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: Appointment of Consulting Engineers for the Infrastructure

Renewal Program

Date: June 22, 2021

Recommendation

That on the recommendation of Deputy City Manager, Environment and Infrastructure, the following actions **BE TAKEN** with respect to the appointment of consulting engineers for the Infrastructure Renewal Program:

- (a) The following consulting engineers **BE APPOINTED** to carry out consulting services for the identified Infrastructure Renewal Program funded projects, at the upset amounts identified below, in accordance with the estimate on file, and in accordance with Section 15.2(e) of the City of London's Procurement of Goods and Services Policy:
 - (i) Stantec Consulting Ltd. **BE APPOINTED** consulting engineers to complete the pre-design, detailed design and construction administration of Assignment B, Victoria Street Reconstruction from west limit to Lombardo Avenue and Victoria Street Pumping Station Replacement, in the total amount of \$504,180.60 (including contingency), excluding HST;
 - (ii) Archibald, Gray & McKay Engineering Ltd. (AGM) **BE APPOINTED** consulting engineers to complete the pre-design and detailed design of Assignment G, Quebec Street Reconstruction Phase 1 from Oxford Street East to the CP railway tracks in the total amount of \$418,000.00 (including contingency), excluding HST;
- (b) the financing for this project **BE APPROVED** as set out in 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 approval 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

The purpose of this report is to award engineering consultant appointments for the Infrastructure Renewal Program. These consultant appointments will lead to infrastructure construction projects in 2022 and 2023. A detailed project information list, including timing and project limits, is contained in Appendix 'B'. Project location maps are contained in Appendix 'C'.

Context

The Infrastructure Renewal Program is an annual program intended to maintain the lifecycle and operation of municipal infrastructure at an acceptable performance level. The engineering consultants work with city staff to complete the Infrastructure Renewal Program projects and meet the challenging infrastructure lifecycle replacement needs. The engineering consulting work recommended within this report will support the reconstruction of an estimated \$7,800,000 of capital infrastructure.

Linkage to the Corporate Strategic Plan

This recommendation supports the following 2019-2023 Strategic Plan areas of focus:

- Building a Sustainable City:
 - London's infrastructure is built, maintained, and operated to meet the longterm needs of our community by replacing aged and failing infrastructure with new materials and sizing new infrastructure to accommodate future development;
 - Londoners can move around the city safely and easily in a manner that meets their needs by incorporating cycling infrastructure and safety enhancements; and
 - London has a strong and healthy environment by incorporating stormwater management quantity and quantity controls to protect downstream waterways.

Analysis

1.0 Background Information

1.1 Previous Reports Related to this Matter

CWC – May 28, 2018 – Revised Grouped Consultant Selection Process.

2.0 Discussion and Considerations

2.1 Work Description

The Infrastructure Renewal Program projects include watermain and sewer replacement/repairs, the reconstruction of a sanitary pumping station, as well as restoration of areas disturbed by the construction activity. The scope of each project varies in length and depends on the infrastructure components requiring rehabilitation or replacement. Full road reconstruction will be part of the overall projects.

The City infrastructure design groups within each service area work closely together to co-ordinate infrastructure repair, rehabilitation and replacement. City staff prepare a list of the highest priority projects, taking into consideration condition assessment, capacity, criticality of the infrastructure link, and the safety and social impacts should the infrastructure link fail. City staff meet regularly throughout the year to co-ordinate their respective work, with the goal of aligning construction projects so more than one infrastructure element can be renewed, which significantly reduces social disruption and saves on construction costs. Design work starts early in the budget cycle, which allows projects to tender early in the season, so the most competitive construction pricing can be realized.

This report recommends the appointment of engineering consultants for two engineering design assignments as identified in Appendix 'B'. One project is scheduled for construction in 2022 while the other project is scheduled for construction in 2023. The proposed construction year and physical limits of the project assignments are summarized in Appendix 'B', and a location map is provided for each project in Appendix 'C'.

Funds have been budgeted in the sewer, water, and transportation capital budgets to support the engineering design work for the projects as identified in Appendix 'A', 'Sources of Financing'. The design and construction administration fees for the new projects, recommended for approval in this report, are summarized in Table 1 below. All values below include 10% contingency and exclude HST.

Table 1: Summary of Project Assignments

Assignment	Street(s)	Consultant	Design Fee	Construction Administration Fee	Total Fee
В	Victoria Street	Stantec Consulting Ltd.	\$263,535.80	\$240,644.80	\$504,180.60
G	Quebec Street	AGM	\$418,000.00	N/A	\$418,000.00

3.0 Financial Impact/Considerations

3.1 Procurement Process

The engineering consultant selection procedure for the 2022/2023 Infrastructure Renewal Program utilized a grouped consultant selection process developed in partnership with the Purchasing and Supply Division, subsequently approved by Council June 12, 2018 and which will be used for all future Infrastructure Renewal Program consultant appointments. This two-stage grouped procurement process is in accordance with Section 15.2(e) of the Procurement of Goods and Services Policy.

The first stage of the process is an open, publicly advertised Request for Qualifications. Statement of Qualifications submissions were received from a province wide group of nineteen prospective consultants. The Statement of Qualifications were evaluated by the Engineering and Infrastructure Service Area resulting in a short-list group of fifteen engineering consulting firms. This short-list of fifteen firms will be retained for a three-year period. After this period, the Request for Qualifications process will be initiated again.

The second stage of the process is a competitive Request for Proposal. Consultants from the short-listed group are invited to submit a formal proposal to undertake a specific engineering assignment. Three consultants were invited to submit a proposal for each of the identified project assignments.

An evaluation of the proposals was undertaken by the Engineering and Infrastructure Service Area, including both a technical and cost component. Engineering consultants are recommended based on their knowledge and understanding of project goals, their experience on directly related projects, their project team members, capacity and qualifications, and overall project fee.

The construction administration fee portion of the engineering consultant assignments is included for those projects of lower complexity, and for projects where construction administration fees can be reasonably estimated prior to the start of the design. Including construction administration fees as part of the initial consultant assignment reduces the number of required reports to committee and reduces the time required to award the final construction contract. Construction administration fees are included for Assignment B, Victoria Street, but are not included for Assignment G, Quebec Street as this project is more complex and will not be constructed until 2023.

Conclusion

Replacing infrastructure at the end of its lifecycle is essential to building a sustainable city. The recommended engineering consultant assignments for the 2022/2023 Infrastructure Renewal Program is another step forward in replacing London's aging infrastructure. The projects discussed within this report have been identified as high priority due to the age, poor condition and associated risk of failure associated with the infrastructure.

In the spirit of continuous improvement, the process for undertaking engineering consultant appointments will continue to evolve ensuring the City achieves the best value through a transparent, fair and competitive process. All the firms recommended through this engineering consultant appointment have shown their competency and

expertise with infrastructure replacement projects of this type. The Infrastructure Renewal Program will continue to ensure high value and endeavour to achieve a consistently high degree of public satisfaction.

Prepared by: Aaron Rozentals, GDPA, P.Eng., Division Manager,

Water Engineering

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

Wastewater, and Stormwater

Recommended by: Kelly Scherr, P.Eng., MBA, FEC, Deputy City Manager,

Environment and Infrastructure

CC: D. Gough, C. Ginty, K. Chambers, A. Rammeloo

Appendix 'A' – Sources of Financing

Appendix 'B' – Project Information List

Appendix 'C' - Location Maps

#21103

June 22, 2021

(Appoint Consulting Engineers)

Chair and Members

Civic Works Committee

RE: Appointment of Consulting Engineers for the Infrastructure Renewal Program

(Subledger WS22C00B) Assignment B - Victoria Street

(Subledger WS22C00G) Assignment G - Quebec Street

Capital Project ES241421 - Infrastructure Renewal Program - Sanitary Sewers

Capital Project ES254021 - Infrastructure Renewal Program - Stormwater Sewers and Treatment

Capital Project ES515021 - Pumping Station Optimization & Renewal

Capital Project EW376521 - Infrastructure Renewal Program - Watermains

Capital Project TS144621 - Road Networks Improvements

Capital Project TS406720 - Traffic Signals - Mtce.

Capital Project TS512320 - Street Light Maintenance

Stantec Consulting Ltd. - \$504,180.60 (excluding HST) Assignment B - Victoria Street

Archibald, Gray & McKay Engineering Ltd. - \$418,000.00 (excluding HST) Assignment G - Quebec Street

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 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
ES241421 - Infrastructure Renewal Program - Sanitary Sewers	J			
Engineering	2,000,000	925,503	185,669	888,828
Construction	11,615,864	7,919,984	0	3,695,880
Construction (Utilities Share)	116,098	116,098	0	0
City Related Expenses	25,000	1,628	0	23,372
ES241421 Total	13,756,962	8,963,213	185,669	4,608,080
ES254021 - Infrastructure Renewal Program - Stormwater Sewers and Treatment				
Engineering	1,104,751	919,081	185,670	0
Construction	8,932,221	8,932,221	0	0
City Related Expenses	59,099	2,149	0	56,950
ES254021 Total	10,096,071	9,853,451	185,670	56,950
ES515021 - Pumping Station Optimization and Renewal				
Engineering	162,195	10,176	152,019	0
Construction	237,645	0	0	237,645
Vehicles & Equipment	30,240	30,240	0	0
ES515021 Total	430,080	40,416	152,019	237,645
EW376521 - Infrastructure Renewal Program - Watermains				
Engineering	2,500,000	1,056,674	247,559	1,195,767
Construction	13,729,336	10,021,136	0	3,708,200
City Related Expenses	128	128	0	0
EW376521 Total	16,229,464	11,077,938	247,559	4,903,967

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(Subledger WS22C00G) Assignment G - Quebec Street

TS144621 - Road Networks Improvements	Approved Budget	Committed To Date	This Submission	Balance for Future Work
Engineering	1,000,000	157,166	128,932	713,902
Construction	13,650,852	948,504	0	12,702,348
City Related Expenses	128	128	0	0
TS144621 - Total	14,650,980	1,105,798	128,932	13,416,250
TS406720 -Traffic Signals Maintenance				
Engineering	261,419	49,633	28,921	182,865
Construction	995,676	465,251	0	530,425
Traffic Signals	2,941,676	2,941,676	0	0
TS406720 - Total	4,198,771	3,456,560	28,921	713,290
TS512320 - Street Light Maintenance				
Engineering	300,000	32,285	9,641	258,074
Construction	2,042,979	334,073	0	1,708,906
Traffic Lights	500,908	500,908	0	0
TS512320 - Total	2,843,887	867,266	9,641	1,966,980
Total Expenditures	\$62,206,215	\$35,364,642	\$938,411	\$25,903,162
Sources of Financing				
ES241421 - Infrastructure Renewal Program - Sanitary Sewers				
Capital Sewer Rates	9,140,864	6,597,115	185,669	2,358,080
Drawdown from Sewage Works Renewal Reserve Fund	2,250,000	0	0	2,250,000
Federal Gas Tax	2,250,000	2,250,000	0	0
Other Contributions (Utilities)	116,098	116,098	0	0
ES241421 Total	13,756,962	8,963,213	185,669	4,608,080
ES254021 - Infrastructure Renewal Program - Stormwater Sewers and Treatment				
Capital Sewer Rates	820,480	820,480	0	0
Drawdown from Sewage Works Renewal Reserve Fund	6,974,096	6,731,476	185,670	56,950
Federal Gas Tax	2,250,000	2,250,000	0	0
Other Contributions	51,495	51,495	0	0
ES254021 Total	10,096,071	9,853,451	185,670	56,950
ES515021 - Pumping Station Optimization and Renewal				

#21103

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RE: Appointment of Consulting Engineers for the Infrastructure Renewal Program (Subledger WS22C00B) Assignment B - Victoria Street

(Subledger WS22C00G) Assignment G - Quebec Street

EW376521 - Infrastructure Renewal Program - Watermains	Approved Budget	Committed To Date	This Submission	Balance for Future Work
Capital Water Rates	11,672,800	10,431,884	247,559	993,357
Drawdown from Water Works Renewal Reserve Fund	3,910,610	0	0	3,910,610
Federal Gas Tax	636,520	636,520	0	0
Other Contributions	9,534	9,534	0	0
EW376521 Total	16,229,464	11,077,938	247,559	4,903,967
TS144621 - Road Networks Improvements				
Capital Levy	3,229,699	0	0	3,229,699
Debenture By-law No. W5673-150	939,460	0	0	939,460
Drawdown from Capital Infrastructure Gap Reserve Fund	1,510,874	0	0	1,510,874
Federal Gas Tax	8,970,947	1,105,798	128,932	7,736,217
TS144621 - Total	14,650,980	1,105,798	128,932	13,416,250
TS406720 -Traffic Signals Maintenance				
Capital Levy	3,867,939	3,456,560	28,921	382,458
Drawdown from Capital Infrastructure Gap Reserve Fund	330,832	0	0	330,832
TS406720 - Total	4,198,771	3,456,560	28,921	713,290
TS512320 - Street Light Maintenance				
Capital Levy	2,667,304	867,266	9,641	1,790,397
Drawdown from Capital Infrastructure Gap Reserve Fund	176,583	0	0	176,583
TS512320 - Total	2,843,887	867,266	9,641	1,966,980
Total Financing	\$62,206,215	\$35,364,642	\$938,411	\$25,903,162
Financial Note: (Excluding HST)	ES241421	ES254021	ES515021	EW376521
Listed by Engineer and Contract Stantec Consulting Ltd Assignment B	\$106,437	\$106,438	\$149,390	\$141,916
Archibald, Gray & McKay Engineering Ltd Assignment G	76,021	76,021	0	101,361
Total Per Capital Project (Excluding HST)	\$182,458	\$182,459	\$149,390	\$243,277

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(Subledger WS22C00G) Assignment G - Quebec Street

Financial Note: (Excluding HST)	TS144621	TS406720	TS512320	Total Excluding HST
Listed by Engineer and Contract				
Stantec Consulting Ltd Assignment B	\$0	\$0	\$0	\$504,181
Archibald, Gray & McKay Engineering Ltd Assignment G	126,702	28,421	9,474	\$418,000
Total Per Capital Project (Excluding HST)	\$126,702	\$28,421	\$9,474	\$922,181

Total

Financial Note: (Including HST)

Listed by Engineer and Contract

Stantec Consulting Ltd. - Assignment B Archibald, Gray & McKay Engineering Ltd.-Assignment G

Total Per Capital Project (Including HST)

Including HST

\$513,054

425,357

\$938,411

Financial Note: Charges per Capital Project

Contract Price Add: HST @13%

Total Contract Price Including Taxes

Less: HST Rebate **Net Contract Price**

ES241421	ES254021	ES515021	EW376521
\$182,458	\$182,459	\$149,390	\$243,277
23,720	23,720	19,421	31,626
206,178	206,179	168,811	274,903
-20,509	-20,509	-16,792	-27,344
\$185,669	\$185,670	\$152,019	\$247,559

Financial Note: Charges per Capital Project

Contract Price Add: HST @13%

Total Contract Price Including Taxes

Less: HST Rebate **Net Contract Price**

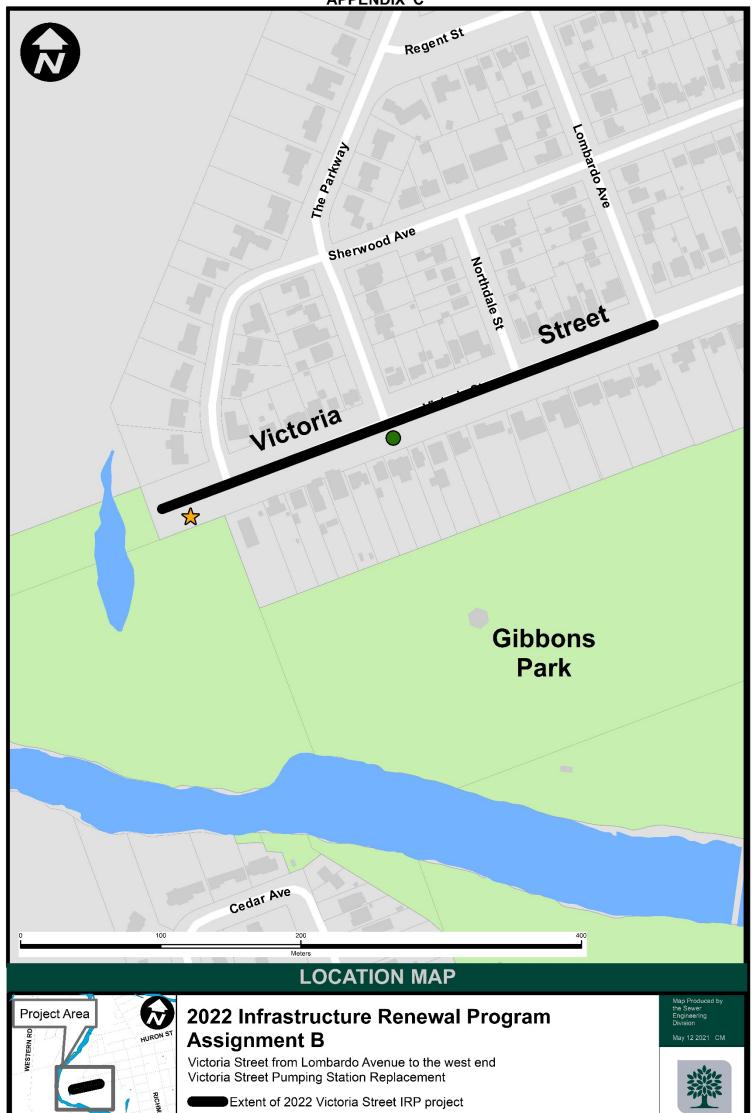
TS144621	TS406720	TS512320	Total
\$126,702	\$28,421	\$9,474	\$922,181
16,471	3,695	1,232	119,885
143,173	32,116	10,706	1,042,066
-14,241	-3,195	-1,065	-103,655
\$128,932	\$28,921	\$9,641	\$938,411

Jason Davies Manager of Financial Planning & Policy

Appendix 'B' - Project Information List

Assignment	Consultant	Street	From	То	Length (m)
В	Stantec Consulting Ltd.	Victoria Street	West Limit	Lombardo	420
G	Archibald, Gray & McKay Engineering Ltd. (AGM)	Quebec Street	Oxford Street East	CPR Tracks	560

APPENDIX 'C'



Existing location of pumping station

Preferred pumping station location

