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**Subject:** Gross Budget Adjustment and Status Update for Contract 2014-T-114 (RN14-14) Niagara-on-the-Lake Wastewater Treatment Plant

**Report to:** Public Works Committee

**Report date:** Tuesday, February 19, 2019

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## Recommendations

1. That the gross budget for the Niagara-on-the-Lake Wastewater Treatment Plant Project **BE INCREASED** by \$763,200 and that the increase **BE FUNDED** as follows:

Capital Variance – Wastewater Project	\$419,760
Development Charges – Sewer	\$343,440;

2. That Council **AUTHORIZE** the Regional Chair and the Regional Clerk to sign the required amending agreements with: Her Majesty the Queen in Right of Canada as represented by the Minister of Infrastructure and Communities; and, Her Majesty the Queen in Right of Ontario as represented by the Minister of Economic Development, Employment and Infrastructure and the Minister of Agriculture, Food and Rural Affairs, in order to extend the term of the existing Provincial and Federal funding agreements; and,
3. That the necessary by-law **BE PRESENTED** to Council for approval on March 28, 2019.

## Key Facts

- The purpose of this report is to provide an update to the Committee on the project progress and to increase the project budget for Contract 2014-T-114 (RN14-14); Project ID 10SW0807. See Appendix 1 for key map.
- Varcon's (the Region's contractor) current schedule for completing the new Wastewater Treatment Plant is May 31, 2019.
- Through the course of construction on the Contract, unforeseen issues and delays have resulted in additional level of effort required by staff and Cole (Region's consultant).
- As a result, Cole is required to spend additional time and effort to provide Contract Administration and Inspection Services. Staff recommends lengthening the term of Cole's contract to align with Varcon's revised construction schedule.
- In addition, the term of the funding agreements with both the Federal and Provincial governments requires an extension to accommodate the revised completion date, which was agreeable to both levels of government. They have since issued amending agreements for the Region to execute.

## **Financial Considerations**

As a result of delays and extensions with the construction schedule, an additional \$903,752 has been forecasted for the Niagara-on-the-Lake Wastewater Treatment Plant. Of the amount above, \$361,600 relates to the schedule extension to May 31, 2019 (Completion), including a contingency for unforeseen expenditures that may be incurred. In addition, there will be costs to complete additional contract work identified during start up and commissioning, including internal costs, to carry the project to completion of \$542,152.

The Region has been assessing Liquidated Damages at approximately \$65,000 per month (\$3,000/working day).

The total project expenditures and revenues to date are shown in the Total Project Budget Summary in Appendix 2. As outlined in Appendix 2, there is an overall approved budget of \$50,416,373 across the two accounts (10SW1407 / 10SW0807). To date, the total estimated cost of the project is \$50,275,822 including open purchase orders, and an amount of \$903,752 is forecasted as being required to complete the project for a total projected project cost of \$51,179,574. This leaves a shortfall of \$763,200. Note the above amounts all include 1.76% non-refundable HST. Therefore, a budget increase in that amount is being requested, to be funded from the Wastewater Capital Variance Project in the amount of \$419,760, and from Development Charges Deferred Revenue – Wastewater in the amount of \$343,440. As of January 21, 2019, the balance of the Wastewater Capital Variance Project was \$1,794,708, and the balance of the Development Charges Deferred Revenue – Wastewater account was forecasted to be \$30,250,526 at December 31, 2018 subject to 2018 year-end procedures to finalize the balance outstanding.

Any unspent surplus funds will be returned to the Wastewater Capital Reserve upon project completion so that these funds can be used to fund future capital projects.

## **Analysis**

Report PWC-C 19-2015, previously received by Committee, provided an overall project description and delineated the four distinct phases / contracts required for the execution of the project.

Water and Wastewater Engineering staff have been providing a higher than normal amount of resources throughout the project in order to manage the contract. Enterprise Resource Management (finance and legal) staff are also providing a significant amount time on contract / project payments as well as lien claims. External legal counsel are also engaged to provide support.

The Ministry of Environment Conservation and Parks (MECP) local office as well as approvals branch in Toronto was engaged during the design process to obtain the Environmental Compliance Approval (ECA). The MECP Local Office has been kept apprised of the progress to date and maintains an interest in the execution of the commissioning of the new plant.

## **Project Status**

In general, the construction work itself is nearing completion. Commissioning of the new plant continues with ongoing equipment start-up, run tests and the site acceptance testing of the control systems. Some landscaping, siding and site work remain to be completed.

There are still a number of deficiencies that will need to be resolved in order for the project to meet final completion. Recently, change orders issued cover items and unforeseen issues identified during equipment start-up and plant commissioning. Many of these issues have resulted in an extended completion date.

Varcon recently provided an updated schedule indicating a possible completion date of May 31, 2019. Region staff and Cole will continue to work with Varcon to try and achieve this schedule. However, with this schedule there remains some concern to the Region in the form of additional cost and risk.

Co-ordination with the team working on the decommissioning of the existing plant is ongoing. This will help ensure the switchover runs smoothly and minimizes the effects of the changeover.

The Region, in partnership with Parks Canada has finalized the Environmental Assessment to determine the preferred approach to decommission the existing plant. Final comments from the MECP and the project file was put out for the final public review and comment period in late December 2018. The detailed design will begin once any concerns are addressed as appropriate.

As noted earlier, the Region collaborated with the Federal and Provincial governments for funding to complete this project. Agreements for the funding were based on the original overall project schedule. The end date for the Federal Funding agreement being March 31, 2020 and the end date for the Provincial Funding agreement being no later than December 31, 2018. Due to the revised construction schedule, meeting these dates became unachievable. Staff approached representatives of our funding partners to discuss the potential to extend these agreements. Both the levels of Government agreed such that the new end date for the Federal Agreement is March 31, 2022 and for the Provincial Agreement is no later than December 31, 2023. To administer this change both partners have sent amending agreements for the Region to execute, which require the passage of an authorizing by-law.

## Alternatives Reviewed

Do Nothing – this alternative does not address the need for continued and consistent contract administration and inspection services as well as the other related costs (internal and external) required to bring the new plant into service.

## 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

PW 67-2014	Award of Tender 2014-T-113 (Contract RN 14-13) Lakeshore Road, Garrison Village and William Street Sewage Pumping Stations Upgrade & Linear Works in the Town of Niagara-on-the-Lake
PW 69-2014	General, Mechanical and Electrical Contractor Pre-Qualification for Construction of the New Niagara-on-the-Lake Wastewater Treatment Plant in the Town of Niagara-on-the-Lake
PW 93-2014	Status of the Construction of Niagara-on-the-Lake Wastewater Treatment Plant project in the Town of Niagara-on-the-Lake
PW 100-2014	Award of Tender 2014-T-114 (Contract RN 14-14) Niagara-on-the-Lake Wastewater Treatment Plant in the Town of Niagara-on-the-Lake
PWC-C 19-2015	Status update on the Construction of the new Niagara-on-the-Lake Wastewater Treatment Plant and related linear infrastructure in the Town of Niagara-on-the-Lake
PW 47-2016	2017 Wastewater Operating Budget Program Change Niagara-on-the-Lake Wastewater Treatment Plant
PW 16-2017	Contract 2014-T-114 (RN 14-14) Niagara-on-the-Lake Wastewater Treatment Plant and Contract 2014-T-113 (RN 14-13) Lakeshore Road, Garrison Village and William Street Pumping Station Upgrades and Linear Works – Project Status Report
PW 17-2017	<b>Confidential Report</b> A Matter of Litigation or Potential Litigation, Including Matters Before Administrative Tribunals, Affecting the

Municipality – Contract 2015-T-109 (RN 15-09) – Welland WWTP  
Phase I Upgrades – Project Status Report

- PWC-C 19-2017     **Confidential Memo** A Matter involving Litigation or Potential  
Litigation against the Niagara Region – Contract 2014-T-114 (RN  
14-14) – Niagara-on-the-Lake Wastewater Treatment Plant
- PW 33-2017        Contract 2014-T-114 (RN 14-14) Niagara-on-the-Lake Wastewater  
Treatment Plant and Contract 2014-T-113 (RN 14-13) Lakeshore  
Road, Garrison Village and William Street Pumping Station  
Upgrades and Linear Works
- PW 7-2018         Budget Adjustment and Status Update for Contract 2014-T-114  
(RN 14-14) Niagara-on-the-Lake Wastewater Treatment Plant and  
Contract 2014-T-113 (RN 14-13) Lakeshore Road, Garrison Village  
and William Street Pumping Station Upgrades and Linear Works

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*This report was prepared in consultation with Pamela Hamilton, Program Financial Specialist W-WW, and reviewed by Tony Cimino, Associate Director W-WW and Joseph Tonellato, P.Eng., Director W-WW.*

**Appendices**

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**PW 5-2019 APPENDIX 2**  
**TOTAL ESTIMATED PROJECT COST**  
**Budget Adjustment**

**Contract 2014-T-113 (RN 14-13) Lakeshore Road, Garrison Village and William Street Pumping Station Upgrades and Linear Works &  
Contract 2014-T-114 (RN 14-14) Niagara-on-the-Lake Wastewater Treatment Plant**

	Total Council Approved Budget	Revisions per PW 5-2019	Revised Project Budget	Expended & Committed as of January 16, 2019 **	Forecast	Budget Remaining
	(A)	(B)	(C) =(A)+(B)	(D)	(E)	(F) = (C)-(D)- (E)
<b><u>Total Estimated Project Cost (10SW0807 &amp; 10SW1407) *</u></b>						
(a) Construction (includes contract contingency)	40,934,538	-	40,934,538	40,934,538	-	-
(b) Project Contingency	173,183	-	173,183		173,183	-
(c) Consulting Engineering Services (Design, Contract Administration, & Inspection)	2,263,341	227,942	2,491,284	2,393,952	97,331	-
(d) Project Management & Internal Costs	380,006	85,258	465,264	387,608	77,656	-
(e) Other Project Costs	6,665,304	450,000	7,115,304	6,559,723	555,581	-
<b>Total Estimated Project Cost</b>	<b>50,416,373</b>	<b>763,200</b>	<b>51,179,573</b>	<b>50,275,822</b>	<b>903,752</b>	<b>-</b>
<b><u>Project Funding Sources</u></b>						
Regional Reserves & Debt (includes Federal Gas Tax funding)	(15,944,948)	(419,760)	(16,364,708)	(15,944,948)	(419,760)	-
Development Charges	(5,705,838)	(343,440)	(6,049,278)	(5,607,731)	(343,440)	(98,107)
Provincial Grants	(14,333,333)	-	(14,333,333)	(14,430,000)		96,667
Federal Grants	(14,333,334)	-	(14,333,334)	(12,984,003)	(1,349,331)	-
Other Costing Sharing / External	(98,920)	-	(98,920)	(100,359)		1,440
	<b>(50,416,373)</b>	<b>(763,200)</b>	<b>(51,179,573)</b>	<b>(49,067,041)</b>	<b>(2,112,531)</b>	<b>-</b>

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

\*\* Includes holdbacks