Report to Civic Works Committee

To: **Chair and Members**
Civic Works Committee
From: **Kelly Scherr, P.Eng., MBA, FEC**
Deputy City Manager, Environment & Infrastructure
Subject: **Greenway and Adelaide Wastewater Treatment Plants Climate Change Resiliency Equipment Preselection**
Date: **October 24, 2023**

Recommendation

That, on the recommendation of the Deputy City Manager, Environment & Infrastructure, the following actions **BE TAKEN** with respect to the pre-selection of key equipment for the Climate Change Resiliency projects at Adelaide and Greenway Wastewater Treatment Plants:

a) the supply of an equalization tank **BE AWARDED** to Greatario Engineered Storage Systems for the total price of $889,887.00 excluding HST, in accordance with Section 12.2 (b) of the City of London's Procurement of Goods and Services Policy;
b) the supply of vertical propeller pumps equipment **BE AWARDED** to Sulzer Pumps (Canada) Inc. for the total price of $1,515,821.37 including contingency but excluding HST, in accordance with Section 12.2 (b) of the City of London's Procurement of Goods and Services Policy;
c) the financing for this project **BE APPROVED** as set out in the Sources of Financing Report attached hereto as Appendix 'A'; and
d) the Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations.
e) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project.

Executive Summary

The purpose of this report is to seek approval to purchase an Equalization Tank (EQ Tank) for the Adelaide Wastewater Treatment Plant and effluent pump equipment for both Greenway and Adelaide Wastewater Treatment Plants as part of the construction of flood protection measures, funded in part through the federal Disaster Mitigation and Adaptation Fund. Effluent pumps are required as part of flood protection, and flow equalization is also an important part of overflow mitigation during high river events at Adelaide. Pre-selection of this key equipment reduces the overall construction period, ensures that the design is optimized for the equipment that will be supplied and standardizes across facilities where possible.

Linkage to the Corporate Strategic Plan

This report supports the 2023-2027 Corporate Strategic Plan by contributing to the following outcome:

- London is one of the greenest and most resilient cities in Canada in alignment with the Council-declared climate emergency and the Climate Emergency Action Plan.
    - London is more resilient and better prepared for the impacts of a changing climate.

Analysis

1.0 Background Information

1.1 Previous Reports Related to this Matter

Greenway and Adelaide Wastewater Treatment Plants Climate Change Resiliency Consulting Fees Value Increase. Civic Works Committee. August 15, 2023.

Greenway and Adelaide Wastewater Treatment Plants Climate Change Resiliency Geotechnical Consultant Award. Civic Works Committee. April 12, 2023.

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.

Adelaide Wastewater Treatment Plant Upgrades Consultant Award. Civic Works Committee. May 26, 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. Both Greenway and Adelaide are in locations that would be impacted by flood of the Thames River. 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 during flood events, and enhance the safety of plant staff during those 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. The purchased equipment will advance the design of the projects and will provide valuable information to the design such as dimensions and power requirements. This will also expedite manufacturing in order to reduce the overall construction period and meet Federal funding timelines.

2.2 Procurement Process

With variability across different manufacturers with respect to lengthy manufacturing time, and with a desire to advance the detailed design based on known equipment layout, materials of construction, etc. it was determined that a Request for Proposals (RFP) was the appropriate means by which to select a preferred supplier for the new Adelaide EQ Tank.

Two (2) Proponents submitted proposals in response to the RFP. A review panel, made up of representatives from the Wastewater Treatment Operations, Consulting Engineer (CIMA + Canada Inc) and the Procurement & Supply Division, reviewed all proposals to ensure compliance with the technical requirements. The proposal from Greatario Engineered Storage Systems received the highest score. The total cost of their proposal was $889,887.00 plus HST.

Greatario Engineered Storage Systems has extensive experience in the storage tank industry. Overall, their proposal met all the key project requirements, and their staff are qualified to undertake the required design, supply and construction.

Given the similar variability across different pump manufacturers with respect to capacity, dimensions, layout materials of construction, etc. it was determined that a Request for Proposals was also the appropriate means by which to select a preferred supplier for the new Greenway and Adelaide Effluent Pump Station pumps.

Four (4) Proponents submitted proposals in response to the RFP. One (1) Proponent was disqualified from the RFP process due to non-compliance with City terms. A review panel, made up of representatives from the Wastewater Treatment Operations, Consulting Engineer (CIMA + Canada Inc) and Procurement & Supply Divisions, reviewed the remaining proposals to ensure compliance with the technical requirements. the proposal from Sulzer Pumps (Canada) Inc. received the highest score. The total cost of their proposal was $1,515,821.37 plus HST.

Sulzer Pumps (Canada) Inc. has extensive experience in the pump industry. Overall, their proposal met all the key project requirements, and their staff are qualified to undertake the required design and supply.

3.0 Financial Impact/Considerations

The detailed source of financing is in included in Appendix A of this report. The City share of each purchase is 60%, with the remaining 40% available to be recovered through the federal Disaster Mitigation and Adaptation Fund.

Conclusion

The Greenway and Adelaide Flood Protection projects are significant undertakings with a high level of complexity that provides essential protection against climate change for the existing treatment facilities. Pre-selection of the equipment described in this report will provide the Consultant’s design team with critical design information which reduces complexity at the time of tender and construction. It also initiates manufacturing for components with long lead times, avoiding potential delays and additional costs during construction.

It is recommended that the purchase of the EQ Tank for the Adelaide WWTP from Greatario Engineered Storage Systems in the amount of $889,887.00 plus HST be approved.

In addition, it is recommended that the purchase of the Submersible Propeller Pumps for Greenway and Adelaide WWTPs from Sulzer Pumps (Canada) Inc. in the amount of $1,515,821.37 plus HST be approved.

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 & Infrastructure**

Appendix ‘A’ Source of Financing

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

Appendix "A"

#23203
October 24, 2023
(Award Contract)

Chair and Members
Civic Works Committee

RE: Greenway and Adelaide Wastewater Treatment Plants Climate Change Resiliency Equipment Preselection
Capital Project ES3230 - DMAF Greenway WWTP Flood Protection (Subledger FS210001)
Capital Project ES3231 - DMAF Adelaide WWTP Flood Protection (Subledger FS220002)
Greatario Engineered Storage Systems - $889,887.00 (excluding HST)
Sulzer Pumps (Canada) Inc. - $1,515,821.37 (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**	**Balance for Future Work**
ES3230 - DMAF Greenway WWTP Flood Protection				
Engineering	1,430,397	1,430,397	0	0
Construction	18,190,908	0	0	18,190,908
City Related Expenses	3,200	3,200	0	0
Vehicles and Equipment	1,230,535	0	1,230,535	0
ES3230 Total	20,855,040	1,433,597	1,230,535	18,190,908
ES3231 - DMAF Adelaide WWTP Flood Protection				
Engineering	1,728,984	1,728,984	0	0
City Related Expenses	3,107	3,107	0	0
Vehicles and Equipment	1,217,513	0	1,217,513	0
ES3231 Total	2,949,604	1,732,091	1,217,513	0
Total Expenditures	$23,804,644	$3,165,688	$2,448,048	$18,190,908
Sources of Financing				
ES3230 - DMAF Greenway WWTP Flood Protection				
Drawdown from Sewage Works Renewal Reserve Fund	12,513,024	860,158	738,321	10,914,545
Federal DMAF Funding	8,342,016	573,439	492,214	7,276,363
ES3230 Total	20,855,040	1,433,597	1,230,535	18,190,908
ES3231 - DMAF Adelaide WWTP Flood Protection				
Drawdown from Sewage Works Renewal Reserve Fund	1,769,762	1,039,255	730,508	0
Federal DMAF Funding	1,179,842	692,836	487,005	0
ES3231 Total	2,949,604	1,732,091	1,217,513	0
Total Financing	$23,804,644	$3,165,688	$2,448,048	$18,190,908

Financial Note:	**ES3230 (Sulzer)**	**ES3231 (Sulzer)**	**ES3231 (Greatario)**	**Total**
Contract Price	$1,209,252	$306,569	$889,887	$2,405,708
Add: HST @13%	157,203	39,854	115,685	312,742
Total Contract Price Including Taxes	1,366,455	346,423	1,005,572	2,718,450
Less: HST Rebate	-135,920	-34,458	-100,024	-270,402
Net Contract Price	$1,230,535	$311,965	$905,548	$2,448,048

Jason Davies
Manager of Financial Planning & Policy

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