Report to Civic Works Committee

To: Chair and Members

Civic Works Committee

From: Kelly Scherr, P.Eng., MBA, FEC

Managing Director, Environmental & Engineering Services

and City Engineer

Subject: Carling Creek Stormwater Servicing Master Plan

Environmental Assessment Consultant Appointment

Meeting on: February 9, 2021

Recommendation

That, on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer that the following actions BE TAKEN with respect to the appointment of a consulting engineer for the Carling Creek Stormwater Servicing Environmental Assessment (EA):

- a) Ecosystem Recovery Inc. BE APPOINTED Consulting Engineers to complete the Carling Creek Stormwater Servicing EA in accordance with the estimate, on file, at an upset amount of \$169,334 including 10% contingency, excluding HST, in accordance with Section 15.2(d) of the City of London's Procurement of Goods and Services Policy;
- b) The financing for the project BE APPROVED in accordance with the "Sources of Financing Report" <u>attached</u>, hereto, as Appendix 'A';
- c) The Civic Administration BE AUTHORIZED to undertake all the administrative acts that are necessary in connection with this project;
- d) The approvals given, herein, BE CONDITIONAL upon the Corporation entering into a formal contract; and,
- e) The Mayor and City Clerk BE AUTHORIZED to execute any contract or other documents, if required, to give effect to these recommendations.

Executive Summary

Purpose

This report recommends Ecosystem Recovery Inc. be appointed to carry out the Carling Creek Stormwater Servicing Master Plan EA.

Context

The Carling Creek Stormwater Servicing Master Plan EA will evaluate the need for a new Carling Creek trunk storm sewer as previously recommended in the 2018 Stormwater Core Area Servicing Study. Alternate options for relieving the overwhelmed storm sewer system will be considered as well as opportunities to alleviate surface flooding from the project area. A roadmap for future works to improve flood protection within the area will be created.

2019-2023 Strategic Plan

Municipal Council's 2019-2023 Strategic Plan identifies "Building a Sustainable City" as a strategic area of focus. The recommendation in this report will support strategies to build infrastructure to maintain or increase current levels of service, support future development and protect the environment, manage the infrastructure gap for all assets, improve London's resiliency to respond to potential future challenges, and direct growth and intensification to strategic locations.

Analysis

1.0 Background Information

1.1 Previous Reports Related to this Matter

Development Charges: Core Area Servicing Studies. Strategic Priorities and Policy Committee. January 29, 2018.

Appointment of Consulting Engineers for the Core Area Servicing Studies RFPs 16-14, 16-15, 16-16 (Irregular). Civic Works Committee. June 8, 2016.

Initiation Report: Core Area Servicing Studies. Civic Works Committee. January 28, 2016.

1.2 Project Background

The Carling Creek subwatershed is located within a historic area of London that includes portions of the Downtown Core, Old North, and Old East neighbourhoods. There is a history of surface flooding that is attributed to generally undersized storm sewers coupled with no defined overland flow routes. Overland flow routes act as the path for stormwater to flow safely overland during heavy rain events. Generally, overland flow routes direct water away from private property and follow roadways or are directed through greenspaces. In areas of the City that are older, proper overland flow routes do not exist allowing water to become trapped in low lying areas. This creates pockets of localized flooding.

In 2018, a Stormwater Core Area Servicing Study (CASS) was completed to identify the necessary infrastructure to deliver stormwater servicing for the Core Area of the City, based on build-out population projections. The study identified sewer pipes that were over capacity and highlighted areas susceptible to surface flooding during moderate to intense rain events. These areas were located on public and private properties within the South Branch of the Carling Creek catchment area. The CASS study highlighted some opportunities to replace, reroute, and increase capacity of storm sewers to reduce the risk of flooding upstream. The most significant recommendation was to construct a new Carling Creek Trunk Storm Sewer with a new outlet to the Thames River for an estimated cost of \$25M.

The purpose of undertaking this Master Plan as part of a Municipal Class Environmental Assessment (EA) process is to identify opportunities to resolve surface flooding to the extent practical within this historic area of the City of London. The modelling completed as part of the CASS study will be used to develop and recommend infrastructure solutions to mitigate flooding. This Master Plan EA will evaluate a comprehensive suite of options to reduce flooding such as storage solutions, new/upgraded storm sewers, and Low Impact Development measures. A cost-benefit risk analysis will then be completed to contrast the suite of options with the recommendation for a new \$25M trunk storm sewer. The risk assessment will also consider potential climate change impacts and aim to establish a level of service within the study area.

1.3 Location Map

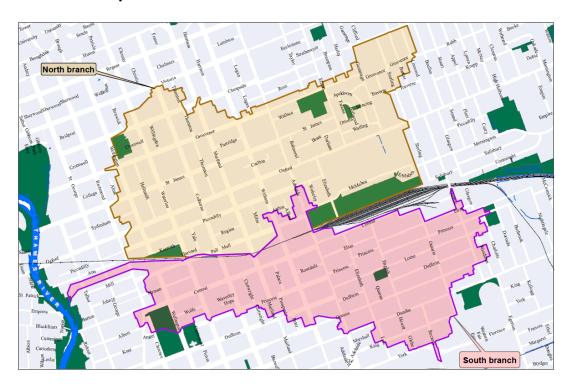


Figure 1: Location map showing the Carling Creek stormwater servicing EA study area

2.0 Discussion

The engineering consultant selection procedure for this assignment utilized a competitive Request for Proposal (RFP) process in accordance with Section 15.2(d) of the Procurement of Goods and Services Policy. Four qualified engineering firms submitted formal proposals to undertake the consulting services for the Carling Creek Stormwater Servicing EA. The evaluation of each consultant proposal focused on the understanding of project goals, experience on directly related projects, project team members, capacity and qualifications, and overall project fee.

3.0 Financial Impact

Based on a review of the submitted proposals, it is recommended that Ecosystem Recovery Inc. be authorized to carry out the Carling Creek Stormwater Servicing EA. Ecosystem Recovery Inc. has specific knowledge of the project area having staff who helped to complete the 2018 CASS Stormwater Report as well as the City Centre Servicing Strategy study. Ecosystem Recovery Inc. has also demonstrated competency and expertise with EAs of this nature and have provided strong performance on past City projects, most recently on the Kilally South East Basin EA.

4.0 Key Issues and Considerations

4.1. Public Outreach and Participation

The Carling Creek subwatershed is a large study area with the potential for multiple drainage concerns. As such, letters will be sent to residents in the area in order to identify any experiences of historic surface flooding to supplement City records. There will also be an electronic presentation prepared and posted on the City's website to inform residents about the study and obtain feedback. Depending on timing, the presentation may also serve as the Public Information Centre required as part of Municipal Class Environmental Assessments process.

Conclusion

It is recommended to appoint Ecosystem Recovery Inc. to lead the Carling Creek Stormwater Servicing EA to evaluate and develop a stormwater serving strategy to mitigate flooding to the extent practical within a historic built area of London. This Master Plan EA will follow a risk-based approach to consider climate change and recommend a level of service for the built area.

Prepared by: Shawna Chambers, P.Eng., DPA, Division Manager,

Stormwater Engineering

Submitted by: Scott Mathers, MPA, P. Eng., Director, Water And

Wastewater

Recommended by: Kelly Scherr, P. Eng., MBA, FEC

Managing Director, Environmental and Engineering

Services and City Engineer

CC: Monica McVicar

Chris Ginty

Appendix 'A' - Sources of Financing

Appendix "A"

#21010

February 9, 2021 (Appoint Consulting Engineer)

Chair and Members
Civic Works Committee

RE: Carling Creek Stormwater Servicing Master Plan Environmental Assessment (Subledger NT21ES02)

Capital Project ES3013 - East London Surface Flooding Remediation

Ecosystem Recovery Inc. - \$169,334.00 (excluding HST)

Finance and Corporate Services Report on the Sources of Financing:

Finance and Corporate Services confirms that the cost of this project can be accommodated within the financing available for it in the Capital Budget and that, subject to the approval of the Managing Director, Environmental and Engineering Services and City Engineer, the detailed source of financing for this project is:

Estimated Expenditures	Approved Budget	Committed To Date	This Submission	Balance for Future Work
Engineering	450,000	0	172,314	277,686
Total Expenditures	\$450,000	\$0	\$172,314	\$277,686
Sources of Financing				
Drawdown from Sewage Works Reserve Fund	450,000	0	172,314	277,686
Total Financing	\$450,000	\$0	\$172,314	\$277,686

Financial Note:

Contract Price	\$169,334
Add: HST @13%	22,013
Total Contract Price Including Taxes	191,347
Less: HST Rebate	-19,033
Net Contract Price	\$172,314

Jason Davies