

Subject: Award of Contract 2018-T-122 (RN 18-22) Garner Road Biosolids Facility Upgrade

Report to: Public Works Committee

Report date: Tuesday, September 25, 2018

Recommendations

1. That Report PW 41-2018 **BE RECEIVED** for information.

Key Facts

- Special Reference
 - Given Section 275 of the *Municipal Act, 2001*, and Regional Council's delegated authority to the Chief Administrative Officer via report GM 8-2018, that the Chief Administrative Officer consider and authorize:
 - That this report will incur expenditures or liability which exceeds \$50,000; and
 - That staff proceed with the gross budget increase for the Garner Road Biosolids Facility Upgrade Project (10SW1220) by \$1,741,863 (inclusive of 1.76% non-refundable HST) and that the increase be funded from the Capital Variance – Wastewater Project
 - Should the Chief Administrative Officer incur an expenditure or liability greater than \$50,000, then the CAO will report to the new Council all actions taken pursuant to this decision.
- The proposed work at the Garner Road Facility is to replace the mixing systems for the three (3) sludge storage tanks at the site and is required as the systems have reached the end of their service life. A failure of the current system would jeopardize the Region's ability to maintain the capacity needed for all of the biosolids produced by all the WWTPs and residuals from the Decew and Grimsby WTP.
- This project is scheduled for construction in October 2018, subject to the approval of this report, and is anticipated to be completed by May 31, 2019.
- A public tender for this project was undertaken through competitive bid process, 2018-T-122, in order to select the General Contractor. The tender package was released on July 11, 2018 and closed on August 16, 2018. A total of five (5) bids were received with the lowest compliant bid being received from ASCO Construction in the amount of \$4,700,386 (including HST).
- The total tendered amounts (excluding HST) are listed below in ascending order:

ASCO Construction Ltd. (Mississauga)

SONA Construction Ltd. (Hamilton)	\$4,400,823
Baseline Constructors Inc. (Waterloo)	\$4,598,000
BGL Contractors Corp. (Waterloo)	\$4,660,810
Merit Contractors Niagara (St. Catharines)	\$4,801,500

- Each tender submission included Addendums No. 1, 2 and 3 as well as the necessary tender deposit and Agreement to Bond. The tenders were reviewed and no arithmetic errors were found.
- This project has been approved for \$1,236,490 Federal and Provincial funding through the Clean Water and Wastewater Fund (CWWF) with a project completion deadline of March 31, 2020.
- The approval of the contract award will be submitted to the CAO for consideration by virtue of the delegated authority under the Restricted Acts after Nomination Day (GM 8-2018).

Financial Considerations

Project 10SW1220 (Garner Road Biosolids Facility Upgrade) has a previously approved capital budget of \$3,500,000. The total estimated project cost after the award of Contract 2018-T-122 (RN 18-22) is \$5,241,863 (inclusive of 1.76% non-refundable HST), as detailed in Appendix 3 – Total Estimated Project Cost. A budget increase is therefore required in the amount of \$1,741,863 (inclusive of 1.76% non-refundable HST), to be funded from the Capital Variance – Wastewater Project. Partial Federal and Provincial funding of \$1,236,490 has been awarded through the Clean Water and Wastewater Fund (CWWF).

Analysis

The Garner Road Biosolids Facility is located northeast of the intersection of Chippawa Creek Road (Niagara Regional Road 63) and Garner Road in the City of Niagara Falls, as shown in Appendix 1. This Biosolids Facility consists of ten (10) clay lined lagoons, three (3) storage tanks, and two (2) storm water ponds. The facility occupies 31 hectares and was originally constructed in 1986, while the three storage tanks were added in 1998.

The current storage tank mixing systems at the Garner Road facility are part of the original 1998 installation and have reached the end of their service life. If a failure of the current mixing system were to occur the site would have to shut down, which would jeopardize the Region's ability to maintain the capacity needed for all of the biosolids produced by all the WWTPs and residuals from Grimsby and Decew WTP.

The intent of this project is to replace the existing submersible mixing system of all three (3) storage tanks with a suitable external hydraulic mixing alternative that will address

key operational and maintenance issues. In addition to the required equipment, a budget increase in the amount of \$261,250 (excluding HST) is required to provide contract administration and fulltime inspection due to the criticality of the work and to ensure there is no disruption to the regular operations at the Garner Road facility. Tetratech WEI Inc. was retained through the competitive bid process (2012-RFP-30) to provide detailed design services and will be responsible for all construction related services.

Contract award requires resources from Enterprise Resource Management Services in order to execute the required contract documents. Water & Wastewater staff will be providing resources throughout the project in order to manage the contract with assistance from Enterprise Resource Management Services on contract/project payments.

Alternatives Reviewed

Do Nothing – this alternative does not address the maintenance issues associated with the mixing systems on the current storage tanks and does not ensure reliable infrastructure to support growth and economic development in the Niagara Region. Irreparable mechanical failure of this equipment is imminent if these mixers are not replaced promptly and would cause a catastrophic loss of service at the Garner Road Biosolids Facility.

Relationship to Council Strategic Priorities

This recommendation is related to the Fostering Growth strategic priority since the planned rehabilitation will ensure reliable infrastructure to support growth and economic development within the Niagara Region.

Other Pertinent Reports

None

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Submitted by:

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Appendix 1 – Key Plan

Contract No. 2018-T-122 (RN 18-22) GARNER ROAD BIOSOLIDS FACILITY UPGRADE



D2018 Niagara Region and its suppliers. Projection is UTM, NAD 83, Zone 17 (CSR5). This map was compiled from various data sources and is current as of July, 2018, Niagara Region make no representations or warranties whatsoever, either expressed or implied, as to the accuracy, completeness, reliability, currency or otherwise of the information shown on this map.

Appendix 2 – Summary of Bids

Contract No. 2018-T-122 (RN 18-22) GARNER ROAD BIOSOLIDS FACILITY UPGRADE

Bidder	Total Tender Price (excludes HST)	
ASCO Construction Ltd. (Mississauga)	\$4,159,653	
SONA Construction Ltd. (Hamilton)	\$4,400,823	
Baseline Constructors Inc. (Waterloo)	\$4,598,000	
BGL Contractors Corp. (Waterloo)	\$4,660,810	
Merit Contractors Niagara (St. Catharines)	\$4,801,500	

PW 41-2018 APPENDIX 3 TOTAL PROJECT BUDGET Contract Award

Contract 2018-T-122 (RN18-22) Garner Road Biosolids Facility Upgrade, in the City of Niagara Falls

Total Estimated Project Cost (10SW1220) *	Total Council Approved Budget	Revisions per PW 41-2018	Revised Project Budget	Expended & Committed as of September 6, 2018	Forecast	Budget Remaining
 (a) Construction (includes 10% contract contingency) (b) Project Contingency (c) Consulting Engineering Services 	2,963,729 318,182	1,269,114 158,350	4,232,844 476,532	-	4,232,844 476,532	- -
i. Detailed Design ii. Contract Administration & Inspection iii. Peer Reviews	55,073 70,520 -	66,195 199,653 -	121,267 270,173 -	66,294 - -	54,973 270,173 -	- -
(d) Project Management (In-House) and Operations(e) Materials Testing(f) Miscellaneous	77,233 15,264 -	38,375 10,176	115,608 25,440 -	12,330 - -	103,277 25,440 -	- - -
Total Estimated Project Cost	3,500,000	1,741,863	5,241,863	78,625	5,163,239	
<u>Project Funding Sources</u> Regional reserves & debt (includes Federal Gas Tax funding) CWWF	(2,263,510) (1,236,490)	(1,741,863) -	(4,005,373) (1,236,490)			
	(3,500,000)	(1,741,863)	(5,241,863)			

* All costs above include the non-refundable 1.76% portion of HST.