

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: Contract Award: Tender RFT21-12
2021-2022 Infrastructure Renewal Program Contract 10
Brydges Street, Swinyard Street, Muir Street Project

Date: March 30, 2021

Recommendation

That on the recommendation of the Managing Director, Environmental and Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to the award of contract for the 2021-2022 Infrastructure Renewal Program Brydges Street, Swinyard Street and Muir Street reconstruction project:

- (a) the bid submitted by J-AAR Excavating Limited at its tendered price of \$5,843,421.36, excluding HST, for Contract 10, Brydges Street, Swinyard Street, Muir Street, Infrastructure Renewal Program **BE ACCEPTED**; it being noted that the bid submitted by J-AAR Excavating Limited was the lowest of five bids received and meets the City's specifications and requirements in all areas;
- (b) The engineering fees for resident inspection and contract administration for Archibald, Gray and McKay Engineering Ltd. (AGM) **BE INCREASED** by \$181,874.00 due to increased working days and contaminated soil conditions discovered during detailed design in accordance with the estimates, on file, to an upset amount of \$741,774.00, excluding HST, in accordance with Section 15.2 (g) of the Procurement of Goods and Services Policy;
- (c) the proposed by-law, attached as Appendix 'C' to remove parking on Brydges Street to allow the introduction of new bike lanes on Bridges Street between Ashland Avenue and Highbury Avenue North **BE INTRODUCED** at the Municipal Council meeting to be held on April 13, 2021, for the purpose of amending the Traffic and Parking By-law (PS-113).
- (d) the financing for this project **BE APPROVED** as set out in the Sources of Financing Report attached, hereto, as Appendix 'A';
- (e) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project;
- (f) the approval given, herein, **BE CONDITIONAL** upon the Corporation entering into a formal contract, or issuing a purchase order for the material to be supplied and the work to be done, relating to this project (RFT21-12); and
- (g) 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 award of a tender to a contractor, and continuation of consulting engineer services for the Brydges Street, Swinyard Street and Muir Street Infrastructure Renewal Program Project. The project will reconstruct Brydges Street from Egerton Street to Highbury Avenue North, Swinyard Street from Brydges Street to the northern limit, and Muir Street from Brydges Street to the northern limit. A location map is included in Appendix 'B'.

Context

Brydges Street, Swinyard Street, and Muir Street have each been identified as a high priority in the Infrastructure Renewal Program due to the poor condition of the municipal infrastructure including the presence of existing combined sewers. A large portion of the project was originally constructed between the 1920s and 1940s and have reached the end of their useful life. The project will include replacement of watermain and water services, removal of 848m of combined sewers, installation of new sanitary and storm sewers, bicycle lanes, on-street parking adjustments, driveway entrance replacements and adjustments, concrete curb replacement, and new asphalt road surface.

Linkage to the Corporate Strategic Plan

This report supports the Strategic Plan in the following areas:

- Building a Sustainable City:
 - London's infrastructure is built, maintained, and operated to meet the long-term needs of our community.
 - Londoners can move around the city safely and easily in a manner that meets their needs by incorporating cycling infrastructure and safety enhancements.

Analysis

1.0 Background Information

1.1 Previous Reports Related to this Matter

Civic Works Committee – July 14, 2020 – Appointment of Consulting Engineers, Infrastructure Renewal Program

2.0 Discussion and Considerations

2.1 Project Description

The Brydges Street, Swinyard Street and Muir Street infrastructure renewal project includes the following improvements:

- Replacement of watermain and water services to property line,
- Removal of 848m of combined sewers,
- Installation of new sanitary sewers,
- Installation of new storm sewers,
- Partial replacement of existing private drain connections (PDCs),
- New bicycle lanes on Brydges Street,
- On-street parking adjustments,
- Driveway entrance replacements and adjustments, and
- Full road reconstruction including new asphalt, boulevard enhancements, curb and gutter, and sidewalks.

Infrastructure replacement needs have been coordinated within Environmental and Engineering Services for efficient use of funds during construction. The project budget

has been included in the approved 2021 Wastewater, Water, and Transportation Capital Works Budgets.

2.3 Domestic Action Plan

One of the municipal actions identified in the City of London’s Domestic Action Plan (DAP) for Phosphorus Reduction is combined sewer replacement. The DAP states:

“The City of London will accelerate plans to separate combined sewers, including the design and construction of necessary stormwater outlets, with the target of separating 80 per cent (17 kilometres) of its combined sewer system by 2025.”

This target for combined sewer replacement is contingent on federal and provincial funding. The following table provides the length of combined sewer replacement achieved for this project in relation to the DAP targets.

2016 – 2025 Combined Sewer DAP Target (km)	Prior DAP Combined Sewer Removed/Separated (km)	This Project – Combined Sewer Removed/Separated (km)	Remaining Combined Sewer (km) to achieve target
17 km	6.6 km	0.85 km	9.4 km*

*includes Brydges Street, Swinyard Street, Muir Street (RFT21-12) and Talbot Street (RFT21-10) sewer separation.

This project achieves the removal of approximately 848m of combined sewer, as the City continues to work towards achieving its DAP targets.

2.4 Construction Considerations

The construction of Brydges Street, Swinyard Street, and Muir Street will be completed in two main phases. The phase limits are shown in Appendix ‘B’ and are detailed below:

- Phase 1 to be completed in 2021 – Brydges Street from Egerton Street to just east of Childers Street; Swinyard Street from Brydges Street to the northern limit; Muir Street from Brydges Street to the northern limit.
- Phase 2 to be completed in 2022 – Brydges Street from just east of Childers Street to Highbury Avenue North.

On Brydges Street, construction will generally occur between approximately 7:00am - 6:00pm. The start of the construction day will be delayed until 8:30am on Swinyard Street and Muir Street to accommodate resident and business access in the morning. Road and driveway access will be maintained at the end of each construction day.

2.5 Public Engagement and Consultation

A Project Notice (letter #1), dated August 8, 2020, was mailed to affected properties within and adjacent to the construction limits. A survey was included with this Project Notice letter which residents were invited to complete to provide information on their property and input for consideration.

The project Pre-Construction Notice (letter #2), dated January 22, 2021, was mailed out to affected properties within and adjacent to the construction limits. Residents were provided instructions on how to view pre-recorded project information videos posted on the City’s website (<https://getinvolved.london.ca/brydges>). Topics covered included timing of work, above ground and below ground scope of work, resident and business access impacts, and tree impacts. Typically, the City would hold an in-person Project Update Meeting (PUM) for Infrastructure Renewal Program projects. Due to the COVID-19 pandemic, adjustments were made to ensure public safety and to follow restrictions on public gatherings. These pre-recorded project information videos were intended to

convey the same information as would have been presented at an in person PUM, with residents being able to contact the City's project manager directly with questions.

3.0 Financial Impact/Considerations

3.1 Tender Summary

Tenders for Brydges Street, Swinyard Street, Muir Street Infrastructure Renewal Project closed on February 17, 2021. Five contractors submitted tender prices as listed below, excluding HST.

Table 1: Summary of submitted tender prices

Contractor	Tender Price Submitted
J-AAR Excavating Limited	\$5,843,421.36
Bre-Ex Construction Inc	\$6,071,972.51
Blue-Con Construction	\$6,337,284.34
Omega Contractors Inc.	\$6,811,373.67
L-82 Construction Limited	\$6,959,250.41

All tenders have been checked by the Environmental and Engineering Services Department and AGM. No mathematical errors were found. The results of the tendering process indicate a competitive process. The tender estimate prior to tender opening was \$7,066,405.20, excluding HST. All tenders include a contingency allowance of \$600,000.00.

3.2 Consulting Services

AGM was awarded the detailed design and contract administration and resident supervision for Brydges Street, Swinyard Street, Muir Street Infrastructure Renewal Project by Council on July 21, 2020. Due to increased project complexities discovered during the detailed design process, the consultant has submitted a request for additional supervision fees. These fees are required to cover the cost of increased working days needed to complete the project. In addition, contaminated soils were encountered, which required greater geotechnical engineering involvement as well as additional time for AGM to manage. AGM submitted a scope change for an additional \$181,874.00. Staff have reviewed the fee submission, including the time allocated to each project task, along with hourly rates provided by each of the consultant's staff members. That review of assigned personnel, time per project task, and hourly rates was consistent with other Infrastructure Renewal Program assignments of similar scope.

The continued use of AGM on this project for construction administration is of financial advantage to the City because the firm has specific knowledge of the project and has undertaken work for which duplication would be required if another firm were to be selected.

In addition to the financial advantage, there are also accountability and risk reduction benefits. The City requires a professional engineer to seal all construction drawings. These "record drawings" are created based on field verification and ongoing involvement by the professional engineer. This requirement promotes consultant accountability for the design of these projects, and correspondingly, reduces the City's overall risk exposure. Consequently, the continued use of the consultant who created and sealed the design drawings is required to maintain this accountability process and to manage risk.

In accordance with Section 15.2 (g) of the City of London's Procurement of Goods and Services Policy, civic administration is recommending that AGM's fees to carry out the resident inspection and contract administration be increased by \$181,874.00, to an

upset limit of \$479,600.00, excluding HST. The approval of this work will bring the total engineering services for this project to \$741,774.00, excluding HST, for both detailed design and resident inspection and contract administration.

Operating Budget Impacts

Additional annual sewer, water and transportation operating costs attributed to new infrastructure installation are summarized in the following table.

Table 2: Summary of annual operating cost increase

Division	Rationale	Annual Operational Cost Increase
Sewer Operations	Removal of combined sewer and replacement with additional 758m of new sewer and appurtenances	\$1,250
Water Operations	Addition of water valves and hydrants	\$300
Transportation Operations	Addition of 2,470 metres of bike lanes	\$20,000
Total		\$21,550

Conclusion

Civic Administration has reviewed the tender bids and recommends J-AAR Excavating Limited be awarded the construction contract for Contract 10 – 2021-2022 Brydges Street, Swinyard Street, and Muir Street.

AGM has demonstrated an understanding of the City's requirements for this project, and it is recommended that this firm continue as the consulting engineer for the purpose of contract administration and resident supervision services, as it is in the best financial and technical interests of the City.

Prepared by: Ashley M. Rammeloo, MMSc., P.Eng., Division Manager, Sewer Engineering

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

Recommended by: Kelly Scherr, P.Eng., MBA, FEC, Managing Director, Environmental & Engineering Services and City Engineer

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

Appendix 'A' – Sources of Financing report

Appendix 'B' – Location Map

Appendix 'C' – Traffic and Parking By-law Amendment (PS-113)

Appendix "A"

#21032

March 30, 2021
(Award Contract)

Chair and Members
Civic Works Committee

RE: RFT21-12 - 2021-2022 Infrastructure Renewal Program Contract 10 - Brydges Street, Swinyard Street, Muir Street
(Subledger WS21C00C)

Capital Project ES241421 - Infrastructure Renewal Program - Sanitary Sewers

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

Capital Project EW376521 - Infrastructure Renewal Program - Watermains

Capital Project TS144621 - Road Networks Improvements (Main)

Capital Project TS173919 - Active Transportation (2019-2023)

J-AAR Excavating Limited - \$5,843,421.36 (excluding HST)

Archibald, Gray and McKay Engineering Ltd. - \$741,774.00 (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 is:

Estimated Expenditures	Approved Budget	Committed To Date	This Submission	Balance for Future Work
ES241421 - Infrastructure Renewal Program - Sanitary Sewers				
Engineering	2,000,000	90,956	29,612	1,879,432
Construction	11,615,864	1,624,452	1,354,463	8,636,949
City Related Expenses	25,000	0	0	25,000
ES241421 Total	13,640,864	1,715,408	1,384,075	10,541,381
ES254021 - Infrastructure Renewal Program - Stormwater Sewers and Treatment				
Engineering	2,000,000	84,530	29,612	1,885,858
Construction	7,944,576	1,616,104	1,354,463	4,974,009
City Related Expenses	100,000	0	0	100,000
ES254021 Total	10,044,576	1,700,634	1,384,075	6,959,867
EW376521 - Infrastructure Renewal Program - Watermains				
Engineering	2,500,000	112,708	37,015	2,350,277
Construction	13,719,930	2,777,483	1,805,951	9,136,496
EW376521 Total	16,219,930	2,890,191	1,842,966	11,486,773
TS144621 - Road Networks Improvements				
Engineering	1,000,000	97,942	59,224	842,834
Construction	13,650,980	0	948,504	12,702,476
TS144621 Total	14,650,980	97,942	1,007,728	13,545,310
TS173919 - Active Transportation (2019-2023)				
Engineering	814,142	675,848	29,612	108,682
Construction	7,262,042	5,123,781	482,884	1,655,377
City Related Expenses	468	468	0	0
TS173919 Total	8,076,652	5,800,097	512,496	1,764,059
Total Expenditures	\$62,633,002	\$12,204,272	\$6,131,340	\$44,297,390

Appendix "A"

#21032

March 30, 2021
(Award Contract)

Chair and Members
Civic Works Committee

RE: RFT21-12 - 2021-2022 Infrastructure Renewal Program Contract 10 - Brydges Street, Swinyard Street, Muir Street
(Subledger WS21C00C)

Capital Project ES241421 - Infrastructure Renewal Program - Sanitary Sewers

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

Capital Project EW376521 - Infrastructure Renewal Program - Watermains

Capital Project TS144621 - Road Networks Improvements (Main)

Capital Project TS173919 - Active Transportation (2019-2023)

J-AAR Excavating Limited - \$5,843,421.36 (excluding HST)

Archibald, Gray and McKay Engineering Ltd. - \$741,774.00 (excluding HST)

Sources of Financing	Approved Budget	Committed To Date	This Submission	Balance for Future Work
ES241421 - Infrastructure Renewal Program - Sanitary Sewers				
Capital Sewer Rates	9,140,864	525,687	323,796	8,291,381
Drawdown from Sewage Works Reserve Fund	2,250,000	0	0	2,250,000
Federal Gas Tax	2,250,000	1,189,721	1,060,279	0
ES241421 Total	13,640,864	1,715,408	1,384,075	10,541,381
ES254021 - Infrastructure Renewal Program - Stormwater Sewers and Treatment				
Capital Sewer Rates	820,480	510,914	309,566	0
Drawdown from Sewage Works Reserve Fund	6,974,096	0	14,229	6,959,867
Federal Gas Tax	2,250,000	1,189,720	1,060,280	0
ES254021 Total	10,044,576	1,700,634	1,384,075	6,959,867
EW376521 - Infrastructure Renewal Program - Watermains				
Capital Water Rates	11,672,800	2,253,671	1,842,966	7,576,163
Drawdown from Capital Water Reserve Fund	3,910,610	0	0	3,910,610
Federal Gas Tax	636,520	636,520	0	0
EW376521 Total	16,219,930	2,890,191	1,842,966	11,486,773
TS144621 - Road Networks Improvements				
Capital Levy	3,229,699	0	0	3,229,699
Debenture Quota (Note 1)	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	97,942	1,007,728	7,865,277
TS144621 Total	14,650,980	97,942	1,007,728	13,545,310
TS173919 - Active Transportation (2019-2023)				
Capital Levy	391,425	391,425	0	0
Debenture By-law No.W-5654-291	3,614,664	2,536,189	256,248	822,227
Drawdown from City Services - Roads Reserve Fund (Development Charges) (Note 2)	4,015,539	2,817,459	256,248	941,832
Other Contributions	55,024	55,024	0	0
TS173919 Total	8,076,652	5,800,097	512,496	1,764,059
Total Financing	\$62,633,002	\$12,204,272	\$6,131,340	\$44,297,390

Appendix "A"

#21032

March 30, 2021
(Award Contract)

Chair and Members
Civic Works Committee

RE: RFT21-12 - 2021-2022 Infrastructure Renewal Program Contract 10 - Brydges Street, Swinyard Street, Muir Street
(Subledger WS21C00C)

Capital Project ES241421 - Infrastructure Renewal Program - Sanitary Sewers

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

Capital Project EW376521 - Infrastructure Renewal Program - Watermains

Capital Project TS144621 - Road Networks Improvements (Main)

Capital Project TS173919 - Active Transportation (2019-2023)

J-AAR Excavating Limited - \$5,843,421.36 (excluding HST)

Archibald, Gray and McKay Engineering Ltd. - \$741,774.00 (excluding HST)

Financial Note: Construction	ES241421	ES254021	EW376521	TS144621
Contract Price	\$1,331,037	\$1,331,037	\$1,774,716	\$932,099
Add: HST @13%	173,035	173,035	230,713	121,173
Total Contract Price Including Taxes	1,504,072	1,504,072	2,005,429	1,053,272
Less: HST Rebate	-149,609	-149,609	-199,478	-104,768
Net Contract Price	\$1,354,463	\$1,354,463	\$1,805,951	\$948,504

Financial Note: Construction continued	TS173919	Total
Contract Price	\$474,532	\$5,843,421
Add: HST @13%	61,689	759,645
Total Contract Price Including Taxes	536,221	6,603,066
Less: HST Rebate	-53,337	-656,801
Net Contract Price	\$482,884	\$5,946,265

Financial Note: Engineering	ES241421	ES254021	EW376521	TS144621
Contract Price	\$159,570	\$159,570	\$210,335	\$163,199
Less Amount Previously Approved	130,470	130,470	173,960	105,000
Contract Price	29,100	29,100	36,375	58,199
Add: HST @13%	3,783	3,783	4,729	7,566
Total Contract Price Including Taxes	32,883	32,883	41,104	65,765
Less: HST Rebate	-3,271	-3,271	-4,089	-6,541
Net Contract Price	\$29,612	\$29,612	\$37,015	\$59,224

Financial Note: Engineering continued	TS173919	Total
Contract Price	\$49,100	\$741,774
Less Amount Previously Approved	20,000	559,900
Contract Price	29,100	181,874
Add: HST @13%	3,783	23,644
Total Contract Price Including Taxes	32,883	205,518
Less: HST Rebate	-3,271	-20,443
Net Contract Price	\$29,612	\$185,075

Total Construction and Engineering	\$6,131,340
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Note 1: Note to City Clerk: Administration hereby certifies that the estimated amounts payable in respect of this project does not exceed the annual financial debt and obligation limit for the Municipality from the Ministry of Municipal Affairs in accordance with the provisions of Ontario Regulation 403/02 made under the Municipal Act, and accordingly the City Clerk is hereby requested to prepare and introduce the necessary by-laws.

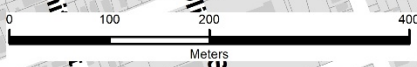
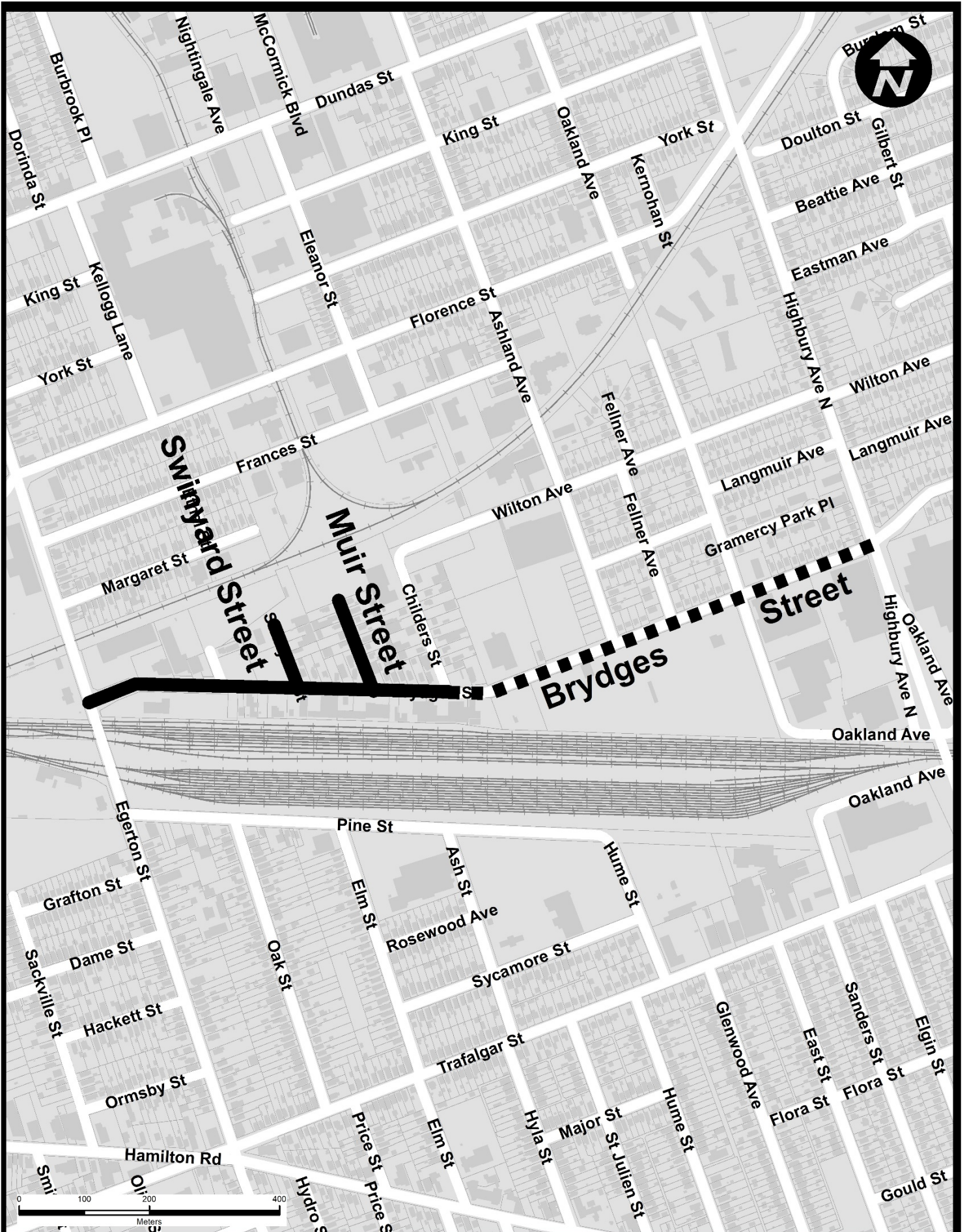
An authorizing by-law should be drafted to secure debenture financing for project TS144621 - Road Networks Improvements (Main) for the net amount to be debentured of \$939,460.

Note 2: Development charges have been utilized in accordance with the underlying legislation and the approved 2019 Development Charges Background Study and the 2021 Development Charges Background Study Update.

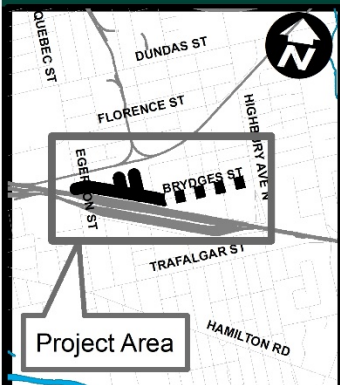
Note 3: There will be additional annual operating costs of \$1,250 for Sewer Operations, \$300 for Water Operations and \$20,000 for Transportation Operations.

Jason Davies
Manager of Financial Planning & Policy

APPENDIX 'B'



LOCATION MAP



**2021-2022 Infrastructure Renewal Program
Contract 10**

Brydges Street from Egerton Street to Highbury Avenue North
Swinyard Street - all
Muir Street - all

- Construction Year**
- Phase 1 - 2021
 - Phase 2 - 2022

Map Produced by
the Sewer
Engineering
Division
February 24 2021 CM



APPENDIX C By-law to amend the Traffic and Parking By-law (PS-113)

Addition of bicycle lanes on Brydges Street from Egerton Street to Highbury Avenue N

Bill No.

By-law No. PS-113

A by-law to amend By-law PS-113 entitled, “A by-law to regulate traffic and the parking of motor vehicles in the City of London.”

WHEREAS subsection 10(2) paragraph 7. Of the *Municipal Act, 2001*, S.O. 2001, c.25, as amended, provides that a municipality may pass by-laws to provide any service or thing that the municipality considers necessary or desirable to the public;

AND WHEREAS subsection 5(3) of the *Municipal Act, 2001*, as amended, provides that a municipal power shall be exercised by by-law;

NOW THEREFORE the Municipal Council of The Corporation of the City of London enacts as follows:

1. No Stopping

Schedule 1 (No Stopping) of the By-law PS-113 is hereby amended by **deleting** the following row:

Column 1 Street	Column 2 Side	Column 3 From	Column 4 To	Column 5 Period
Brydges Street	South	Highbury Avenue N	153 m west	Anytime

Schedule 1 (No Stopping) of the By-law PS-113 is hereby amended by **adding** the following row:

Column 1 Street	Column 2 Side	Column 3 From	Column 4 To	Column 5 Period
Brydges Street	Both	Egerton Street	Highbury Avenue N	Anytime

2. No Parking

Schedule 2 (No Parking) of the By-law PS-113 is hereby amended by **deleting** the following row:

Column 1 Street	Column 2 Side	Column 3 From	Column 4 To	Column 5 Period
Brydges	North	Egerton Street	A point 22 m east of	Anytime

Street

Ashland
Avenue

3. Limited Parking

Schedule 6 (Limited Parking) of the By-law PS-113 is hereby amended by **deleting** the following row:

Column 1 Street	Column 2 Side	Column 3 Area	Column 4 Time	Column 5 Period
Brydges Street	North	Ashland Avenue to Highbury Avenue N	8:00 a.m. to 6:00 p.m.	2 Hours

4. Reserved Lanes

Schedule 9.1 (Reserved Lanes) of the By-law PS-113 is hereby amended by **adding** the following rows:

Column 1 Highways	Column 2 Between	Column 3 Lane	Column 4 Time/Day	Column 5 Direction	Column 6 Class/Type of Vehicle
Brydges Street	Egerton Street to Highbury Avenue N	1 st Lane from south	Anytime	Eastbound	Bicycle
Brydges Street	Highbury Avenue N to Egerton Street	1 st Lane from north	Anytime	Westbound	Bicycle

This by-law comes into force and effect on the day it is passed.

PASSED in Open Council on April 13, 2021

Ed Holder
Mayor

Catharine Saunders
City Clerk

First Reading – April 13, 2021

Second Reading – April 13, 2021
Third Reading – April 13, 2021