

<b>TO:</b>	<b>CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON APRIL 16, 2019</b>
<b>FROM:</b>	<b>KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER</b>
<b>SUBJECT:</b>	<b>VAUXHALL WWTP FLOOD PROTECTION ADDITIONAL DEWATERING COSTS</b>

**RECOMMENDATION**

That on the recommendation of the Managing Director of Environmental and Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to the construction contract for flood protection measures at Vauxhall Wastewater Treatment Plant (WWTP):

- a) the value of the engineering consulting fees for AECOM Limited **BE INCREASED** by \$75,000 including contingency, due to increased efforts related to the project extension;
- b) the value of the engineering consulting fees for Dillon Limited **BE INCREASED** by \$40,000.00 to restore contingency that had previously been reallocated; and
- c) the financing for the projects **BE APPROVED** in accordance with the “Sources of Financing Report” attached hereto as Appendix “A”.

**PREVIOUS REPORTS PERTINENT TO THIS MATTER**

Civic Works Committee, July 17, 2018, Item 2.6 – Clean Water and Wastewater Fund Project Budget Amendments

Civic Works Committee, May 15, 2018, Item 2.8 – Contract Award – Tender T18-38 – Vauxhall-Pottersburg Interconnection Project

Civic Works Committee, October 24, 2017, Item 18 – Vauxhall Wastewater Treatment Plant Flood Protection Construction Tender Award

Civic Works Committee, June 7, 2017, Item 16 – Infrastructure Canada – Phase One Investments Clean Water and Wastewater Fund – Approved Projects

Civic Works Committee, November 29, 2016, Item 11 – Appointment of Consultants – Clean Water and Wastewater Fund Projects

**2015-19 STRATEGIC PLAN**

**Strategic Plan**

This project supports the Strategic Plan with respect to Building a Sustainable City- Robust Infrastructure and a strong healthy environment by enhancing the climate change resilience of City infrastructure.

## BACKGROUND

### Purpose

The purpose of this report is to seek approval to:

- increase consulting fees to AECOM and Dillon to offset increased levels of effort related to the extended contract period.

### Context

Construction on site has encountered difficult groundwater conditions that have required additional efforts and time. This project has been advanced under the Clean Water and Wastewater Fund (CWWF), whereby the City received funding from the federal and provincial governments in the amount of 75% of the purchase price. This report seeks approval for the funding required to complete this project and ensure receipt of the applicable CWWF funding.

## DISCUSSION

### Project History

A project to provide “Climate Change Resilience” at the Vauxhall WWTP received approval under the Clean Water & Wastewater Fund (CWWF) in June 2017. The project is intended to ensure continued operation of the plant in extreme flooding events by:

- Constructing a physical flood protection barrier around the plant designed to protect the plant from a 1-in-250 year flood event; and
- Constructing a pumping station that will isolate the plant from the river and lift treated water above the river levels. This will enable the plant to continue treating wastewater regardless of the water level in the river.

This project was awarded in October 2017 and H.I.R.A. Ltd. was the successful contractor.

### Construction Progress

Shortly after commencement of construction activities, it became apparent that the amount of groundwater being experienced would necessitate additional dewatering activities. The costs of additional dewatering and sheet piling consumed the available contingency, and the time taken to implement the solution incurred additional costs to the Contractor.

Acceptable costs for the delay are currently being negotiated with H.I.R.A., but will represent additional cost to the project that will need to be funded by the City.

Construction has proceeded, and the project is approximately 60% complete. At this time the project is expected to be complete prior to the expiry of the CWWF program. Staff are working to ensure that this timeline is maintained so as not to risk losing over \$3,500,000 in federal/provincial funding.

**Budget Implications**

Wastewater Treatment Operations has existing capital accounts intended for improvements at the Vauxhall Wastewater Treatment Plant. There are sufficient funds in these accounts to cover the additional costs for dewatering.

<b>CONCLUSIONS</b>
--------------------

The construction of flood protection measures at Vauxhall Wastewater Treatment Plant will ensure that the facility is able to provide reliable wastewater treatment over its expected remaining life. Due to unforeseen site conditions, construction has been delayed and additional costs incurred. Staff is recommending that the approved value of the construction and engineering services contracts be increased and funds be reallocated from an existing capital account to accommodate those increases.

**Acknowledgements**

This report was prepared with the assistance of Kirby Oudekerk, P.Eng., Wastewater Treatment Operations Division, and Debbie Gibson, Finance and Corporate Services.

<b>PREPARED BY:</b>	<b>REVIEWED BY:</b>
<b>GEORDIE GAULD DIVISION MANAGER WASTEWATER TREATMENT OPERATIONS</b>	<b>SCOTT MATHERS, MPA, P.ENG. DIRECTOR WATER, WASTEWATER AND TREATMENT</b>
<b>RECOMMENDED BY:</b>	
<b>KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER</b>	

Attachment: Appendix "A" Sources of Financing

- cc: Anna Lisa Barbon, Managing Director, Corporate Services and City Treasurer, Chief Financial Officer  
 Alan Dunbar, Manager III, Financial Planning & Policy  
 Jason Davies, Manager III, Financial Planning & Policy  
 John Millson, Senior Financial Business Administrator