TO:	CHAIR AND MEMBERS	
	CIVIC WORKS COMMITTEE	
	MEETING ON TUESDAY, OCTOBER 22, 2019	
FROM:	KELLY SCHERR, P.ENG.	
	MANAGING DIRECTOR ENVIRONMENTAL	
	& ENGINEERING SERVICES AND CITY ENGINEER	
SUBJECT:	EAST LONDON SANITARY SERVICING STUDY	
	MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT:	
	ISSUANCE OF ADDENDUM	

#### RECOMMENDATION

That, on the recommendation of the Managing Director Environmental & Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to the East London Sanitary Servicing Study:

- (a) The proposed addendum to the East London Sanitary Servicing Study **BE ACCEPTED** in accordance with the Schedule 'B' Municipal Class

  Environmental Assessment process requirements;
- (b) A Notice of Addendum **BE FILED** with the Municipal Clerk; and,
- (c) A Master Plan Revision Report for the East London Sanitary Servicing Study **BE PLACED** on public record for a 30-day review period.

# PREVIOUS REPORTS PERTINENT TO THIS MATTER

Civic Works Committee, August 13, 2018 – Appointment of Consulting Engineer – Vauxhall Wastewater Treatment Plant – Class EA for Capacity Upgrades

Civic Works Committee, August 13, 2018 – East London Sanitary Servicing Study – Municipal Class Environmental Assessment: Notice of Completion

Civic Works Committee, July 17, 2017 – Appointment of Consulting Engineer – Design and Construction Administration Services - Pottersburg-Vauxhall Wastewater Treatment Plants Interconnection Project

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

Civic Works Committee, November 3, 2015 – Appointment of Consultant – Master Plan/Municipal Class EA for the Pottersburg-Vauxhall Interconnect

Civic Works Committee, June 2, 2015 – Appointment of Consultant – Engineering Services for the Stress-Testing and Re-Rating of Adelaide, Pottersburg & Vauxhall Wastewater Treatment Plants

Civic Works Committee, September 22, 2014 - Optimization of London Wastewater Treatment Plants – A Strategy and Roadmap

## 2019-2023 STRATEGIC PLAN

# Strategic Plan

This project supports the 2019-2023 Strategic Plan through the following: Building a Sustainable City, Build infrastructure to support future development and protect the environment.

#### **BACKGROUND**

# **Purpose**

The purpose of this report is to provide a revised servicing alternative to the one identified in the 2018 East London Sanitary Servicing Study (ELSS) Master Plan. Recent planning and technical reviews have identified an alternative that has less environmental impact and is more cost-effective. In order to fulfill the regulatory requirements, an addendum of the original environmental assessment has been initiated.

#### Context

The Vauxhall Wastewater Treatment Plant (WWTP) services a sewershed that is mostly built-out, while the Pottersburg WWTP sewershed has a significant capacity for growth, especially industrial. The 2018 ELSS determined that Vauxhall WWTP would need to be upgraded to provide treatment capacity to East London while a new Pottersburg plant is constructed.

Through subsequent technical and planning investigations it has now been determined that the future WWTP at the Pottersburg WWTP site can be constructed while maintaining operation of the existing Pottersburg WWTP. As a result, both the Vauxhall and Pottersburg WWTPs can work in tandem to provide servicing for East London. This reduces the scope of the upgrades that would have been required at Vauxhall WWTP, significantly reducing the environmental impact and cost.

## DISCUSSION

The Vauxhall Wastewater Treatment Plant (WWTP) and Pottersburg WWTP service a significant portion of east London. The Vauxhall WWTP services an area that is for the most part built-out. The Pottersburg WWTP's service area has the potential for significant amounts of new industrial development; however, the capacity improvements required to upgrade the Pottersburg WWTP are extremely costly. The capacity of the Vauxhall WWTP can be upgraded at a relatively low cost. The purpose of the East London Sanitary Servicing Study was to consider the servicing challenges within Vauxhall and Pottersburg WWTP sewershed areas and provide a preferred approach for providing wastewater collection and treatment to support future development.

The East London Sanitary Servicing Study determined that to provide the treatment capacity required under the long-term scenario, a newly constructed WWTP would be required. This is due to the age and condition of the existing Vauxhall and Pottersburg WWTP infrastructure which limit their remaining service life. This approach was anticipated to require the demolition of the current Pottersburg WWTP, thus requiring the Vauxhall WWTP to receive and treat all flows generated in both sewersheds during construction of the new plant. The ELSS provided a high level cost estimate for these upgrades which ranged from approximately \$35,000,000 to \$75,000,000.

A Schedule 'C' Class EA was initiated in late 2018 with the intention of formalizing the plan for upgrading the Vauxhall WWTP to the 60,000 m³/d treatment capacity recommended in the ELSS. As a result of additional technical review and planning in the early stages of the Class EA it was determined that an alternative solution could be implemented which would satisfy the short- and long-term treatment requirements identified in the ELSS at a substantially reduced environmental impact and cost. The key elements of the revised approach are:

- Repurpose an existing section of the Pottersburg WWTP to support the interconnection project.
- Through careful construction and staging construct the future Pottersburg WWTP while keeping the existing Pottersburg plant in operation.
- Cancel planned rehabilitation work on the Vauxhall WWTP, and focus financial resources on the construction of a new Pottersburg WWTP;
- Plan several projects to reduce peak flows at the Pottersburg and Vauxhall WWTPs experienced during rain events.
- Having reduced peak flows, the Vauxhall WWTP can then be re-rated to obtain a sufficient treatment capacity to meet the short-term treatment requirements in the City's east end.

## **Public/Stakeholder Consultation**

The City has engaged in pre-consultation efforts with the MECP and have received tentative approval for the revised short-term servicing solution. The MECP has also confirmed that filing an addendum to the ELSS rather than completing the Schedule 'C' Class EA is considered sufficient to fulfil the environmental planning requirements prior to proceeding with design and construction of the proposed solution.

A Notice of Addendum with a hyperlink to the Addendum Report will be circulated to all First Nations, Agency and the public stakeholders previously identified through the ELSS.

# **Budget Implications**

As identified above, the revised solution represents a significant cost reduction from what was previously anticipated at the time the ELSS was completed.

The recommended long-term treatment strategy to construct a new Pottersburg WWTP has not changed from approach recommended in the ELSS. The timeline for the initiation of the planning process for this future project is likely to be within 10 years and the estimated \$330M-\$460M construction cost warrants early planning and budgeting.

## **Timing of Next Steps**

Issue Addendum and Addendum Report for East London Sanitary Servicing Study

Upon acceptance by Council:

- 1) A "Notice of Addendum" be published identifying that the addendum report is available for public review for the mandatory 30 calendar days at City Hall 9<sup>th</sup> Floor and online at: <a href="http://www.london.ca/residents/Environment/EAs/Pages/East-London-Sanitary-Servicing-Study.aspx">http://www.london.ca/residents/Environment/EAs/Pages/East-London-Sanitary-Servicing-Study.aspx</a>
- 2) Stakeholders are encouraged to provide input and comments regarding this study during this time period. Should stakeholders feel that issues have not been adequately addressed, they can provide written notification within the 30-day review

period to the Minister of the Environment, Conservation and Parks requesting further consideration. This process is termed a "Part II Order" (informally known as a Bump-Up Request).

 Subject to no requests for a Part II Order being received, the Addendum Report will be finalized and the recommended solutions may proceed to design and construction.

## **CONCLUSIONS**

The East London Sanitary Servicing Study was undertaken as a means to establish short- and long-term strategies for wastewater treatment and the accommodation of growth in the Vauxhall and Pottersburg WWTP sewersheds. Through recent follow-up studies and planning, a revised approach representing a significant capital cost avoidance has been developed. It is recommended that this revised servicing alternative for the short-term wastewater treatment needs of East London be accepted and that an Addendum to the East London Sanitary Servicing Study be posted for the 30-day public review period.

SUBMITTED BY:	REVIEWED AND CONCURRED BY:
GEORDIE GAULD DIVISION MANAGER, WASTEWATER TREATMENT OPERATIONS	SCOTT MATHERS, MPA, P. ENG. DIRECTOR, WATER AND WASTEWATER
RECOMMENDED BY:	
KELLY SCHERR, P. ENG., FEC	
MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING	
SERVICES & CITY ENGINEER	

Attach: Appendix "A" – ELSS Executive Summary

cc. Mike Newbigging, Jacobs Engineering Group
Tom Copeland, Wastewater and Drainage Engineering