Report to Civic Works Committee

To: Chair and Members

Civic Works Committee

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

Deputy City Manager, Environment and Infrastructure

Subject: Greenway and Adelaide Wastewater Treatment Plants Climate

Change Resiliency Geotechnical Consultant Award

Date: April 12, 2023

Recommendation

That, on the recommendation of the Deputy City Manager, Environment and Infrastructure, the following actions **BE TAKEN** with respect to the award of consulting services for the completion of the Detailed Design and Contract Administration for flood protection at the Greenway and Adelaide Wastewater Treatment Plants:

- a) WSP Canada Inc. **BE APPOINTED** Geotechnical Consulting Engineers in the amount of \$153,360.00, including 20% 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" attached 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 that WSP Canada Inc. be appointed to carry out geotechnical and hydrogeological investigations related to the design of flood protection measures at the Greenway and Adelaide Wastewater Treatment Plants.

Context

The City of London secured the opportunity for federal funding through the Disaster Mitigation and Adaptation Fund for improvements to the resilience of the Greenway and Adelaide Wastewater Treatment Plants through flood protection.

The geotechnical and hydrogeological investigations recommended for award in this report will provide essential support for detailed design efforts related to the planned flood protection systems at Greenway and Adelaide Wastewater Treatment Plants, which are currently being undertaken by CIMA Canada Inc.

Linkage to the Corporate Strategic Plan

This project supports the 2019-2023 Strategic Plan through Building a Sustainable City:

- Build infrastructure to support future development and protect the environment;
- Improve London's resiliency to respond to potential future challenges; and
- Conserve energy and increase actions to respond to climate change and severe weather.

1.0 Background Information

1.1 Previous Reports Related to this Matter

Greenway and Adelaide Wastewater Treatment Plants Climate Change Resiliency Detailed Design Consultant Award. Civic Works Committee. October 4, 2022.

Greenway WWTP Climate Change Resilience Class EA – Notice of Completion. Civic Works Committee. April 20, 2022.

Adelaide WWTP Climate Change Resilience Class EA – Notice of Completion. Civic Works Committee. April 20, 2022.

Disaster Mitigation and Adaptation Fund – Contribution Agreement. Civic Works Committee. March 29, 2022.

Greenway and Adelaide Wastewater Treatment Plants Climate Change Resiliency Class Environmental Assessment Consultant Award. Civic Works Committee. March 2, 2021.

Climate Emergency Action Plan - Update. Civic Works Committee. August 11, 2020.

2.0 Discussion and Considerations

2.1 Project Description

The Greenway Wastewater Treatment Plant, located at 109 Greenside Avenue, is the City's largest plant and treats approximately 60% of the wastewater produced in London. The Adelaide Wastewater Treatment Plant, located at 1157 Adelaide Street North, treats approximately 15% of London's wastewater. With climate change, the City of London and other communities are experiencing more frequent and intense wet weather events, which increases the potential for flooding. Through the federal Disaster Mitigation and Adaptation program, the City has secured funding to construct flood protection measures at the Greenway and Adelaide Wastewater Treatment plants to protect against floods up-to and including a 1 in 250-year storm event. The flood protection systems, once complete, will improve asset resilience, enhance treatment capabilities, and enhance the safety of plant staff during extreme wet weather events.

To date, the City has completed an Environmental Assessment at each site and has retained CIMA Canada Inc. to complete the detailed design at each plant, with the completion of detailed design scheduled for the end of 2023. Geotechnical and hydrogeological investigations are required to advance the design of the project and will provide valuable information to the design such as soil quality and groundwater levels, and to assess the required foundation designs for the flood barriers and effluent pumping stations.

2.2 Procurement Process

A request for geotechnical services (Geotechnical TOR) was issued by the Design Consultant, CIMA Canada Inc., in January 2023 with the intention of awarding the required geotechnical and hydrogeological work through the administrative award process. This practice is routinely completed when it is anticipated that geotechnical and hydrogeological investigations will fall within the allowable range of administrative award.

A total of six (6) qualified firms were requested to provide pricing for geotechnical and hydrogeological services. Four (4) firms submitted proposals, with the lowest bid

submitted by WSP Canada Inc. totalling \$127,800.00, excluding contingency and H.S.T.

All submitted proposals were reviewed by staff from Wastewater Treatment Operations and CIMA Canada Inc. to ensure compliance with the Geotechnical TOR. A small overall spread was observed between all submitted bids, which is an indication of a competitive and fair bidding process. The evaluation team determined that the lowest bid, provided by WSP Canada Inc. met all requirements outlined in the Geotechnical TOR.

WSP Canada Inc. has extensive experience with geotechnical and hydrogeological consulting within the City's wastewater treatment and conveyance facilities. Overall, their proposal met all the key project requirements, and their staff are qualified to undertake the required consulting services.

2.3 Schedule and Budget Implications

The geotechnical and hydrogeological assignment is scheduled to be complete by mid 2023. The geotechnical and hydrogeological fees proposed within this report include fees required to complete on-site investigations, review of gathered information, and completion of reports in support of design activities.

This project is to be funded in part by the Government of Canada's Disaster Mitigation and Adaptation Fund, with the maximum federal share of all project related expenses totalling \$19.8 million (40%). The remainder of the budget is proposed to be funded under existing capital budgets with final construction and engineering costs estimated at \$49.5 Million.

Conclusion

WSP Canada Inc. was found to provide the best value to the City through for geotechnical and hydrogeological consulting services for flood protection Detailed Design at the Greenway and Adelaide Wastewater Treatment Plants. The WSP Canada Inc. team has a demonstrated ability to complete geotechnical and hydrogeological investigations related to flood mitigation and wastewater treatment plant design and demonstrated a solid understanding of this project in their proposal. It is recommended that WSP Canada Inc. be awarded this assignment.

Prepared by: Kirby Oudekerk, MPA, P.Eng.

Division Manager, Wastewater Treatment Operations

Submitted by: Ashley Rammeloo, MMSc., P.Eng.

Director, Water, Wastewater, and Stormwater

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

Deputy City Manager, Environment and Infrastructure

cc: Steve Mollon, Senior Manager, Procurement and Supply

Jason Davies, Manager III, Financial Planning and Policy Zeina Nsair, Financial Business Administrator, Finance and

Corporate Services

Randy Axford, WSP Canada Inc.

Appendix 'A' Sources of Financing

#23070

April 12, 2023

(Appoint Consulting Engineer)

Chair and Members Civic Works Committee

RE: Greenway and Adelaide Wastewater Treatment Plants Climate Change Resiliency Geotechnical Consultant Award (Subledger FS210001) Greenway

(Subledger FS220002) Adelaide

Capital Project ES3230 - DMAF Greenway WWTP Flood Protection Capital Project ES3231 - DMAF Adelaide WWTP Flood Protection

WSP Canada Inc. - \$153,360.00 (excluding HST)

Finance Supports Report on the Sources of Financing:

Finance Supports 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 recommendation of the Deputy City Manager, Environment and Infrastructure, the detailed source of financing is:

Estimated Expenditures	Approved Budget	Committed To Date	This Submission
ES3230 - DMAF Greenway WWTP Flood Protection			
Engineering	1,390,807	1,312,655	78,152
City Related Expenses	3,200	3,200	0
ES3230 Total	1,394,007	1,315,855	78,152
ES3231 - DMAF Adelaide WWTP Flood Protection			
Engineering	1,228,779	1,150,871	77,908
City Related Expenses	3,107	3,107	0
ES3231 Total	1,231,886	1,153,978	77,908
Total Expenditures	\$2,625,893	\$2,469,833	\$156,060
Sources of Financing			
ES3230 - DMAF Greenway WWTP Flood Protection			
Drawdown from Sewage Works Renewal Reserve Fund	836,404	789,513	46,891
Federal DMAF Funding	557,603	526,342	31,261
ES3230 Total	1,394,007	1,315,855	78,152
ES3231 - DMAF Adelaide WWTP Flood Protection			
Drawdown from Sewage Works Renewal Reserve Fund	739,131	692,386	46,745
Federal DMAF Funding	492,755	461,592	31,163
ES3231 Total	1,231,886	1,153,978	77,908
Total Financing	\$2,625,893	\$2,469,833	\$156,060
Financial Note: Contract Price	ES3230 \$76,800	ES3231 \$76,560	Total \$153,360
Add: HST @13%	9,984	9,953	19,937
Total Contract Price Including Taxes	86,784	86,513	173,297
Less: HST Rebate	-8,632	-8,605	-17,237
Net Contract Price	\$78,152	\$77,908	\$156,060