public tender process (2019-T-231) to solicit bids from pre-qualified General Contractors for these works (2019-RFPQ-225 – Request for Pre-Qualification of General Contractors for Grimsby Water Storage System). The tender closed on December 5, 2019. Five (5) bid submissions were received and five (5) were opened with the lowest compliant bid being received from ROMAG Contracting Ltd. in the amount of \$ 17,797,000.00 (excluding HST).

## **Financial Considerations**

Project 10CW1302 Grimsby Water Storage System in the Town of Grimsby has a previously approved capital budget of \$26,889,173.70. The total estimated project cost after the award of Contract 2019-T-231 is \$22,914,400.90 (inclusive of 1.76% non-refundable HST), as detailed in Appendix 1 – Total Estimated Project Cost. The expected project surplus of \$3,974,772.80 will be returned to project funding sources. The project is funded as follows: approximately 65% by Water Development Charges, 30% Water Capital Reserve, and 5% debt financing.

## Analysis

The Grimsby Water Treatment Plant (WTP) was commissioned in 1994 as the newest water treatment plant owned and operated by Niagara Region. The system supplies potable water to the Town of Grimsby (via Grimsby WTP High Lift Pumping Station), the community of Beamsville in the Town of Lincoln (via Lincoln Booster Pumping Station), and the community of Smithville in the Township of West Lincoln (via Park Rd. BPS and Reservoir).

Based on the Master Servicing Plan (MSP) 2016, the Grimsby Water System has insufficient storage to meet 2041 demands. Of the 10 ML of storage at the Grimsby WTP, only 50% is considered to be available storage, due to the constraints in chlorine contact time. The existing water storage reservoirs in Smithville, Lincoln and West Lincoln are unable to service the area near the escarpment in Grimsby due to limitations in water storage volumes. This means that the Grimsby system is deficient in storage when compared to the Ministry of Environment, Conservation and Parks' (MECP) criteria. For this reason, additional floating storage is required in the area to support growth and provide emergency water storage.

The September 2011 Niagara Region Water and Wastewater Master Plan recommended an additional study to confirm the optimal location for additional floating storage in the Town of Grimsby. The addition of a new 15 ML reservoir would address the existing security of water supply issue and provide operational flexibility allowing better efficiency and optimization of the High Lift Pump operation at the Grimsby WTP.

In February 2015, Niagara Region completed a Class Environmental Assessment (EA) and confirmed the optimal storage location for the 15 ML reservoir site. The proposed site for the new reservoir is a 16 acre property located on the east side of Park Road South, half way between Ridge Road East and Elm Tree Road West. The property was purchased by Niagara Region for this project.

Appendix 2 illustrates the project work area limits.

Proposed works for the Grimsby Water Storage System project include:

- New in-ground 15 ML concrete water reservoir including:
  - 2 Cells (baffled) – 7.5 ML each complete with PRV altitude valve and isolation valves for maintenance.
  - Overflow chamber including de-chlorination.
  - Excavation and local dewatering needs as required.
  - Passive reservoir ventilation.
  - Valve house connected to reservoir complete with process piping and valves, electrical motor control centre line-up and a standby power generator.

- Connection to existing 300 mm and 450 mm watermains with automated valves to allow drawing and filling of the new 15 ML Reservoir to and from Grimsby and Smithville water distribution system.
  - SCADA system monitoring and operator flexibility (isolation valves on existing and new watermain to new reservoir).
  - Site works for driveway, parking and traffic flow, fencing, landscaping, and site buffering vegetative screenings to achieve a low visual environmental impact.
- Modifications to piping at the existing Park Road BPS and Reservoir to accommodate the proposed new 15 ML Reservoir storage including:
    - 500 mm diameter watermain to backfeed from the new water reservoir to the Grimsby water distribution system including a pressure reducing valve (PRV) at the connection point to the existing 500 mm watermain, north of the existing Park Road BPS and Reservoir.
    - Automated valves for system flexibility.
    - Control valve chamber at the pump station including a pressure sustaining valve (PSV) and isolation valves with SCADA monitoring.
    - New connection from the existing Park Road Reservoir directly to the Park Road BPS clearwell/pump well.
    - Re-Chlorination system review and modifications as necessary.
  - Roadway and site restoration works of all work areas.

In accordance with the Class EA requirements, Indigenous Groups were consulted during the Class EA and Archaeological Assessments (Phases 1, 2 & 3). Indigenous Groups will be participating as monitors during construction phase to ensure protection measures are implemented.

WSP Canada Group Ltd. (formerly MMM Group) was retained by Niagara Region through 2015-RFP-17 to complete detailed design and tendering. Contract administration and inspection services were evaluated during the original RFP period, and were approved by Change Purchase Order through the procurement process.

In accordance with Niagara Region Procurement By-law 02-2016, as amended June, 2019, and under the guidance of the Region's Procurement Department, a public tender process was initiated on Monday, October 28, 2019 with a closing date of Thursday, December 5, 2019.

Tender opening occurred on Thursday, December 5, 2019 at 2:15 pm and five (5) bids were received, and five (5) were opened with the lowest compliant bid being received from ROMAG Contracting Ltd. in the amount of \$ 17,797,000.00 (excluding 13% HST).

Niagara Region's Procurement Department has reviewed and checked all opened tenders to confirm they included acknowledgement of the correct number of Addenda and requisite Bid Security (tender deposit) and Surety (Agreement to Bond).

A summary of the bid submissions, which were opened is included in Appendix 3.

Contract award requires resources from Legal Services and Corporate Services in order to execute the required contract documents. Water and Wastewater Engineering staff will be providing resources throughout the project in order to manage the contract with assistance from Corporate Services on contract/project payments.

### **Alternatives Reviewed**

1. Proceed with Contract Award –This alternative would enable staff to proceed with contract award to ROMAG Contracting Ltd. to construct a new 15 ML potable water reservoir with a 500 mm diameter watermain backfeed, and upgrades required at the existing Park Road BPS and Reservoir to meet Niagara Region's objective of providing the required water distribution system floating storage, and safe and reliable drinking water supply to the communities of South Grimsby, Smithville, and Beamsville.
2. Do Nothing – This alternative does not adequately address the safe and reliable water distribution system supply of potable drinking water to the communities of South Grimsby, Smithville, and Beamsville, given that there is inadequate floating storage available to provide emergency storage requirements.

Staff recommend Alternative One (1) to proceed with contract award to ROMAG Contracting Ltd.

### **Relationship to Council Strategic Priorities**

This recommendation is related to fostering Council's strategic priority for Responsible Growth and Infrastructure Planning, since the planned construction for a new reservoir storage facility as well as other associated facility and linear infrastructure improvements will ensure reliable infrastructure to support growth and economic development within the Town of Grimsby, Township of West Lincoln, and Town of Lincoln.

### **Other Pertinent Reports**

N/A.

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**Recommended and Submitted by:**

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*This report was prepared in consultation with Tony Cimino, C.E.T., Associate Director, W-WW Engineering and Pamela Hamilton, Program Financial Specialist, W-WW, and reviewed by Joseph Tonellato, P.Eng., Director, W-WW and Bart Menage, Director, Procurement and Strategic Acquisitions.*

**Appendices**

Appendix 1	Total Estimated Project Cost	6
Appendix 2	Key Plan	7
Appendix 3	Summary of Bids	8

**PW1 - 2020 APPENDIX 1**  
**Total Estimated Project Cost**  
**Contract Award**

**Contract 2019-T-231 - Grimsby Water Storage System**

	<b>Council Approved Budget</b>	<b>Budget Increase/ Reallocation</b>	<b>Revised Council Approved Budget</b>	<b>Expended &amp; Committed as of 12/5/19</b>	<b>Contract Award/ Forecast</b>	<b>Budget Remaining</b>
	<b>(A)</b>	<b>(B)</b>	<b>(C) = (A) + (B)</b>	<b>(D)</b>	<b>(E)</b>	<b>(F) = (C)-(D)-(E)</b>
<b><u>Total Estimated Project Cost (10CW1302)*</u></b>						
(a) Construction (includes contract contingency)**	21,985,000		21,985,000		18,110,227	3,874,773
(b) Project Contingency	2,625,000	(120,000)	2,505,000		2,505,000	-
(c) Consulting Engineering Services (Design, Contract Administration, & Inspection)	1,339,174	320,000	1,659,174	1,421,918	237,256	-
(d) Project Management & Internal Costs	940,000	(200,000)	740,000	75,891	564,109	100,000
<b>Total Estimated Project Cost</b>	<b>26,889,174</b>	<b>-</b>	<b>26,889,174</b>	<b>1,497,810</b>	<b>21,416,591</b>	<b>3,974,773</b>

\*All costs include 1.76% non-refundable HST

\*\* Total Contract Award is equal to i) 17,797,000 before tax; ii) 18,110,227 including 1.76% non-refundable HST; iii) 20,110,610 including 13% HST





### **PW 1-2020 - Appendix 3 Summary of Bids (2019-T-231)**

<b>Vendor</b>	<b>Total Tender Price (excluding HST)</b>
ROMAG Contracting Ltd.	\$17,797,000.00
Maple Reinders Constructors Ltd.	\$17,935,500.00
Kenaidan Contracting Ltd.	\$18,189,094.00
North America Construction Ltd.	\$20,315,000.00
Newman Bros. Ltd.	\$20,554,569.14